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By Mrs M.L. Budgen

## M A Y FLOWERS:

 CREATED THINGS.

## LONDON :

LOVELL REEVE, 5, HENRIETTA STREET, COVENT GARDEN.
1855.

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## THIS LITTLE VOLUME

IS AFFECTIONATELY

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TO

## P. HEWSON,

MY ESTEEMED RELATIVE AND

LIFE-LONG FRIEND.

## PREFACE.

Here is the sequel, or sequence, of our "March Winds and April Showers." As such, it is called "May Flowers," though the productions it comprises may ill enough deserve the title, or only merit it as belonging, like their precursors, to the field of Nature.

A book whose contents should be expressive only of the attributes of May Flowers, would be, moreover, hardly suitable to earth, or earth's readers, as they now exist. The pure, the sweet, the bright, the beautiful, would be redolent in all its pages ; but there would be wanting in them, what sullied Creation and fallen Humanity now alike require, the pitiful, the sorrowful, the severe, or what, in being just, may seem so. Had the inhabitants of Eden required other volume than that of Nature, ere its leaves were warped and blighted by the breath of sin, "May Flowers" (unless, indeed, with sin the seasons had
their advent) might have expressed exactly the character of a book adapted for their reading-not (alas!) for ours, who know of evil as well as good, and for whom thorns and briars have a voice as well as fair, fresh blossoms. Pen of mortal mould could not work out all the beautiful significance of such a title; and if it could, the characteristics that befit it could not be exclusively adhered to in discourses (however light their tone) upon natural as connected with moral things. Let this help to excuse both incongruities and shortcomings in the pages that follow. For the rest, let them, in their season of appearance, if in nothing else, find acceptance as "May Flowers"-a humble offering to May-to those also whom May, in contributing to make happy, must surely make indulgent-disposed to overlook great defects, and to take pleasure in small things.

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## Tail Piece.

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I.

## BIRD AND MAN.

A Frenchman has said of bees, "On ne peut pas les aimer médiocrement, on se passionne pour elles." The same remark applies even more forcibly to birds, in particular to "birdies smalle"-birds of song. These verily are amongst those favourites of creation with which it is hardly possible that notice should stop at liking. Liking belongs entirely to earth, and birds are something more than animals of earththey are animals of air, if we may not say of heaven. Their beauty, their life, their lightness, their aerial flights, their heaven-taught melodies-these, if we follow them at all, must raise us with them to a
height-the height of loving. It is not only because birds have wings of feathers, and angels (in pictures) have the same, that we are reminded of birds and angels in conjunction. There are other similitudes which link birds (representatively) with spiritual existences. Of all material creatures (save insects) the least weighed down by flesh, they serve best to symbolise the mind. "Oh that a little bird were I!" is one of the most natural aspirations of the bird-like soul. The spirit in its bondage is as a bird in captivity ; at one while contented, fond even of its prisonhouse, at another striving to escape; longing to be like the bird at liberty, to rise heavenwards, " to flee away and be at rest." Then, taking the bird race as representative of mind in general, there is hardly a mind in particular (or even a detached thought, unless it be a creeping one, indeed) which may not be likened to some particular kind of bird.

There is the eagle-mind, with its keen perception and powerful grasp, that can seize on scattered thoughts as the eagle upon scattered weaker birds, amalgamate and feed on them with strong digestion, then, with sight and strength commensurate, soar upwards to heights whence it can look undazzled upon truth as the eagle at the sun.

There is the skylark-mind, to which precedence more properly belongs ; the mind which rises heavenwards joyously, melodiously, and brings its heavenly music, its cheerful piety, down again to earth, spreading delight and harmony around it.

There are humming-bird-minds, minute, delicate, sparkling, flower-hovering, flower-fed; of frame adapted only to torrid warmth and brilliant skies; minds which, formed in, and fit only for one condition of cloudless prosperity and indulgence, can bear no transportation, but shrink before the world's cold, and die in its nipping frosts. Pure and innocent, they serve to adorn for a while their little spot of earth, and may enlarge and strengthen, and grow more beautiful by far in the land of perpetual sunshine.

Correspondences betwixt forms of mind and fowls of air are, in short, for ever crossing us. Dove and sparrow, and parrot and peacock-like, and (alack!) raven and vulture-like, are terms, with a score resembling, of characteristic application. And not alone birds that fly, but apterous, or wingless, or nearly wingless birds, have their prototypes in nearly wingless minds. Look, for example, at the people (flocks of them) who remind one of penguins-people who
love to sit lazily on the shores of life's sea, fishing for troubles as the penguin for its finny prey. Their apologies for minds are for ever flapping (like the bird's apologies for pinions), as if in bewailment of their want of power, but are never made use of to rise above billows nor advance against opposing waves.

Enough of great birds and little birds, as images of great and little minds. It is of birds simply we would now discourse ; not, however, as standing in their place of creation by themselves, but as associate, actually, not figuratively, with creation's lord. We are not going into the economy of the subject ; it is not a problem of the poultry-yard that we are about to work. With the morale of cooping and cramming we shall not meddle here. And yet it is a moral question, as regards the relation of featherless and feathered bipeds, of which we wouid fain arrive at the solution-Is the keeping of caged song-birds a practice which has anything to sanction it excepting custom and long-established usage?

We read of "cages full of birds" in times ancient and scriptural ; of pet sparrows in times ancient and classic; but should there be wired prisons and feathered prisoners in times modern and Christian?

This is no light question, though it may concern so light a thing as a little goldfinch or canary. We are somewhat dubious how to answer it, and therefore shall consult upon the subject the birds themselves. In order to this, we must assume, of course, the gift of interpreting their tongues. The magic of fancy must endow us with a power like that imparted to the Lady Canace with her magic ring; a power to find meaning in that social chatter which makes up "birdies' steven." Gifted, for the nonce, with some such faculty, we are listeners to the voices from a lofty tree-top. The birds that occupy its branches are sitting in committee, debating and hearing evidence on the question we have started ; on those knotty points, namely, so important to themselves, whether man is to be looked on as a benefactor or an enemy? whether the fowler's net is to be shunned as a passage to dolour and death, or sought as an entrance to gilded palaces and pleasures without end? whether the imprisoned call-bird is to be regarded as a base betrayer, bent fiendishly on making fellows in the misery he has brought upon himself, or as a generous benefactor of his race, eager to invite others to a share of the felicity he enjoys?

In order to obtain information and settle their own wavering opinions on these dubious questions, the feathered assembly call in the evidence of witnesses recently escaped from the hands of man. The returned captives are two goldfinches, both bearing about them tokens of captivity, but as little resembling as the face of a medal and its reverse. The witness first examined begins, in notes plaintive and broken, to relate his experiences among men-but they are told already by the drooping wing, the ruffled feathers, the heavy eye, which move the dove well nigh to weeping, and raise a general murmur of mingled rage and pity; and not only is the voice of the little narrator weak and trembling, but he himself trembles on the bough which supports his slender weight. Two soft and gentle ones of his kind (one his mother) are sitting by him on either side, but he keeps looking fearfully about him, and draws in his sullied plumage at every sound ; the rustle of a falling leaf disturbs him, and at the shout of a ploughman from the field below, he nearly falls from off his perch with terror.
"You remember," said the little finch (looking first at his mother), "that bright morning in the time of thistles, when we all (the whole brood of us)
set off together and followed you in the longest flight we had ever taken; how, as we breasted the wind so bravely and so gaily, we heard the sound of some mysterious music which seemed to fill the air. I know now it was what men call the voices of the Sabbath bells. Then you remember how that, after a while, we rested on some yellow tree-tops. Looking down, we could see nothing at first but the morning mist spreading out white below us. From the midst of it we caught the chirping, and sometimes the song of familiar voices, as if ascending from the ground. They were not the notes of mounting skylarks, but those, we were certain, of some fellowfinches rising loud and cheery, as if to wish us joy after our first accomplished journey. We were too tired yet for a downward flight to meet our friends; but as we sat pluming and chatting on our lofty perches, what a glorious sight did we presently behold! It made every one of us flap our new-fledged wings, and scream our loudest for very joyfulness of heart. The mist was gone, the sun shining, and right below us lay the beautiful common we had flown so far to visit. The wide expanse was variegated by broken ground and smooth green turf, but little enough of turf was to be seen for the quantity
of furze and fern which overtopped it, and for (what to us was more) the loads of thistle and knapweed in flower and in seed-the flower so purple, the seed so brown and tufted with white, the down of our prickle-guarded corn. And now was the time of harvest. We knew it by the feathered grains that rose floating in the air, and inviting us to fly down and take our fill. Then, too, louder than ever, we heard the strains of welcome which had greeted our first arrival. We could see now that they were proceeding from a little party of our own feather, perched in what we took for nests, such as we had never seen before. These were set upon the ground, and spread over the turf about them was a something quite as new to us, which we could liken to nothing but the open net of an enormous spider. It was larger and coarser by a thousand times than any of the innumerable webs that we saw at the same time hung upon everything around, and covered with dewdrops sparkling in the sun. A spider-web we thought nevertheless it must surely be, and that an ugly, dark, long-legged creature, that sat quiet as a spider close beside it, must be the spinner. We did not in the least admire his looks, but little spiders had never done us any harm, and why should great ones? There
could be nothing, at all events, in going a little closer; besides, we were by this time very hungry, and the thistles looked so tempting. Off, then, we started, but only flew a little way down, and up again at the voice of our mother. She bade us wait and watch; but just then, shriller than ever and quite overpowering her tender notes of warning, came the strains of invitation from below-from the very midst, too, of a glorious bunch of thistles which rose above the spidery network. There was no keeping on our perches, and even while a cry of terror was proceeding from our mother's beak, we took flight from our tree and lighted down amongst those dreadful snares and base ensnarers. A shout as of joyful ecstasy was raised by our vile betrayers. Then came a whirr-r and a flap, and a knock upon the ground. I tried to fly upward, but my wings were caught in the meshes of that horrible web, and I found myself presently in the claws of that great spider-like creature more horrible than all. He dragged me from the snare, and put me in a narrow place where there was no bright sunshine, no sweet air, no trees, no thistledown, no gentle mother. I tried in an agony to find them, but it was only to beat my head and bruise my breast against the cold hard barrier that mocked
my efforts. I was not indeed alone. I knew that, by the pitiful voices, answering to mine, of companions in distress, and by the beating of their wings and the throbbing of their breasts against my own.
"At first we were left undisturbed, but after a while we seemed lifted up and carried along, prison and all, with a sort of jerking motion which added to our terror. Now and then would come a sudden stop, the light as suddenly appeared ; the monster (I now know it was a man) would put in his claw, seize upon one of us, and then all again was darkness. At last, worn out with fluttering and striving, and faint for want of air, food, and water, I crouched down in a corner in sullen sorrow and despair.
" When night and roost-time came I could not tell, for all now was night to me; but after a while I went to sleep. I was awakened by a grip like that which had dragged me from the fatal snare. Something was passed under my wings and round my body, then the grasp that held me was loosened, and, oh! the momentary joy-I flew!-but then came a sudden twitch, a cutting pain, and I was brought back to the hand of my cruel captor, from which, though now open, I could not fly. Thus was I held fast and loose by turns, loose to the length of the
string that bound me, till I learnt the delusion of these mocking shows of liberty. At last, in terror of the pain that was sure to follow, I forbore attempts at flight, and ceased even the flutter of my weary wings. "While this was going on I was in a place so close and dingy that I could hardly breathe, and only see by halves. Afterwards my tormentor carried me into the fresh air and the bright light. He had set me first on one of his hated fingers and twisted the string round another so that I could not stir, only, at least, to flap my wings again when I saw the sunshine. But it only dazzled and bewildered me as, looking round, I could see nothing of the things that I had looked upon and loved so all my happy life.
" Not a bird, not a tree, not a head of thistle, not even a bit of grass was to be seen; nothing but patches, patch after patch, of red, and brown, and yellow, something like these autumn woods in colour, but in nothing else. I have learnt since that I was amongst the houses and streets of men, and that my captor was one of that most wicked race. I saw them in numbers coming and going, darkening my miserable sunshine as they passed. 'A tame bird! a wonderful bird! a beautiful tame goldfinch! a capital song-bird! and all for sixpence !!' was the cry, over
and over, of the man that held me. Now and then he would stop while others gathered round, their great eyes seeming to grow greater as they saw how I sat so quiet, perched upon his finger.*
"Amongst one of these groups of gazers was a creature smaller than the rest, who looked at me for a long time, and then put something into my persecutor's hand. Then he cut quickly the string that kept me to his finger, but not the girth about my body, and gave me to the ' little master' as he called him, who had been watching me so long. His grasp was not so hard, but it was as tight nearly as my late tyrant's, and I tried vainly to escape. I was soon carried from the streets, the sunshine disappeared, and I panted again for want of air as well as from affright.
" But terror, and want of air, and want of freedom, all began now to be overpowered by a want more urgent than all-the want of food and water. Soon after my little master had got home he loosed his hold and let me fly. He did it (he said) to try my tameness. That was shown by one desperate effort to regain my liberty. I caught a glimpse of the bright blue sky, collected all my little strength to fly

[^0]towards it, met with a blow that wetted my beak with blood, and fell back, not caring to fly again. In a little while though I recovered my care for something else, for drink, for food, and when my new master threw seed before me and set down water, I drank, and drank, and ate, and ate, never caring that he was by, close by, or for the clapping of his hands as he cried out joyfully, 'What a tame, tame bird!' The seed was hard and slippery, different quite to what we used to feed on. I could hardly break, but I could swallow it (shell and all); so I ate, and ate, and ate, till I could eat no more. Then I hid my head in my wing and fell asleep, not, though, before I heard voices (more than one) repeating and repeating, 'Oh! what a tame bird, a wonderful tame bird!' . . . . They would not have called me a 'tame bird' when I awoke. I was wild with pain. All the seed I had swallowed in my hunger, all the water I had drank up in my thirst seemed turned to stone within me, and the girth about my body seemed cutting me in two. They had put me, while I slept, into a narrow prison, like that to which I was first committed from the net. I found myself pent in by bars, but they rattled loosely, and one presently gave way. I saw the sky and madly dashed towards it. A blow, a crash, and

I was once more on the wing, really on the wing, breasting the air. Pain, terror, weakness, fled before delight ; cruel men, their cruel habitations, all below, behind me; my native woods and wilds before me. On, on I flew, and here I am, my mother dear, my loved companions. You would save me if you could, but your beaks can never free me from this cruel cord. Here, under my feathers, it cuts into my flesh, my bone. I cannot eat, I cannot sing, but I have told my tale. Oh! let it teach you to beware of nets and men!"

The little bird here staggered on his perch, his wings fluttered in a death-struggle, the white eyelids rose over the dull black eyes, and he fell from the tree-top. He was shrouded and buried in the waving grass below, and over him rose a requiem from the feathered choir.

Varied, and not mournful only, are the strains that compose this funeral dirge. With notes of plaintive bewailment come screams of anger and flappings of fury, a mingled testimony of love and pity for the little victim, and of indignation against the great victimiser, man. This first outburst having in degree subsided, several voices are uplifted (some timidly, others boldly) in the oppressor's defence. Amongst
these advocates of man is a robin, reminded by falling leaves of December frosts and Christmas crumbs; a rook, his eye cast downwards on a field where the ploughshare is unearthing some delicious grubs; and an owl, in dreamy reminiscence and blinking observance of a neighbouring barn and barnfed mice. Not a bird of them attempts to justify (how can they?) the torture and murder of which they have just heard the story and seen the consummation. They do but try to maintain (only, though, by arguments loose and ill-compacted as a blackcap's nest) that the destroyer of the little finch might only have been a rara avis of his race,-such as a white crow or black swan in their respective families. The contention begins to wax angry as well as loud. Beaks, opened hitherto only for accusation of the common enemy or common friend, seem about to be converted into weapons of sharper warfare. At this critical moment a call is made for the second witness, the other goldfinch returned, like his unfortunate fellow, from captivity. Forward he comes to bespeak the attention of the assembly. There is that about him which presently obtains it. It is not his slender voice, drowned almost in the subsiding clamour, nor yet is it exactly his little person; but in his air
(picked up we may be sure in civilised society) is a certain je ne sais quoi of self-possession and assurance such as never fails to work upon uncultivated natures.

He hops gaily to the very bough from whence had fallen the little bird now lying dead upon the grass. Like it he had only just returned from the haunts of men, whose yoke he had borne a great deal longer on his feathered neck. But that neck seems certainly in nowise galled, and his appearance altogether does wonderful credit to his late keepers. No heavy eye, no sullied, starting plumage bespeaks in him the hand of violence laid on nature's tasteful tireing; nay, not only does he present a contrast to his departed fellow captive, but even a marked superiority to the comrades of his kind to whom captivity is unknown. He looks (in the comparison) as a travelled polished gentleman in company of homebred rustics ; as a groomed horse amidst unshod, unbroken colts; as a garden flower, a garden pansy amidst pansies of the waste. His plumage is more glossy ; his colours more pronounced; his bill more white, and long, and slender; and his feet of flesh-colour or stocking-pink, instead of unbleached blackish brown.

The dapper little fellow looks, as already hinted at, most perfectly aware of these improvements in his
"outer bird" acquired by his intercourse with man, to say nothing of acquirements by one degree less superficial, picked up in the same society. Just then, as a man in excellent humour with himself might settle his chin in his starched collar and look down with complacence on his burnished boots ere he opens his ivories to address a popular assembly, so does our little finch give to his satin plumes a self-satisfied shake, to his pinky feet an approving glance, ere he opens his ivory bill to relate his experiences of human and humanising life.
" Gratitude," says he, " and a sense of justice alike impel me to uplift my voice in defence of men. I have been so happy as to live for a lengthened period under their favour and protection, and I am bound to declare that they are the best benefactors of our race. I once, in my ignorance, thought with you, my poor benighted brethren" (here the owl opened his round sleepy eyes rather fiercely); "yes, my dear uneducated brethren, I thought with you, that they were to be looked on in the light of enemies. I was so silly as to flutter in the net, and, for a passing season, to fret within the cage ; but I have learnt to acknowledge long ago that the net, in hampering my feet and checking my wing, was to raise me to a higher sphere,
and that the cage, while it confined my body, was to prove a medium for enlargement of my mind. What, my friends, is the body? (here the orator took another glance at the satin of his wing). What, I ask you, is the body, in comparison with what informs it-the soaring soul? But I digress. You have been told of a barbarous master, of a man, of a monster if you will, who was barbarous to a bird. Such an individual might exist, doubtless did. My heart bleeds at sight of the once living proof of it lying now dead upon the grass. From my own experience, I should say such instances are rare; but granted they are common, this is no proof, not a bit of it, that men, as a race, are the enemies of birds. One might as well, almost, endeavour to maintain, that men, as a race, are the enemies of men; an idea too preposterous, too absurd! Not an owl-I mean not a goose among us could possibly entertain it. Yet how stand appearances? I will tell you. You have just been moved to rage and pity (who can wonder?) at our brother's fate. But look you; the treatment he was so unlucky as to meet with was no worse, not by a feather's weight, than what men experience daily at the hands of their fellow-men.
"I have been accustomed to hang in my beautiful
palace at a town-house window, not a feather out of place, nor (I must confess it) a want uncared for. And what have I commonly beheld? why, creatures of the human family in garments, dirty, rough, and ragged, just like the plumage of our dear departed ill-used friend. His ruffled feathers barely covered, it is true, a poor little carcase reduced to skin and bone. But you should see in the streets of men, the great living skeletons (men, mind you) that crawl about, half hidden by their tattered clothing; their cry is for ever ' bread, bread' (food made of the seed that fattens men), yet men, fat as ortolans, and smooth and sleek as I am, pass them by and give them nothing except perhaps a mocking or a bitter word. You were horror-struck, my friends, (and well you might be) at sight of the girting cord that cut into the body of my brother finch. But you should have heard the stories that I have (true stories) from an American parrot who shared with me a drawingroom window and my mistress' favour. You should have heard of the cords, and the irons, and the chains, the whips and scourges (the last instruments of torture never laid on bird) that the whites (which are white men) are accustomed to use upon
the blacks (which are black men) in the country of which my companion Poll was born a native.
"In a word, I am thoroughly persuaded that men and women are in general much more kind to us birds than they are to one another. Why, I can tell my noble friend the pheasant, and my fleshy friend the partridge, that men go so far in friendliness to them as to cage and kill each other for their sakes, for their encouragement and preservation; I have heard talk of it repeatedly. But to speak only from personal experience: There is my own most excellent and tender mistress; she refused bread one morning to a starving child (one of those ragged skeletons of which I told you ); she was 'too poor,' she said, 'to give to beggars.' Yet, think of her generosity to me and Poll! She bought for each of us that very morning a fine new cage; never were cages made more elegant and commodious for bird accommodation. Ah! that most admirable woman! my more than mother ! how shall I number all her benefits? Has she not fed me from her mouth, even as my feathered parents when I was a nestling? has she not wept over me when I was sick? a thing my feathered mother never did! has she not fattened me with oily hempseed and floury canary, and pampered me with lumps of sugar;
educated, in short, my uncultivated taste? And now I can discriminate (thanks to her tender teaching) between the sweets of captivity and the bitters of freedom; the meagre thistle and vulgar knapweed which were once in my ignorance so sweet to me."

A murmur and a movement ran here through the feathered assembly. It was not of an approving character. Perhaps, however, the oratorical goldfinch took itfor applause, for, with no abatement, seemingly, of self-laudation, he thus proceeded,-
"Yes, these and a thousand other benefits of a corporeal, an external description, do I owe to my sojourn among men. But, as I said before, what is the body! It is nothing." (Here the speaker shook out his feathers and raised his black and scarlet crest, and stood on the extremities of his pinky feet to make the most, nevertheless, of the little body that he had.) "The body is nothing-less than nothing! What is something is the expansion and elevation of the mind. These are gifts worth gratitude; and herein what a weight of obligation is mine; not alone to my revered and admirable mistress, but to her enlightened race. Only through intercourse with the human can the bird-mind have full development, and attain unto its proper-which is a highly elevated
-place in the scale of creation. For this reason, my friends, and having your highest interests deeply at heart, I would persuade you to dismiss all narrowminded, antiquated, ignorant misgivings about fowlers' nets and trap-cages." (Here several angry voices and flapping wings reminded the orator of his little brother lying mute upon the grass.) "Ah!" resumed the speaker, no ways abashed, "that was an unlucky accident. He fell, it is evident, into most inhuman hands. I admit freely that certain dangers do beset us through the agency of man, but there are others quite as formidable from which, under man's protection (his only), we are safe. There are certain honourable nobles of our race,-potentates, high mightinesses of the air, who shall be nameless." (Here a sparrow-hawk, the only hawk in company, made a demonstration slightly threatening ; the finch a demonstration slightly nervous. "Yes,"he continued, though perceptibly drawing in his feathers, " there are certain great princes of the air who condescend, who stoop sometimes (of course they do us honour), to levy from us little commoners the tribute of our flesh and blood. But honours are not always welcome, in especial when thrust upon us, like this honourable
tax, by beak and claws. We civilly evade it when we can, but it is in one position only that we can positively decline it. It is only when we stand upon a perch behind bars of brass or steel, and under roofs of wood and tiling; only, in short, when our ally is man."

The feathered orator here stopped for breath, but the pause, this time, was onlyfilled by silence. The single sparrow-hawk had quietly disappeared from the tree of assembly, but several of his kind had become visible, hovering in air. Our pert little finch only noticed them by an upward twinkle of his bright eye, then proceeded coolly,-
"But what are they, those petty potentates, when compared with other powers of the sky, really great ones, whose mortal enmity we are never safe from excepting when we share the habitations of man. What is the grip of human fingers to the pinch of winter? Where one of us dies of hunger in a cage, a thousand die of famine in a frost. Yes, frost and famine are our direst foes. They are fast approaching. I hear them in the rustle of this yellow foliage. Your fate, my friends, I see it prefigured in the downfall of these trembling leaves. Fly, then, while it is time, into the nets of the friendly birdcatcher. Exchange
wastes of snow for sanded floors, frost-bound brooks for crystal fountains, bitter grains, few and hard to come at, for seeds sweet and plenty. Adieu! for myself I return (as was always my intention) to my deserted cage, my disconsolate mistress !"
" Be off! mean, base recreant, upstart as you are!" cried all, nearly, of the old and a few of the young birds then and there assembled. "Back with you to your silken bondage. For $u s$, free air, free sunshine, waving tree-tops, no floor but the green earth, no roof but the blue sky. For us, death and liberty ! sweet liberty and death!" "Begone!" screamed a jay; "Be off!" croaked a raven; " Decamp, decamp!" cried a lapwing.
" With the greatest pleasure," returned the civilised, humanised goldfinch, with a preliminary quiver of his satin wings. Then cleaving the air in a metropolitan direction, he was soon (to the infinite delight of his mistress and his friend Poll) through an open window and the door of his suspended cage.

The assembly he had left was as divided as ever on the question it had met to discuss. Evidence so strongly opposed as that of the two finches was enough to puzzle more capacious heads than theirs;
so, after a tiresome and noisy debate, prolonged till after sundown, each feathered member flew from the tree of meeting, much in the same mind as when he lighted on it. The feathered elders were only confirmed in their old-fashioned notions about nets and gins; the new-fledged juniors in their new ideas about the benefits to be derived through twine meshes and wired cages. Old birds therefore continue, as heretofore, to avoid being " caught with chaff," or by "salt upon their tails," while young ones continue to fill flap-nets by dozens; some through heedless ignorance, others through a daring desire to test their new theories concerning the comparative merits of captivity and freedom.

Bird experience, as exemplified in extreme cases, has been shown, then, quite inadequate to conduct to a decisive judgment concerning the just relationship of bird and man. We have left the birds, at least, still divided on the matter ; nor are we perhaps at all more competent than they to answer the ensuing queries-branches from the main question,-a moral question, be it not forgotten, one therefore not below consideration.

1. When we deprive a song-bird of its liberty, do
we abuse, or only justly exercise the power given to man over the animals placed below him?
2. Have caged birds, taken in the aggregate, no compensative advantages and pleasures in exchange for their natural heritage of freedom and enjoyment?
3. May it not be a design even of the kind Creator that these creatures of song and beauty, intelligence and affection, should minister to our pleasure when we sit at homé as well as when we walk abroad?

We attempt no formal answer to the above inquiries, which have sometimes-we confess it-come knocking at the door of conscience. We love birds and we keep them, and doubts have troubled us about the strict compatibility of doing both. Now, however, as concerns our individual self and our individual captives, we have long ago dismissed all scruples. But how have they been banished? and are we right in dismissing them instead of our prisoners to the winds? This may be best answered and best judged of from a short relation, "an unvarnished tale" of the domestication and domesticity of certain goldfinches which are living with us, as happily, we do believe, as if no roof of tiles divided them from the canopy of heaven.

But these birds in particular, and goldfinches in general, are worthy, in our opinion, of a chapter to themselves.



## II.

## GOLDFINCHES IN GENERAL; AND OURS IN PARTICULAR.

> " And of these chaunting birds, the goldfinch not behind, That hath so many sorts descending from his kind."

> Drayton.
> "Stone walls do not a prison make, Nor iron bars a cage."

Goldfinches would seem born, if ever birds are, for domestication. How can that be, when so few, comparatively, are taken from their native wilds? This proves nothing. Men were created for civilisation; yet few, for ages, were the civilised nations, and few now the really civilised, that is, cultivated individuals amidst the populations of the earth.

But wherefore (if it be so) is the feathered family
of goldfinch especially suited for adoption into the family of man? For reasons many; for these amongst them :-

The goldfinch is a bird of wide geographical range. Where man is, there almost invariably is he. We may call him, if not a citizen, a denizen of the world. On the frowning steeps of the Himalayan mountains, as well as in the smiling valleys of England, the goldfinch is at home.* His home (be it where it may) is an abiding one. He is no bird of passage. He stands in no need of that change of climate-or, more properly, sameness of seasonwhich is somewhat incompatible with a cage. He is a bird of remarkable beauty of plumage and elegance of form; also of sweetness and variety of song; likely, as such, to attract man's notice. He is easily habituated to change of food and habits; therefore bears as easily the change from freedom to captivity. He is a bird of singular intelligence and docility; a pupil, therefore, apt to teach : and, finally, a bird of great longevity; allowing full time, therefore, for domestication to work its wonders.

[^1]But with all this in him to bespeak our attention, this little favourite of Nature, with his coat of many colours,* never seeks to be a favourite of ours. A goldfinch in a garden is no common visitor; at a window-sill, or on the threshold of a door, he is, as far as we know for, a visitor unknown. Through the summer, flocks of young goldfinches, as gay as summer flowers, are frequent in every weedy waste; their favourite resorts the brick-field, the common, and the sea-side cliff; wherever, in short, the thistle, like a tyrant, bears its infertile sway. When the glory of this rigid potentate is on the wane, when thistle-down and gossamer rise light upon the autumn breeze, and autumn dews lie heavy on the ground, then the glory and gaiety of goldfinches has reached its height. Then, alas! like all things sublunary, they begin to fall or fade. Sometimes they topple headlong into the bird-catcher's net; sometimes decline slowly with the decay of autumn leaves and the first pinchings of winter frosts. The goldfinch, nevertheless, like all the fowls of the air, is well provided for-marvellously well—by Him who " openeth his hand, and filleth all things living with plenteousness." Mark the succession crops which, under the

[^2]ordering of this parental Power, are provided for these little birds! To them the grain that is most bitter is most sweet; nearly all the seeds are bitter of those compound flowers which compose the syngenesian class, and of these seeds the favourite if not only food of goldfinches is composed.

Spring bestows a harvest-time on them, in the first early blossoms and early seeding of the dandelion. Its round, feathery seed-heads, the " clocks" of our childhood, are by children and the winds blown to pieces for the goldfinches, who also pick them to pieces for themselves.

Then summer brings them largely of her bounties, in the innumerable heads of the scaly knap or knobweed. This hard and hardy intruder often empurples the meadow, to the spoiling of the grass, especially in high and chalky districts; and it would be spoilt oftener but for the appetite of goldfinches and other lovers of bitters (insects numerous) which live upon its seeds.

Thirdly, in early autumn, and in part coeval with the knapweed, comes the thistle. Then joy to goldfinch gourmands! It is a joy to see them dipping their slender bills into the prickly covers which protect (but not from them) the downy-crested and
down-enveloped grain. Various species of thistle flower in succession, so that their seeds form a standing dish (ere they take to flying) of those that love them.

Ripening with the later thistle-seed, and almost as acceptable to goldfinch palates, is the autumn provender afforded by the teazle. This is a singularly handsome plant, a noble of its prickly tribe, and its spiny, seedy pyramids are of noble size; large enough, each of them, to furnish a magnificent repast for a hungry little bird. The teazle we are speaking of is not the hook-headed, cloth-combing, cultivated teazle of the fullers and fulling counties; but that unbarbed, uncultured species which grows where it pleases, the skirts of brick-fields and the skirts of the sea being its favourite resorts.

The above, with groundsel, sowthistle, and a few other syngenesians, make up the bill of fare (or fare for the bill) of goldfinches from spring to the end of autumn.

And what then? Do the wintry winds sweep their tables, leaving not a crumb upon them?

Not at all. An abundance of substantial food is still left for their discussion, in a seed much larger than any of the above, but like them bitter, and of the class syngenesia.
"What on earth can be the use of burrs? unless to spoil one's temper and one's garments ?" Who has not said so, or so thought, while attempting to free a trowser, or a petticoat, or a spaniel's tail, from these impertinent hangers-on? "What can be the use of burrs? Ask the sparrow! ask the goldfinch! Burrs are, in their opinions, made up of something better than their hooked appendages. They know, by the testimony of their bills, that every burr is composed of large flat seeds, curved and set circularly, close together. These are protected, not only by their outwork of hooked bristles, but by hard tough skins. The sparrow, with his strong thick beak, is a match for these defences; he can separate the seeds and feast upon their marrow. Not so with the delicately moulded goldfinch, who seldom, we fancy, grapples with the heads of burdock, while the form of head is left them. In due time, though, and by the time our little finches stand in need of an addition to their supplies, the great elementary powers-rain, wind, frost,-come in aid of their weakness and their wants. Under these seasonable influences, the seeds which compose the heads of burdock become loosened and fall separately to the ground. There, moistened and softened, behold them food come-at-able for gold-
finches, and perhaps other birds with slender bills and taste for bitters. We have not actually seen them thus appropriated, out of doors, but when softened by hot water these tough-coated seeds are eagerly devoured by our domesticated birds. With such a plentiful supply for every successive season goldfinches might seem prepared to set famine at defiance; perhaps they never fall its victims except when the earth is enveloped in a mantle of snow. Cold may, however, kill, as well as hunger ; and, by one or other, assisted by the birdcatcher, the numerous flocks of autumn are almost entirely destroyed. We are told by a well-known naturalist, that a few pairs only survive to see the spring. Here is a passage from the same observer, which confirms our own experience of the ready conformity of these birds to artificial habitudes. "Many," says Mr. Knapp, "mope, pine, and die, from change of food and loss of friends, but I have known a goldfinch immediately after captivity commence feeding on canary, rape, and hempseed (food it could never have tasted before); nibble his sugar in the wires, as if an enjoyment he had been accustomed to; frisk round its cage and dress its plumage, without manifesting the least apparent regret for the loss of its companions and liberty."

Such, undoubtedly, is in most cases the easy transition from the natural to the artificial with imprisoned goldfinches. It is not always, though, quite so easy to break-in new-caught birds, even of the goldfinch feather, to new diet. Fresh from their accustomed bitters, some will refuse the sweets provided them; others, accepting, are attacked in a few days by what bird-fanciers term "a scouring," in other words, a diarrhœa. The poor little prisoner, after awhile, grows quiet, dull, and bunchy, then drowsy, and from the troubled sleep of disease it soon, usually, sinks into the quiet sleep of death. But is this an evil without a remedy? It may (like the cholera) be without discovered means of cure, but (also like the cholera) it has ample means of prevention. Now, we are always in the habit of making for our goldfinches a collection of their favourite seeds as they ripen in succession. Of these we were provided with a tolerable stock (not an ample one), when, one October a fresh-caught bird was added to our feathered family. He was a little brown-suited fellow, who, for all the colours he could yet boast of, might have been taken for a sparrow. To sweeten his early hours of captivity we gave him a sprinkle of bitters on the floor of his cage, to which,
from that moment, he seemed completely reconciled. Had we possessed a sack instead of a sample of this precious grain, the sprinkle might have been made a daily supply, and then all would have gone well. But when the thistle-seed was withdrawn, canary and rape were scattered in its stead; not a grain of either was ate or opened. At the bidding of pity a few more bitters were thrown down; these were presently picked up, but the bidding, even of hunger, was disregarded, as concerned the unaccustomed food; our prisoner and his exclusive appetite were not to be starved into acquiescence. That was soon made evident by the starting feathers, the heavy eye, and other symptoms of disorder. What was to be done? Was our captive to die, to be set free, or to consume the whole (and what then ?) of our store of bitters? We were weighing the alternatives when the possibility occurred, that the rejected seed might be not alone impalatable, but un-come-at-able. It might be too hard and slippery for the youngster's bill. Whether or no, this suggested an expedient. We took a hint from the Pindaric pilgrim : to smooth his passage to the shrine of Loretto he boiled his peas. To smooth the passage of our prisoner to artificial life, we boiled his seed. The device succeeded; canary was thence-
forth devoured with apparent goût, so also hemp, not boiled, but bruised, and from that time neither sick, nor seeming sorry, our bird proceeded on his domestic career.

We had two other goldfinches in our previous keeping. These had undergone their seasoning in other hands, how, therefore, we connot tell. This is the history (all we know of, or can guess at it,) of one of these birds (the eldest of the pair), which has been in our possession for nearly six years. He was bought at a London bird-shop, and he had been evidently in a bird-fancier's, or bird-torturer's hands. When he first came into ours, nothing could exceed the brilliancy of his plumage, the rich crimson, the pure white, the glossy black, the golden yellow, the softly shaded brown, all harmoniously combined, but of greater intensity and clearness than those colours ever exhibit in a young fresh-caught bird. We knew it not then, but have been certain, since, that this was one that had undergone the operation of forcing.

Now, in what does this forcing process consist, as applied to feathered flowers? What was it, for instance, in the case of the goldfinch we are speaking of, which had become as a prize tulip to a common
cloudy seedling. It is to be taken suddenly from light, liberty, and pure fresh air, to a little dungeon, dark, hot, fœetid; a black hole in the compass of a box, only differing in size from such as one has read of very lately-one in use somewhere over the Atlantic, its purpose, the packing, for concealment or conveyance, of a runaway slave. Numerous birds (to say nothing more of men) have been, and are still, we believe, so served, They are immured for weeks in a close box lined with flannel; never opened, never cleaned,only supplied with abundance of rich exciting food. Numbers die (as well they may) under this operation. Those that live come out of it, as we have described, in the brilliant feathering of a forced or premature moult. Together with improved, that is, brightened plumage, they acquire improved, that is, heightened voices, and become frequently the "call-birds" employed by bird-catchers to allure others to misery like their own.

Well, we became possessor (unsuspectingly) of one of these forced productions of a box like a hotbed. A fine handsome fellow for awhile he was, in especial by the side of his cage companion-a sunbrown child of nature with soft subdued colours, netted in a brickfield, and bought soon after of the brickmaker who
caught him. The advantage in dress was all, certainly, on the side of the child, or changeling, of art. But when September and October came and went, having brought with them the season for a natural moult, behold the difference that they left. He of the soberer suit was invested with a new one, richer, glossier, and of colours more defined. His blackish bill and greyish feet had grown whiter, and but for a slight fading of his sunny brown, he was altogether an improved creature. He, on the contrary, with the finery of artificial production, lost his feathers, like his comrade, with the autumn leaves, but in his case they, like the leaves, were not renewed with winter. All through that nipping season the poor little victim to human, or inhuman meddling, continued bare-necked, and feathered but by halves. Nor was this all,- the few feathers he had left to shiver in, had lost their gloss and smoothness. To plume himself upon them was a thing impossible, yet was he for ever pluming, pluming, and plucking, all to no apparent purpose, except to denote an irritable skin and keep up irritation -consequences, with all the rest-of feather-forcing. The poor little fellow would often sit for hours all-of-a-heap upon his perch, as big and bunchy as his scanty plumage would permit ; this especially in the
middle of the day. He had, however, his times of gaiety, and even song; so we went on hoping that another year would reinvest him with another whole and many-coloured coat. But another came, and yet another, and brought nothing better than a few new patches to the ragged garment. In the absence of a tailor-bird, we were fain to consult a bird-doctor on the case (or coat) of our once beautiful, still favourite, finch. The bird-doctor, like others of the faculty, tried many things-his patient most of alland that was all that he could do. Cure seemed hopeless, till the fourth autumn, when in stepped Nature, laid a restorative finger on the little bird, and behold him re-arrayed! For softness, thickness, smoothness, and brilliancy of colour, the suit she gave him surpassed that for which he had so dearly paid; and another was the gift of the succeeding year.

Water, be it here noticed, seemed a great auxiliary in the above-mentioned work-a seeming miracle of renovation. Nature, like her Divine Master, works by means, and, at her bidding, the little leper was to wash. This to the feathered race is her general injunction, and it is a great cruelty in man to hinder obedience to the same. No one that has a heart for
birds, or for making creatures happy, could see a caged bird make its ablutions, and deny it the luxury again. We did, in the single instance of our deflowered (or defeathered) goldfinch, on account of the failure in his plumage; this only during the first ensuing year: in the second, on the principle of "kill or cure," the bath was granted, and may have aided largely to recovery.

To both the birds above spoken of, bathing now brings a daily pleasure. A few other appliances, only meet and kind, are thereto added. They consist of a small allowance daily of their bitter seeds, with a few of hemp, not mixed with the canary, but given as bon-bons from the hand; a constant supply of groundsel ; a cage daily cleaned and daily sanded ; a supper on winter evenings; a covering over them on winter nights; and a frequent taste of freedomthe freedom of a room. With such a measure of attention-of justice, nothing more-our goldfinches are both now in finer feather, song, health, and spirits than belong often to a captive state. Compared with others in a state of freedom, they are as our garden natives (flowers and fruits) to their congeners and originals of the wild. In so much, they bear striking witness to the outward benefits of careful
domestication ; that is, cultivation, when not carried to the excess of forcing. Those that cannot bestow careful cultivation upon flowers and fruits have no business with gardens; and those that cannot bestow careful domestication upon birds have no business with cages.

But enough of our favourite finches, as regards externals; now to the less superficial subject of their interior faculties, and the influence of cultivation upon them. It is their development, much more than mere improvement of song and plumage, that bears upon the main question of our last essay. Let us repeat it:-Do we, in keeping birds for our amusement, confer on them a benefit, or (of necessity) inflict an injury? If the latter, we have certainly no warrant, morally valid, for the keeping them at all.

Before a word about our goldfinches, as respects their mental manifestations, let us premise (though with all the diffidence of doubt) what our notion of mind in animals is. It would seem to us as comprising two distinct powers; the one made up of all those implanted instincts which lead to modes of action as certain and invariable as the necessities of being which call them forth; the other consisting of
an amount, greater or lesser, of intelligence-a principle resembling very closely what we arrogate to ourselves exclusively under the name of reason. This latter is (like reason) available to contingencies, and (also like it) capable of improvement through outward influences.

With a mental endowment of this double character, we imagine animals to be possessed of affections, which are also of a twofold sort-limited and expansive; the one restricted and instinctive, as in love of sex and offspring; the other variable, and of individual excitement, as in the friendly attachment of animals to each other, or to such of the human family as extend towards them kindness and protection.

Instinct, and the admirable operations performed under its guidance, belong to the history of animals in a state of nature. When taken from it, their instincts (or some of them) become comparatively weak, and confusion and imperfection are thrown into the ways and works thereto belonging. It would be an indisputable injury, with birds and other animals, thus to bedim the steadiest of their appointed lights, were it not for that compensative arrangement observable here, as in the disposition of
most things both in the natural and moral world. Through this, there comes with the weakened faculty the need for its exercise proportionately lessened. And not this only; for in the stead of obliterated instincts, or to make up for their impairment, comes an augmentation of that higher quality which looks like reason, also of those affections which are so much like our own.

Now, it is of this improvable intelligence and expandable affection that we are going to relate a few evidences (or what to us so seem) in the domestic doings of our goldfinch favourites.

It has been remarked by Audubon, that every species of bird is possessed of a certain (not always definable) cast of countenance peculiar to itself. Now we must take leave to extend this observation from every species to every individual. We always name our birds. We would as soon call a pet dog only "doggy," as a pet bird only "dicky." A general appellative has no personality, and every bird has a great deal. In air, movement, form, and feature, aye, and in character, each has always enough of peculiarity to suggest (if noted) a characteristic name. It is with the dispositions of birds and animals as with those of children; the best way to see the most of
them is to notice them in their intercourse with one another.

The eldest, and first-bought of our goldfinches, is he of the black-hole experience before described. He boasts himself of a bill of most uncommon length. His eyes have a sharp, shrewish, and withal, cunning expression; and though with these asperities he has his tenderer points, his face does not altogether belie his disposition.

The first time a companion was introduced to him in his cage he testified his seeming pleasure by loud and repeated chirps, and that peculiar wagging of the tail and body which is significant of bird delight; the stranger, looking shy, forbore to return the friendly demonstration. It was not the less persisted in; then followed by a warmer salutation; in short by a salute. Everybody knows, we presume, that birds kiss. Kissing must have first come in with birdswith billing and cooing doves. Who can doubt it? And it would seem, moreover (doubt that who may) that kissing, with bird as well as man, may be a token of feigned, as well as real affection.

Here, with our goldfinches, is proof of it. The original inmate of the cage-he of the long beakproffers, as we have said, a kiss. The short-billed
stranger for awhile rejects, then is won over to accept and to return it. That suffices; Short-bill is put off his guard, and forthwith from Long-bill comes, like the stab of a stiletto, an angry peck-peck, and as angry a flap-flap of the pecker's pinions. Short-bill, with more than Hudibrastic wisdom, shows no fight, but as much of flight as his wires will permit. The mastery of the cage is decided, and Long-bill keeps it by repeating now and then the like proceeding. Hence his characteristic name of Spite; and Short-bill acquired afterwards the name of Tease-Spite and Tease! Amiable appellations for a pair of feathered pets! Well, they are appropriate; and be it noted, they are only Spite and Tease, sometimes, to one another, not to us.

Tease is, withal, a most affectionate little creature, in especial towards his fellow, miserable if for awhile deprived of him, delighted at his restoration; his uneasiness denoted by distressful calls, his delight by low chattering, often accompanied by (no deceitful) kisses. He rarely fails to yield undisputed precedence to his long-billed elder in the matter of a feed of thistle or other dainty, and if kept at bill's-length by a degree of fear, the fear goes not to the length of casting out love.

There are times, nevertheless, when, like a friend of the type human, he will tease most unmercifully the creature which in all his little world he loves the best. These times of teasing return usually with the approach of every roosting or twilight hour. With birds that are caged together this hour brings usually a violent dispute for sole possession of the highest perch. To meet this ambitious infirmity of bird nature, there are two perches placed upon a level in the oblong cage of our two goldfinches. As sure, however, as the graver Spite begins to settle himself for the night-to indulge in that open-eyed reverie which always precedes the soft unconsciousness of his pinion pillow, so sure does the little Tease begin his teasing. Always lively, he grows, as birds mostly do, lively to excess towards the time for repose. Then does he hop ceaselessly from perch to perch, from wire to wire ; and, not content to keep his activity to himself, then does he delight to bounce and jostle against the quiescent Spite; nay he ventures sometimes to the daring length of plucking a feather from his side. At length, the drowsy one is roused and ruffled, and exhibits his annoyance by sundry pecks and murmurs, equivalent exactly to the "Don'ts !" and "Be quiets!" of a somnolent papa, a "family man," who
has determined on a comfortable nap, which a teasing child or children have determined he shall not enjoy. Short-bill is indebted chiefly, not entirely, to the above habit for his alias of Tease. It is significant also of his place of capture, a perfect garden of teazles in the corner of a brick-field. Well, Spite and Tease, in spite of their names and for all their occasional squabbles, are the most affectionate of friends. They feed out of the same pan (provided a grain of thistle be not in it), eat off the same finger, and (when the teasing is over) sleep on the same perch. There is only one thing which in concert they will never dothey will never, like less delicate bathers amongst other bipeds, wash in the same bath. They are usually, however, let out at the same time to make their morning ablutions, and it is among the drollest of sights to notice their proceedings on these occasions.

First comes Spite. Perhaps he takes a preliminary flight, or perhaps lights direct from the cage upon the edge of his saucer-bath. Dip into the water, dip, dip goes his long white ivory, as if to fathom the depth of the artificial pool ; then follow, plump into the middle, his pair of slender feet. Flap, then, go the golden wings, and tap, at the bottom of
the saucer, goes the ivory bill; flapping, tapping, splashing, in a perfect fury of delight; the drops rising, to fall as in a shower-bath,-every feather spread open to receive them. Where, meanwhile, is Tease? Waiting on a chair-back near the table of the bather. He waits, according to his deferential wont, but not for long; deference cannot stand, nor little Short-bill either, the sight of that delicious shower: every "feather quivers with desire," and down he flies to the table within an inch of bath and bather. The saucer is wide enough for two, but the birds, as we have said, never bathe double. What, then, is to follow? A fight, certainly, or a chase, or both, betwixt him who possesses and him who covets the desired luxury? Not at all. The little birds, if about to war, make (like great nations) a mighty show of desiring peace. Before they measure bills (alas!for Short-bill), they open them in coaxing parley-the one to be allowed to finish, the other to begin the process of ablution. "Chatter, chatter," one dripping, one dry; one within, one without the watery circle. "Chatter, chatter" all, like the chatter of state congresses, to never a bit of purpose, till-is it possible ?-they come to kissing. Ah, that Judaskissing ! Now assuredly a quarrel will ensue. Some-
times this palavering, chiefly on the part of Spite, ends in the retreat of Tease. More often the waterfit is too strong upon the latter to admit of other than the water-cure. Then he cares not a seed-husk for such repellents as a proffered kiss, and in the water or on the wing, to it they go, in fighting ear-nest--the reward of the victor the undisturbed possession of a blue saucer, the water it contains, and the ecstacy of dipping in it until dry.

Now, is not the above procedure of our bathing birds exactly like that of two children (little ones or of a larger growth) caressing and wheedling for sugarplums or other coveted possession, before they come to fisticuffs about them? This is one only of a thousand little ways and workings equally resembling. No one (we are persuaded) can take careful notice of the intercourse of animals, in particular of associate birds, without being compelled to acknowledge that they are looking upon miniature copies (some few lines wanting) of the type of human mind as exhibited, that is, in its naturalness unreclaimed. In these, reflected and reduced, as in a convex mirror, we may see our natural amiabilities (no better than the amiabilities of Spite and Tease), and contrasted with them our qualities of colour opposite-our avidities,
our little artifices, our jealousies, our bickerings, all as vividly repeated. Yes, there are dumb children of our Heavenly Father who are not assuredly without a share in the largest number, though not in the highest, of our mental possessions. For our broad lands they may have but their little acre, or their barleycorn; but of broad lands, acres, barleycorns, the soil is very similar, commingling in different proportions - the clear and foul, the flowery and the weedy. Some particular allotments, richer than theirs in quality as well as in extent, we certainly possess. Powers of mind are ours, which are not theirs-powers to calculate, to imagine, morally to know the good and eschew the evil; above all, to know ourselves, and to know and worship God. These are our talents, essentially human, and with them (essentially human too) the great responsibilities they involve. As man, let these our endowments of humanity be employed. As man, then, high above beast, high above bird, is our place in creation-in the world that is passing, and the world that passeth not away. But let these, our only exclusive attributes (save human speech), be thrown away, and in what are we better than they?

Than the bird we are only so much worse, in that E 2
we have no wings ; no wings of feathers, bone, and muscle, to reach the sky; no wings of faith, love, earnestness, to rise towards Heaven.

Hitherto we have been telling of our goldfinches as friends of each other; now for a word of them as friends of our own.

We anticipate the smile of good-natured pity, or ill-natured contempt, ready to meet the very mention of feathered friends. "I can boast," says one, " of the friendship of my dog." "I can vouch," says another, "for the attachment of my cat." "As for birds, they are all well enough in their way ; pretty enough and pleasant enough to those who like them; but as to sense and affection, they know just what they can't help, which is how to build a nest ; and they love just what they can't help either, their mates and their little ones, and that only as long as they are mutually useful and instinctively dear." Time was when such words would have expressed our own opinion of the bird creation ; but that was when we, like most people, were keeping a bird only to hang it high, like a picture on a wall, or to suspend it like a blind-tassel in a remote window. We thus kept a bird (a goldfinch, too) for eleven years, and never thought of it as more than a foolish, fluttering, noisy thing. Now suppose, instead of a little bird,
we were to take a little puppy, or a little kitten, cage it, hang it up on high, just give it a supply of food, and nothing more ; would it be likely, when it grew to dog or cathood, to exhibit much more sagacity or affection than a so-served bird? We fancy not. If we deprive an animal of nature's kind and appropriate teaching, and bestow on it no teaching or heed at all, what is it likely to become? A thing of nothing better than life and motion, all its natural instincts kept in, or clean put out for want of using; none of its natural intelligences brought forth to more than fill their places.
"You never mean to insinuate"-objects here some gentleman with a Newfoundland, or some lady with a Blenheim-" that birds, under any treatment, could be made worthy of comparison with dogs!" Why, no ; no comparison can be drawn betwixt them. Our Spite could not seize a beggar by the leg, nor our Tease pull us out if we fell into the water. Of attachment birds are capable-attachment to us. We maintain and shall adduce what we consider proofs of it. But since the like proofs as are adducible with dogs are prevented by a thousand impossibilities in the case of birds, let dear faithful Tray keep, by all means, his just pre-eminence as the especial friend of man.

But take simply natural intelligence, and we doubt if any quadruped be endowed with more than falls to the share of some among the feathered bipeds. Only watch a little bird-a wild one if you can, a tame one if you can't,-and you must confess it to be the very picture of intelligence. While your dog or your cat is sleeping away the daylight before the fire or in the sun, look at your bird perched on a twig or at a window : see it always awake, alive, alert, turning its little head, twisting and craning its little neck, standing a-tip on its little toes, all to take in at eye and ear every object, every sound within its range of sight and hearing.

Now for the display of this inteliigence in our educated finches. Educated! Yes. But of education, be its subjects what they may, how widely different the notions! As at mention of educated women some may think of nothing but ladies in conjunction with pianos, drawing-boxes, Berlin-wools, and French and Italian grammars, so at mention of educated birds some may think of nothing but canaries and goldfinches associated with conjuring-cards, lilliputian cannon, firelocks, wheelbarrows, yokes, and water-pails. Now, as respects the use of these and things similar, the education of Spite and Tease has,
we confess it, been wofully neglected. They cannot, like some accomplished individuals of the Fringilla family, tell the clock by the cards, fire off a cannon or a musket, die at command, be carried off by a comrade in a wheelbarrow, and live and fly again to order. They cannot even stand on their heads, or carry yokes with pails upon their shoulders-performances all which evince indisputably a world of teachableness in the goldfinch composition, but of which ours have been taught nothing in the world.

What in the world, then, have they acquired in and by our keeping? Let us see. We have seen already what these little creatures, taken from general intercourse with their kind, have become to one another. They have exchanged their springtimes of love for life-times of friendship; gainers (we take it) by the change. But this is not all: to their affection for each other there is added another of a higher sort, in their love for us-an object higher than themselves. When animals have learnt to love and look up to a human being, they have advanced a step; gained, not a new faculty, but scope for its display. We may not, we suppose, bestow on this faculty the name of veneration, but it is something very like it. Nothing does it more
resemble than a lower form of the same quality which in us, rising to adoration, enables us to love and look up to God. Such, one might imagine, was the sort of love naturally subsistent on the part of animals towards man, while yet in the happy Eden of their birth, and before, in sorrowful substitution (or addition) came that "fear and dread" of us which ensued upon the Fall.

Now, our little birds do love and look up to us; this is no fond fancy. Spite, for all his spitefulness (all kept, be it remembered, for his feathered friend) has not seen our face, fed from our hand, listened to our voice for five long years without having learnt to distinguish face, hand, voice, from those of strangers. He tells it by his chirp of recognition, or joyful flap of wing, nor in this respect (or respectful observance) is Tease behind.

To put birds, as well as people, entirely at their ease, one must put them pretty much upon a level with oneself. This, in the absence of bird-haters in the shape of men, and bird-lovers in the shape of cats, can with birds be very safely done. We generally do it by placing them on the table at which we are employed, and herein, simply, consists our grand secret for their domestication; the table to a bird,
caged or free, becomes as the hearth-rug to a dog or cat.

It is not only by day, but during a part also of the winters'evenings that our friends, Long and Short-bill, are thus admitted to our table-talk or silence. "Is this," says somebody, "your kindness for birds? to put out their poor little eyes with cruel candlelight when they should be hid under darkness and their downy wings; and would be, but for you!" True; but the little eyes have had their slumber, have been closed for hours since the closing of the day, and are as ready for an hour of candlelight, as though it were an hour of sunshine come again. Our birds, like some of their betters, take a long nap, to wake up to supper, and sometimes a song. "How absurd! would they do it by moonlight in their native woods!" Certainly not; but in their native wilds they not only go to bed, but rise with the sun, a laudable habit with which walls and blinds and shutters sadly interfere. So when we give them hours of extra waking and feasting of an evening, it is only to make up for as many of extra sleeping and fasting of a morning. It is only one of the compensations of captivity which, by compensations only, and that in measure running over, can be made a just allotment.

Now, when our goldfinch pair are admitted to their places on the table, Tease is sure to make the most of his artificial daylight by all manner of daylight activities. Not so with our old friend Spite, who enjoys himself, usually (as well as Tease will permit), after a fashion infinitely more sedate. In that state of repose, open-eyed, and wide awake, wherein by day as well as night, he often indulges, he loves to fix himself on his perch at the point, invariably, which brings him nearest to our person, towards which, almost as invariably, his eyes are directed. We have only to change our seat, and forthwith maitre Long-bec makes a corresponding move. Tease, amongst his other candlelight activities, including an occasional teasing of Spite, always helps himself to his supper. Not so his more passively awake companion. He always looks for his to the great giant, who, he knows perfectly, is accustomed to wait upon his wants. At a certain hour, he is ready to step on the giant's finger, and be lifted on it through his cage-door. He is as ready then to bestow upon his great purveyor the grace of a kiss (this is accurately true), for the evening meal ready for his discussion. He eats it from the hand on which he is not seated, drinks out of a glass or from off a dripping
finger, gives, in concluding acknowledgment, another kiss, or a dozen if required, and returns, glad and grateful, to his wired chamber.

It is thus when the birds are caged; but they just as often spend their candlelight hour in the freedom of the room, cleverly avoiding candles in their occasional flights. They seldom, however, go far from the table, where they make themselves perfectly at home, pecking here, hopping there, pulling this, prying into that, perching now on our chair-back, now on our shoulder, now on the summit of our pen or pencil, often on the top of their cage, to which they never fail to betake themselves, generally in due time, for the night.
"But all this," says some one, " (if it all be true,) must have been brought about by a world of teaching, more than any bird in the world is worth." By no means; all that our finches do has come of the casting away of fear. As respects one or two of the human family, they have shaken from their feathered necks every grain of that mill-stone to progress, both of man and brute. Owing to no weight of fear impeding, their wings bear them uncalled, as well as called for, to hand, head, shoulder; and what is more, they care no more for handling than
a kitten ; care so little, as to discuss a meal with as much composure when held in the durance of four fingers and a thumb, as if in that only of their wires or the walls.

It is thus, we are persuaded, with animals in general. Only let them be divested of their natural "fear and dread," and forth will come the natural looking-up and love, over which "fear and dread" are but overcast, as cloud over sunlight, stone over a gushing spring, or as the unsightly coating of certain shells over the beautiful surfaces which lie beneath.

Albeit messieurs Long and Short-bill are so ready, as we have seen, to go soberly to bed after supper, they are not at all times equally disposed to re-enter the door of their abode. On sunny mornings, in especial, after their matutinal bathings, they often show a decided disposition to hold fast on as much of liberty as four walls allow them. They find it sweeter sometimes than their darling bitters, a bait of which thrown upon their floor will not always tempt them home.

When it does, after many a divided and undecided glance, it is curious to see the cunning and quickness they exhibit, in order to avoid the closing behind them of their house-door. One invariable precaution
to hinder such occurrence, is to keep the said door always before them, taking care the while, however occupied their bills, to keep a sharp watch with eyes and ears on the treacherous individual, for whose treachery one previous act of it quite suffices to prepare them. At the slightest movement, word, look, betokening the intent suspected, one, perhaps, snatches up a seed, another drops one, and out dart both, before foot or finger can be made of service to arrest them.

Much more than cunning and quickness is here evinced. Here is a display of memory, foresight, forbearance, powers of comparison, and choice. Memory, to recal the time or times when shut in before. Foresight, to anticipate that the like will occur again. Forbearance which deters from the relished meal, because comparison weighs and judgment chooses betwixt the enjoyments of that and liberty.

But though so sharp-witted and alert to avoid being shut in, when it is their pleasure to be out, these birds have infinite pleasure, also, in the possession and occupancy of their wired house, which they have learned to look upon as home. Provided there have been no recent attempts to shut them in, they will often, when abroad in the room, make flying
visits to its interior, all for no seeming purpose, but to assure themselves of safe possession. If at large in the twilight time of roosting, they never fail repairing to their proper perches, and when their residence is put out of sight evince as much uneasiness at its withdrawal, as joy at finding it restored.

This love of home, combined with love of home companion, is in especial, all-powerful with long-billed Spite. It suffices, with him, to lure back, not simply from the narrow freedom of a room, but from the freedom (boundless to a bird) of an adjacent garden. As the willing captive of like feather, immortalised by Cowper, the gentle bard of home, he has shown not once, but often, that he also has

> "A prison with a friend preferred, To liberty without."

Once or twice, through inadvertence, many times through confidence, has a sash been left up where Long-bill has been at large. The first time we caught him on the open window-sill, it was to make sure, of course, that we were about to lose him. He doubtless had wandering notions of leave-taking in his little head, there as he sat, (the rascal!) now peering up at the blue sky, now poring down at the many-coloured mosaic of the garden, now prying deep
into the recesses of shrubbery and trees beyond. All these were doubtless putting forth their powers of invitation. So were the voices from grove and garden ; but, perhaps, in their vastness and their strangeness, thay had also a repellent influence on the long domesticated bird. There, at all events, he stood as if held in suspension by conflicting forces, little Short-bill screaming his hardest from the cage to bring him back; we breathing our softest lest we should send him forward. This for minutes that seemed hours, till, the debateful survey (if it was debateful) ended, Long-bill turned his back on the wide world without, to come home to Short-bill and the narrow world within.

An invisible chain had evidently been wound about the little bird-its links, love of home, of friends, featherless and feathered, and force of habit. Often since have we given him its length, and it has proved hitherto as strong as brick walls and brazen wires. It is plain, in short, that the forfeited delights of freedom are more than balanced by the acquired delights of captivity, as far as regards our individual finches. Those who have had patience to read, and confidence to believe what we have told about them, can hardly doubt it, or they would doubt it still if little Spite and Tease were to open their ivory bills in
articulate confirmation of the same. We shall only, in conclusion, give a brief summary of the losses and the gains of all domesticated song-birds, when treated as they ought to be.

They lose the range of earth, and the use, for cutting air, of their " aire-cutting wings."

They gain in the frequent freedom of a room, a measure of resembling pleasure, rendered by comparison with greater thraldom a greater joy.

They lose a fickle February mate.
They gain, or ought to, for a bird should not be caged alone, a fast friend for all the changing seasons of the year.

They lose (generally) the pleasant exercise of their instinctive skill in fabrication of a nest, with that of their instinctive affection in tending on their nestlings.

They gain exemption from the frequent misery of finding nest invaded and nestlings gone.

They lose, from spring to winter, the pleasures of reaping and gleaning of their self-sown harvests for themselves.

They gain, from winter to spring, protection from winter's icy arrows, and feast within, while winter in his white cloak may be locking their granaries without.

They lose, as regards their instincts, dimmed or obliterate through want of use.

They gain, as regards their higher faculties of intelligence and affection, brightened and brought out by intercourse with creatures higher than themselves.

On the whole, then, our " birdies smalle," we would fain persuade ourselves that we have not done you wrong. While we have left your little sum of joys unlessened in number, we have in some things raised the standard of their quality. We have made you cognizant of us, your fellow-beings, not as mysterious objects of " fear and dread," but as welcome suppliers of your wants, and ministers to your pleasures. You have learnt, as such, to look up to, and to love us. Who can tell of what these capacities of your nature may not be the germ?

Who can tell that the line which serves now to divide most clearly the mind of animals from the mind of man, is a line intended to be kept for ever? Is it presuming to conjecture that endless progression may belong to the improvable capabilities of animals, as to those of men? In animals these powers are for the most part lost and useless, here; but can there be a living creature to whom a capabi-
lity is given only to be thrown away, for ever? The inference seems clear.

Then, little " birdies," the sparks of light and love which now inform and warm you may wax larger, how much larger yet?

A consciousness may even dawn on you of the divine hand that made, the divine love that provideth for you, even as you have been awakened here to perception of the human care that has won your affection in return.



## ANIMALS OF AIR.

With March winds and April sun and showers come birds, bees, and butterflies. The bird that "knows no winter in its year" comes from the summer of a foreign clime ; the bee from its winter home in hive or nest-hole ; the butterfly from its winter shroud in the chrysalis, or winter shelter in the ivy. Birds, bees, butterflies-a welcome to you all! As we speak your names there is spring music in their very sound! As we write them, spring sunshine in their very look! Winged creatures, ye are too beautiful to be bound to earth, where nothing, except its flowers, is half so lovely; and ye are pre-eminently animals of air.

As such, ye are joined together, practically, poetically, divinely. Who would sunder you? Nor is it with the bee and butterfly alone that the bird is so intimately linked. There is a like connection betwixt birds and insects in general. They are holden together by a bond of mutual uses and dependencies. These we shall glance at by and bye, but let us note first some remarkable likenesses betwixt these widely-differing, yet closely-resembling, vertebrates and invertebrates of air. Now, these likenesses are not of a sort very palpable to common observation, which may reach no further than to their possession in common of the gift of wings. Nobody forgets that with fowl of the air the narrow antechamber to their " wide wide world" is an egg. Many, if they know, lose remembrance of the fact, that with insects of the air it is usually the same. The warmth of the sun, or heat-exciting substances, are with the insect as a brooding mother, to bring vitality to light. Then for the case-the framework wherein this jewel of vitality is lodged. In the respective caskets, both so highly wrought, of birds and insects, no other similarity may catch the eye; but see how they resemble to the mind of a scientific writer :-" Birds," says he, " are in every respect concentrated insects ; and
insects birds, deprived of their internal skeleton." * Deprived! but the deprivation is made up. The word skeleton, so associate with the bare bones of humanity and other denuded carcasses, presents popularly the notion only of an inward framework for support of fleshy clothing. In the case of insects this arrangement is reversed. With them, the skeleton without-which by its solidity resembles, and by its use supplies, the place of bone,-composes a horny case; hence proceed internal processes, which serve for insertion of the muscles-and thus are answered all the purposes of a skeleton within. The external case of insects is in some flexible and comparatively soft ; in others, as in beetles, it assumes the rigidity of a coat of mail. So these caskets for the keeping of life with bird and insect, would seem to differ most in this,-that the one is velveted without, the other within.

The same naturalist and comparative anatomist before referred to, has noted an analogy, not observable elsewhere, betwixt the feet of birds and insects. In both we find, he says, an absence of basal bones, while the phalanges, or toe-joints, vary in number from one to four. This variation is found in birds

[^3]individually, in insects generally, and has been made to serve with the latter, with beetles especially, as a help to their classification.

But the resemblance most striking and most interesting betwixt birds and insects, is observable in that structural characteristic which especially fits them for being animals of air. This consists in the remarkable preponderance of organs of respiration, or, to express it in other words, the extent of machinery for appropriation of atmospheric fluid, an important aid to the muscular motion employed in flight.

Independent of other organic adaptations for this enviable mode of progress, the skeletons of birds are wondrously light. Their bones are hollow, and filled with air, their bodies also traversed by air cavities. As for insects, their bodies are intersected by airvessels as numerous as the blood-vessels in animals of a higher grade, and connected with their movements of respiration are the movements of their wings.

We shall look presently at these air-borne racers (the warm-blooded and the cold), with a view to comparison of their respective rates of speed; but let us first notice the organs which propel them on their cloud-girt courses.

Take the wing of bird and bee, or bird and butterfly.

In that of bird, see its triangular form decreasing from its axis at the shoulder. Mark its concavity below, its convexity above, giving more of power to a down-stroke than an up. Notice its supporting bones, so jointed as to provide for horizontal expansion after being raised in air,-a guard against the resistance of the wind. Observe, in short, its every particular so precisely suited to the purpose it was meant to serve. See, clothing these interior perfections, the beautiful investiture of feathers, all subservient equally to the same use. Let us give heed only to combinations such as these, and what must be our opinion of the whole? Can it be other than that we see in the converted fore-arm and fingers of a bird, an index that points as plainly as the arm and.fingers of a man to the hand divine that moulded both and gave them motion.

Not a whit less admirable is the wing of an insect. We pay involuntary, that is unthinking homage to the painted banners of the butterfly. The glassy pinion of a bee or fly may have attracted notice as passing as the play of light upon its surface, but rarely have we looked at either with one half-one hundredth part of the attention they deserve. In general form, the wings of birds and insects are not
dissimilar, both approaching the triangular. Of extraordinary power, in both, are the muscles by which they are moved, and in insects these are aided, as we have seen, by the action of air on expansion and contraction of the chest. As the bird-that ship of air-possesses a rudder in its tail, so the insect, that little boat of the same, is furnished with a similar appendage, sometimes in a long thin body, sometimes in its lengthy legs, extended behind it when sailing through the sky. However different, in short, with these different aeronauts the apparatus for flight, its mechanical principles are the same. We cannot here devote a page of letter-press to the inch of scalepainting on the wing of the butterfly, nor yet to the feet of feather-painting on the mighty pinions of the albatross or eagle. Both are deserving of a volume, but in volumes numerous have they been described and figured, and in the volume of Nature they are always open for inspection. We prefer, therefore, to bespeak attention to another and very curious particular in the construction of an insect's wing, which few, perhaps, save entomologists, are likely to know anything about. Did it ever occur to us that the membrane of which (whether clothed or clear) the wing consists, is nothing but an extension of the
epidermis or skin of the little animal it belongs to? Less likely still, are we to have detected in what seems a simple expansion, sometimes exquisitely thin, the constant presence of a fold or double. The truth is, that insect wings are objects which, with a thousand others, we only see by halves. No human eye nor glass of human construction may serve now, or ever, to exlibit wholly these delicate pieces of Nature's handiwork; but curious examiners have seen in them just twice as much as cursory observers. What seems superficially a single spread of intersected membrane, is in reality, however transparent, fine, and thin, a fold or double of the same, which, united round its margin, forms a bag capable of extension when fluid is introduced.*

An insect's wing, even as regards its surface, is often looked upon, if not by halves, with an eye but half capable to see it as it is. We have spoken of some as clear or naked. So they appear to the unaided sight; but on the smoothest, the glassiest of them all, is revealed by the microscope a multitude of bulbous-rooted hairs. So the bee, as well as bird,

[^4]has clothing on its wings, while, in the butterfly these rudimental hairs become or "pass over into" the beautiful scales or feathers, which wholly overlay not one, but both sides of its blazoned banners. Where this mosaic painting is not present, it is the exquisite veining of the insect's pinion (as in the dragon-fly and others) which most especially strikes upon the eye. How much more forcibly does this arrangement of beauty strike upon the mind when that has been opened to a perception of its use! We see then, not simply a curious network, but a branched assemblage of hollow tubes filled by a fluid injected from the body. They serve, as such, to support, strengthen, and distend the sails of the air-animal as cordage the sails of a ship.

Such are insect wings, wonderful and beautiful as a bird's; and with birdlike power, or, relatively to size, with power much more than birdlike, do some insects use them. We may see, for instance, the dorr-beetle, not a tenth of the swallow's bulk, equalling the swallow's speed in its summer's evening flights. In actual amount of swiftness there are, however, birds with which no known insect can compete. The hum-ble-bee, stated to have kept pace with a slow train at twenty miles an hour, would be beat hollow by an
express at forty ; equally by a carrier-pigeon, whose rate of postage has been reckoned at the same. How much more by an eider-duck or hawk, travelling (so say measurers of wind or windlike progress) at a rate, the former of 90 miles, the latter of 150 during an hour's vibration of the wing of Time.

In sustainment of flight, the bird also carries it hollow over the " arrowy bee," the soaring butterfly, or any other insect animals of air. Locusts and butterflies in their migrations, and dragon-flies in their hawking excursions over pond and streamlet, are pretty long-flighted, or, what with them is nearly the same thing, pretty long-winded; but they only furnish representations (very humble ones) of the woodcock and the snipe when they take their cuts across ocean of some five hundred miles upon a stretch.

It is enough to speak of hoverers, and the hawk and the humming-bird are imaged in our mind's eye-the hawk suspended, ready to stoop upon his quarry ; the humming-bird so poised as to insert its tongue, without stooping at all, into the tubular flower which furnishes its repast,-the wings of both oscillating the while with a rapidity that mocks the sight. These hoverers amongst birds have their insect penclants in the hawk and humming-bird hawk-moths,
also in the beelike syrphus and bombylius. When these are suspended among their favourite flowers, the strokes of their wings are so rapid as to render them invisible. A peculiar position of these organs is likewise essential to their power of giving support without progression. In onward flight they are raised obliquely, whereas, in suspension they are at right angles with the plane of motion. If so fixed always, the insect could make no way in its aerial course. The pressure from above, and that from beneath would, with the rapid motion of the wings, serve to neutralize each other. Such is actually the case in the hovering of a hawk-moth or a syrphus.

When one sees an air-animal in the act of taking flight, one has occasion, generally, to admire, almost to envy, the ease with which it commits itself to the buoyant breast of its supporting element. Observing its command in navigation of the atmospheric sea, one inwardly confesses-because, as ballooning stands (or falls), there's no denying it-that in the ocean of air we are very little animals to the insect and the bird. Some there are, though, of these dominants of the sky whose dominion over it is comparatively weak. They have either a deficiency of wing (the organ of government), or they use it lazily, or, to all appearance, inexpertly.

There are some bulky beetles with whom it seems no easy operation to start on their aerial course. With a corpulent cockchafer, for instance, it costs a preparatory process of as much fuss and effort to get on wing as is required by a corpulent alderman to get into the saddle. With some heavy fowl it is much the same.

Thelarge-bodied, small-winged birds, and those with wings only rudimental, as the ostrich, apteryx, \&c., have representatives in apterous insects, and many female moths, with only rudimental pinions.

Let us look now at some of our air-animals (vertebrate and invertebrate) in their partial occupation of the water. See an assemblage of water-fowl and water-insects met together on the surface of a pond, -ducks and geese, for example, with water-beetles and water-boatmen,-one can hardly help, as one watches them, to notice how remarkably they reflect one another ; almost as clearly as the liquid mirror reflects them both. Here is the boat-shaped bird, and the boat-shaped insect; the one clothed with feathers that repel the water, the other with hairs that do the same ; the bird rowing itself with its webfoot oars, the insect with its fringed oar-shaped feet ; the bird dipping, diving, head downwards, tail upwards;
the insect doing just the same, and for the same pur-pose-that of appropriating living prey, the teeming produce of the pond. The duck does not, it is true, swim back downwards, like the water-boatman,--but the back of the insect resembling in shape the breast of the bird, is best adapted for the boat's bottom, and is immersed accordingly.

Another analogy may be noticed here betwixt aquatic birds and aquatic insects,-both present in their respective divisions, types of being less perfect than their congeners of the land.

Now for a glance comparative at our animals of air (the higher and the lower) as respects their senses, or the organs for their exercise. Are there any points of resemblance especially observable in these? It would seem there are. Look at the eye of a bird, so bright, so searching, so far-seeing, its other organs inconspicuous by comparison. Look at the eye of an insect, not bright always, but so prominent, occupying so large a space in its little cranium,-the only organ about it that tells indisputably of the office it performs. The instruments for exercise of hearing and of smell are with insects of dubious location; not so with birds, but in these the olfactory organs have with some exceptions (as in the far-scenting vulture) been
looked on as inferior to those of vertebrates in general.

It is chiefly, though, as respects the organ of taste, the tongue, that an analogy has been noticed betwixt birds and insects.

Many of the latter have no tongue at all, the deficiency being supplied by trunks and suckers, as in butterflies, moths, and aphides. Others, such as bees, beetles, dragon-flies, and grasshoppers are possessed both of tongue and jaws, the former more or less resembling the same appendage amongst higher animals. This organ, in common with others that belong to insects, has a tendency to become dry, in consequence of the large quantity of air distributed throughout them.
"In this circumstance," says Burmeister, "do we meet again with a parallelism to birds. In them the tongue is small, imperfect, almost cartilaginous, sometimes quite horny, and resembling a feather.* It is just the same with the tongue of many beetles." $\dagger$

Where this is the case, the sense of taste, for which as well as for that of smell, moisture is required, must be considered as imperfect. Physiologists there are, who have denied it altogether to insects and even

[^5]birds; but in this, common observation would seem to contradict them.

What but taste is the director of birds at large in the nice selection of their seeds-each bird, in its kind, choosing generally from the receptacles of some one tribe of plants? What but taste causes a canary to discuss, with such indisputable signs of preference, the occasional bon-bon of a grain of hemp or other reserved dainty? Then, as for insects, one might as well doubt its existence in a set of winebibbers selecting their port in "The Shades," as attempt to question it in a bevy of bees selecting their honey in the sun.

From the preliminary process of tasting, we come naturally to the business of feeding, and in this, our two great divisions of air-animals, biped and hexapod, are seen to meet again in groups linked by remarkable resemblance.

First, we have the tribes that are carnivorous, the most perfectly organized of all, both amongst birds and insects. At their head the eagle, king of birds, the cicindela, king of insects; or, as in some respects more analogous, the rapacious strong-winged dragonfly.

See there the eagle grasping his quarry, and rising
to devour it in his cloud-capped eyry; and here the dragon-fly seizing his, and bearing it, to suck its lifeblood, to the height of some isolated post or tree.

In that division of animal feeders which subsists on carrion, we are presented with the two great companies of bird and insect scavengers. For the firms of Messrs. Condor, Vulture, Crow, and Raven, we have their insect representatives in those of the Muscidæ, Silphidæ, Dermestidæ, and a multitude of other carrion-flies and beetles. Some of these, in the tropics, are of giant size, proportioned to the giant condor, and many (like the vulture) sniff putrescence from afar, and hasten on rapid wing to their appointed work of ridding the earth of its defilements.

Then, for every vegetarian amongst birds, we have a hundred lesser prototypes in the grain, and grass, and fruit, and leaf-consumers of the insect million.

In the pleasing attribute of maternal affection, or (if we will) in the instinct that wears its semblance, the air-animals, vertebrate and articulate, closely emulate each other. Even their peculiar manifestations of this common characteristic are marked by singular similitude. The young of both (with a few insect exceptions) are produced from eggs. In the choice of places for their deposit they evince the very same
sort of judgment, caution, and foresight. Skill and industry, as exhibited in fabrication of nests, are, it is true, less universal on the side of insects than of birds; but nests there are, and not a few, of insect manufacture, which are equal in everything excepting size, to the nurseries of the feathered race. In the general analogy betwixt nest-building birds and nestbuilding insects, many corresponding particulars are worthy notice. Amongst them is the comparative deficiency of care or skill observable usually in the nests of preyers, both bird and insect ; rapacious birds are content generally to select a site high and difficult of access for their careless fabrications; rapacious insects are as satisfied, in most cases, to fix upon a place secure and suitable for deposit of their eggs.

But it is chiefly betwixt bird, bee, and butterflythose marked associates in the lovely and the love-able--that we discern features of most close resemblance in the beautiful manifestation of maternal instinct. As regards these corresponding traits, we must speak of them as inclusive of bird, bee, butterfly, and moth, or more properly as belonging to the feathered race and the large insect orders, Hymenoptera and Lepidoptera, to which bees and butterflies belong.

For the $b i r d$, so carefully selecting the hollow tree, or leafy covert, or other "hidden nook," for concealment of her " sight-eluding den," we have the butterfly and moth taking prescient precaution to lay their eggs on the under side of leaves, in the crevices of rugged bark, or on green stalks and grey palings to which in colour those eggs are mostly similar. And we have the solitary bee, busy in reconnoitre of a wall, a bank, a post, or pathway, with an eye to the boring of a tunnel for her inconspicuous or subterranean nest. For the bird, describing, without aid of compass, the circle of just fit circumference to inclose her domestic treasure, we have the social bee (or wasp), skilled in implanted geometry, and framing the hexagon of its nursery cell. For the bird, lining her nest with feathers, we have the moth laying her eggs upon her own abandoned shroud, or wrapping them in a coverlet of down pulled from her own body. Also the poppy-bee, hanging her tunnelled nursery with scarlet tapestry furnished by the poppy flower. Again, for the bird, relinquishing her flights in air to sit in patient quietude over her eggs or callow nestlings, we have the butterfly deserting her nectar and her flowery sports for the vulgar cabbage-
leaf, distasteful to herself, but a meet provision for the brood which is to issue from her eggs.

And again, for the bird flying far and wide in search of appropriate food for the supply of its helpless little ones, we have the solitary bee storing her subterranean nursery with bread of flowers, or flowery pollen, for support of its infant inmates. And, more birdlike still, we have the solitary wasp repairing to her nest (as a sparrow to hers) with a supply of living caterpillars, collected not for her own, but her little ones' consumption.

There is yet a crowning, if not a common parallel betwixt displays of maternity in birds and insects.

We may place in juxtaposition (absurd in resemblance and in contrast) the great bussikin, puffing, clucking, fussy, feathery hen, brooding or conducting her soft round chickens; and the small, hard, horny, glossy, gliding, narrow earwig, brooding, or taking for a walk, the little linear images of her insect self.

There are, no doubt, other likenesses, both of structure and habitude, betwixt the two races of airanimals, but from their resemblances let us turn now to their mutual relations. These relations, though of a reciprocal, are not always of a friendly character ; witness amongst them the connection of the winged
races as preyers and preyed upon. It is not for nothing that trees give shelter to the birds that sing among their branches. Well do these latter pay them for protection, employing as they do their whole lives or that part of them devoted to feeding, in keeping under check the insect armies which to trees are most inimical. A list of the insectivorous birds of Britain, either constant inhabitants or summer visitants, would comprise nearly all our feathered favourites of song, from the nightingale to the hedgesparrow, inclusive of Cock Robin and Jenny Wren. Did these, the musicians of the grove, never open their bills for more destructive purpose than for the pouring forth of song, not a fragment of green curtain would be left (thanks to the caterpillars) on their orchestral branches ; but few, comparatively (thanks to the birds), are the caterpillars ever permitted to reach their winged maturity. While yet creepers, they are, however, animals of air, filled abundantly with air organs. As such there seems a fanciful fitness in their appropriation by air animals of larger bulk; for what food, save air itself, would seem so fitting to supply their own aerial characteristics-the lightness of their structure, the swiftness of their flight, the power of their song! There are birds, it is true, no great
proficients in the vocal art, with others no pretenders to it, which are, nevertheless, as great epicures as their musical fellows in insect feeding. Of these, see the wryneck, with his long gelatinous tongue, skimming ants from off the surface of the ground; the swallow, skimming newborn gnats and case-flies from off the surface of the water ; the woodpecker, the tree-creeper, and the willow-wren picking millipedes and other creeping millions from out the crevices in boles of trees; the fly-catcher, perched on a post of observation from whence to dart upon its insect prey ; the butcher-bird, spitting moths for convenient consumption, or devouring beetles, even to the mailed legs and wings; the cuckoo, lining its stomach with the fur of hairy caterpillars, by other birds rejected ; the fern-owl, describing circles round the oak in pursuit of twilight moths. Down the throats of these and a hundred more, are insect myriads passing momently by day and night in their brief passage from light to darkness-life to death. And in no case, excepting perhaps with denizens of the deep, with animal-flowers and their microscopic prey, is the work of extinction carried on so rapidly, so easily, we had almost said gracefully, as through agency of insectivorous birds. Riding upon feathered wings, Death
seems destroying here in sport rather than in earnest, for, with these animals of air, to annihilate and be annihilated would seem, in most cases, operations equally painless and of like facility.

We have spoken of the air-animals, greater and lesser, as mutual preyers; but who, it may be asked, ever heard of insects making meals off birds? except, perhaps, in the rare or single instance of the great bird-spider of Southern America. It is true, nevertheless, that the insect myriads, which are being packed for ever in the crops of birds are not without their myriads of insect avengers. These are of widely different families to the victimized crew, and widely different is their modus operandi on the bodies of the feathered race they victimize in turn. For instantaneous destruction, they inflict, not death, even lingering, but a lingering species of annoyance which makes the bird pay tribute throughout its life for the lives it takes without a moment's warning; and, as in other cases, the innocent suffering with the guilty, the penalty falls, not alone on insect feeders, but on the whole feathered race. There lives not a bird, it is said, from the peacock to the wren, or, more inclusively, from the ostrich to the humming-bird, to which some parasitic insect is not attached. The incessant
business of these birdivorous feeders, is to draw from out veins of the air-vertebrate a supply of vital fluid, a. serving usually to impart of its own crimson hue to the transparent bodies of the little articulates. These blood-suckers are of diverse forms of ugliness, and of diverse sizes, proportioned to the extent of the feathery coverts under which they lurk. They pass usually under the ill-sounding appellation of bird-lice or mites, but are not included by naturalists in that family of ill repute.

Now for a parting glance at the relation of airanimals (bird and insect) to the vegetable kingdom. In this, as in so many other points, they strongly resemble each other, so much so, that what a German physiologist has observed of plants and insects, is of almost equal application to plants and birds. Speaking of their reciprocal benefits, "we may possibly," says he, " be misunderstood to insinuate a kind of consciousness on their own parts, of their calling, and a recognition of their duties. Herein, though neither plant nor insect thinks nor feels, Eternal Love and Wisdom has felt and thought for them, and has so strengthened their mutual attachment, that the human mind, in explaining, may well illustrate it as
affection and friendship, and as an acknowledgment of what the one owes the other, and may expect in return. An exhibition this, amongst a thousand, of the Infinite Love that fills the universe."* This relation assumes a twofold aspect, if it does not bear a double character. Under the one, birds and insects are vegetable destroyers; under the other, they are vegetable benefactors. As destroyers, birds devour seeds, fruits, flowers, leaves. Insects do the same, and in addition, bark, wood (living and dead), pith, and roots. As benefactors, or as grateful recipients of benefits derived, what do air-animals by the " good creatures" that afford them food and shelter? Let us inquire of the good green tree by bird protected, perhaps, planted ; of the sweet honey-giving flower assisted by bee and butterfly to propagate its kind.

As for birds, one might as well attempt to reckon up their individual number, or to count the leaves of a mighty forest, as to estimate the extent of benefit derived through their agency by the vegetable world. What is the little corn they pilfer, the modicum of fruit they devour, the sprinkling of buds or leaves

[^6]they may destroy? Nothing but the levy of a trifling impost, paid back by good offices a thousandfold. This balance of restitution, held so evenly by Nature's hand, should be more thought of, less interfered with.

Softening and scattering what they swallow and drop, the hard-billed feeders upon seeds and fruits sow future harvests. These may be scarce proportioned to their reapings; but the soft-billed feeders upon insects may be said to brood with wings of protection over the foliage which has fed their food and protected them.

Save for bird intervention insect agency would serve, as we have seen, to strip both wood and garden, or to clothe them in a suit of mourning.

But as things are ordered, (how wisely and beautifully!) this very agency contributes to dress the garden and the glade in summer suits of gladness. It is known to every botanist that the Hymenoptera (bees in particular) are to the flowers as officiating Hymens; the Lepidoptera (in especial butterflies) as messengers of love. But for these, many a fair flower, the parent now of a race as fair, would have been left to fade in barren blessedness, and many a sunny spot would be barren of the flowers that now dress it
with delight, they themselves seeming to delight in the gift of life.
> "Through primrose tufts in that sweet bower, The periwinkle trailed its wreaths, And 'tis my faith, that every flower Enjoys the air it breathes.
> "The budding twigs spread out their fan, To catch the breezy air, And I must think, do all I can, That there was pleasure there."

If many a flower thus owes its very being to insect agency, many a tree to agency of birds, do they not all—all the flowers and all the trees-owe to bird and insect frequentation a half, and more, of their living interest, of (as we said at the beginning) their music, poetry, and painting? Yes, sweet and pleasant to our senses is the living harmony of bird and insect voices, mingling with the whispers of summer air and the breathings of summer flowers. But how much sweeter still, more pleasant, more beautiful, is the harmony (to thought) of that harmonious plan, which links not alone bird, bee, and butterfly, but everything that lives, and grows, and has its being, in a chain of mutual correspondence, usefulness, and love.

Many may seem (to us) the disruptions of this all-
perfect bond ; links of it are hidden from our sight by the mist of imperfect knowledge, and others would seem wrought of iron rather than of gold, through the seemingly unloving nature of some amongst the relations of created beings. But for all that, the chain is not deficient by a single link, and if here and there its brightness is obscured, it is only for a season, by the rust of earthiness and sin.



## IV.

THE HARPY THAT BROODS IN EVERY CORNER.
> " Earth and her million tribes are cursed for thy sake, Earth and her million tribes still writhe beneath thy cruelty." Tupper's Proverbial Philosophy.

Shade of the immortal Quixote! we invoke thy benison. Like thee, we would do battle in defence of oppressed innocence. All thy chivalric brethren (good knights and true), whether of errant or of steady intellect, have done the like ; but, most famous champion, it is thy name in especial that comes associate with the crusade on which, single handed, we set forth; it is with thee above all that we would claim a voluntary fellowship; not alone because of

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thy right-heartedness of purpose, but because, whether we will or no, we shall be set down as thy fellow in wrong-headedness of proceeding. What, then, our objects of attack? Are they shadows of a distempered brain? Are they windmills, or flocks of sheep? Not so. It is a horrible harpy against whom we would run a tilt. It is the harpy's brood, countless in number, diverse as hideous in shape, that we would diminish, if only by a single one. Wherein, then, most admirable knight, may our enterprise be likened unto thine? In that, that our giant harpy (a veritable grinder of bones) would seem thought by some people a mere giant windmill ; no more than a windmill an object for people in their senses to attack; and because the harpy's brood-those monstrosities in particular which we desire to rout-appear regarded by the multitude as innocent as a flock of muttons. In so far, hero of La Mancha! do we compare ourselves, as we shall surely be compared with thee. As with thee, too, cold and cutting gibes will come rattling like hailstones about our ears. To thee, indeed, through the happily converting power of thy monomaniac phantasy, such icy missiles of scorn seemed even as grateful showers of applause. On us (Heaven preserve us in our sentient sanity!)

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they must fall in all their reality of mocking hardness. But enough of prelude, of trumpet-flourish, since our own trumpeter we are compelled be. And now, allons ! forward ! trusting to panoply of proof, and the might of a right good cause.

Yet, a word or two to explain the specific nature of our undertaking. Who or what are the oppressed innocents for whom we are, pen in hand, to fight? Who or what the harpy and her brood under whose inflictions they are groaning? In plain terms, then, our oppressed innocents are oppressed animals, very ill distinguished from men by the appellation of brutes. Our harpy is Cruelty herself, her brood the proceeding horrible shapes, or cruelties in act, of which animals in general are made, through the animal in chief, especial victims. Now the murder, or our murderous design, is out. We are going to wield our feeble weapon, first in the showing up, then in the cutting down of a few among those manifold shapes which meet us at every corner, of cruelty towards animals. Was then our trumpet-flourish inappropriate? Who now will look upon our enterprise as other than madbrained and quixotic? Perhaps few enough. But here let us pause for a moment to inquire how and why it is, that whoso-
ever dares to enlist in the service of humanity, as conjoined with that of suffering brutedom, enrols himself, by the same act, amongst a little band of martyrs, exposed to the shafts of a great army of scoffers. How is this? Is it that people in general take absolute delight in cruelty per se? Are they so enamoured of our hideous harpy that they hug her to their bosoms as if she were a pet dove? Do they, also, so love the harpy's brood that they encourage their vagaries, and take amusement in their gambols, as though they were the friskings of a pet lamb? Nay, hardly this; people in general are not so particularly bad. It is only some people that torment, either beast or man, for the mere sake of tormenting. It was only some people that used to resort, for enjoyment's sake as well as custom's, to the ancient Coliseum, the bear-garden, the bull-ring, the cockpit; only some that are found still in every circle of which cruelty is the centre. It is only, then, in some people, such as these, that the champion who throws down his gauntlet for the rights of brutedom, recognises the loudest and coarsest of his derisive foes. Of whom then consist the other enemies, so much more numerous,-the inimical spectators, or the indifferent, who, not being with him,
are against him? Only some, as we have seen, a few comparatively, may be said to pet, to fondle the harpy Cruelty; but there are a surprising number who look on the monster and her brood with a very complacent eye, with a deal more favour than they themselves have the least idea of. Of such are people who wouldn't commit a cruel act (so they think) for all the world ; who wouldn't go to see a cruel sight (so they declare) for any money; yet of such are men who, with hands in pockets, open eyes, and open, silent mouths, never fail to watch to the end any spectacle of cruelty, or cruel infliction they may chance to fall in with ; and of such are men, and women too, who relish mightily to hear or to read true stories concerning cruel doings; all the while they bless themselves to think "how cruel the world is !" Now, these are not all in opposition to the daring wight who espouses the cause of animals; they do not all laugh him to scorn. On the contrary, many of them declare loudly, that " cruelty, even to brute beasts, is a very shocking thing!" Yet, seeing that, as such, it is one of the things they live on, can one believe them, can one expect them to be so wanting, so cruel to thernselves as to regard with an eye of favour, or lend a helping hand to one who would cut off a portion of their relished fare?

There are other people, lastly, not a few, who neither fondle the harpy Cruelty, nor look on her with complacency; who, on the contrary, shut their eyes whenever they can, both upon her and her ill-favoured progeny, the proceeding shapes that issue from her nest. These surely must be for us. These must be friends to the brute and to the brute's defenders. How should it be otherwise? Are there not among them many who delight themselves in animals, who love them beyond anything except their own pleasure, pride, and comfort? Amongst these we may class gentlemen very fond of their own studs, only a little fonder of steeple chases-ladies very fond of horses altogether, very fond in especial of their own plump pair; fond, therefore (for nightwork and for rough work), of bestowing patronage (family patronage) on the fly, one of such pseudo flies as we are accustomed to see struggling on for ever, upon three legs and a fraction, in the toils illimitable of sea-bathing, water-drinking, pleasure-seeking places.

Amongst the same sort of excellent people, are others (or the same) who feel a great deal for all animals that are afflicted, for those in particular whose sufferings will intrude upon their sight. For such
they care exceedingly, only they care a little more for their own ease or their own trouble, so, gladly turn away and leave the afflicted object to its pains, rather than take pains for its relief.

Now, people like these latter do not (kind souls!) join in the laugh against us; they do not pelt us with the hail of derision or abuse. Nay, by these gentle spirits the lists we enter are watered sometimes by showers of pitying tears, strewed sometimes by flowers of encouraging applause; but for all this, one can hardly help suspecting that these sensitive souls vote us in their hearts most insufferable bores-shocking their tender feelings, disturbing (who knows?) their tender consciences with the clash of our arms, the din we are making in behalf of "those poor dear unfortunate animals that they, for their parts, can never bear to look at or to think about! And so (Heaven help us!) what with cruelty positive, cruelty negative, selfishness paramount, and (another form of the same) compassion over-sensitive, never was voice uplifted or pen wielded in a more unpopular cause than the cause of humanity towards the dumb creation.

There is also a serious stigma attached commonly to those who are active in exposing and denouncing H 2

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cruelty to animals. They are often accused or suspected of caring little or nothing about cruelty to men. They are very apt to be classed with those unnatural young ladies who adore Blenheims and detest babies; with old ladies almost as bad, who feed strange cats upon their house-tops, and send starving children empty from their doors ; or even with monsters worst of all, who kill pet lirds with kindness and parish girls with cruelty. Now, this is a grave imputation-a blot cast on his escutcheon, which no true champion of the cause we espouse can do other than his best to wipe away. What! not care for the cruelty of man towards man, because we cry out upon the cruelty of man towards brute! Are not the two as lashes of a common scourge-branches from a common root-or roots each to the other? seeing that, while cruelty to man springs up as a growth out of cruelty to animals, cruelty to animals is often (as we shall show) a result of cruelty to man. Who, then, can look at, or look into one, and overlook the other? Who war with one, and not attack the other? Not we: and when we contemplate our hideous harpy, we see her plunging her talons into man as well as brute; imbuing with her ferocious spirit, or her spirit's semblance, brute as well as man ; and thence
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through all the carnivorous of the descending tribes, casting a gloomy shadow over earth and air and water.

Unfortunate animals! Double sufferers, through human delinquency; victims of man's barbarity, and, through the instinctive taint of ferocious appetite, victims of one another.

The lion and his subordinates of the flesh-rending crew ; the eagle with his taloned congeners of the blood-stained beak; the crocodile and his mailed compeers; the shark, arch-murderer of the main; the pike, shark of the pond ; the water-scorpion, pike of insects-the cicindela, their tiger ; these and the like, furnish successive types of cruelty, and may be looked upon as shadows reflective of the forms which it assumes with man. Look at the estimation, as well as fear, in which the most powerful of these carnivorous creatures have been held by the human race ; and of what is this indicative, but of a certain correspondence between the internal delights of the man of $\sin$ and the external habits of the beast of prey which represents him? What, for example, has raised the lion, by consent of humanity, to the sovereignty of the brute creation, and invested him with a thousand royal attributes of fabulous imputation to justify

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the election? What but the same tendency in the mind of the multitude which has made conquerors and tyrants (the murderous great) objects of homage and hero-worship, and attracted, even to the murderous little, a meed of curious interest and sickly sympathy? Where shall we find the source of all this tendency to impute honour where abhorrence alone is due, except in the cruelty mingled with cowardice of our fallen nature ; in other words, in our sympathetic yearning to, and crouching awe of, brute ferocity? So it has been, and so it has been fitting that it should be, in the scheme of Providence, of which sin's temporary ascendancy was to form a part. The monarchs of the forest, with their reigns of terror, have represented properly the individuals among mankind most adapted to be the scourges, and conduct the destinies of an unregenerate world. These lions of the nations have, as truly as the lions of the forest, received, both in their prey and in their popularity, "their meat from God;" but the foundations of the lion's throne are beginning to crumble, and we shall have to nominate another king of beasts to correspond with those whose turn is coming, to be kings and nobles of the earth. To represent these, the throne of brutedom will be filled worthily by the majestic elephant,
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gentle as powerful, not alone in corporeal bulk a mountain of flesh, but in intellectual calibre a " mountain of light."

We have been speaking of the seeming cruelty of some of the lower animals but as a shadow of the substantial barbarity entertained and exercised by the human race. Their instinctive copy of our moral deformity is, in some instances, a pretty close one, but the likeness is probably only superficial. That animals are endowed with some like passions to our own is sufficiently apparent, but one may reasonably doubt whether there is any passion or feeling in the very fiercest of the carnivorous animals at all resembling that which prompts to wanton cruelty in man. And yet, forsooth, when a man is particularly cruel we call him reproachfully " a brute!" Among our brother brutes some there unquestionably are who would seem to be our fellow-epicures in the pleasures of tormenting. Grimalkin and her victim mouse start up before us. What a barbarous, torturing, crueltyrefining creature it is! Not a bit of it! Puss has her temper, and her treachery, and her spite. She sometimes scores the proof of them on our caressing hands; but never is puss more truly amiable than when she has undisturbed possession of her mouse !

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Then is her sllky fur not softer than her feelings, then is her heart overflowing as a brimful saucer with the milk of animal kindness. Saving for her claws, there is nothing sharp about her when she has got her mouse. She loves that whiskered plaything; has for it precisely the same sort of sportive fondness as she had, when a kitten, for a ball of cotton; and, out of crowning kindness, eats it up!

Again, there are certain insects, even, which seem to take delight not merely in killing, but in killing by inches, or by lines. To say nothing of the spider and ichneumon, there is a solitary sand-wasp that pounces upon hapless caterpillars, inflicts on them a disabling, but never a mortal wound, and conveys them writhing in seeming agony to her nest. How full of at least instinctive cruelty must be that mother wasp ! Not at all! She is full only of instinctive love,-love of her children in their tunnelled nursery at home, for whose supply she has provided a store of meat, fresh in its vitality for every-day consumption.

But, whatever the incentive of animals below us to destroy others and to destroy them painfully, be it sportiveness, maternal tenderness, or the call of appetite, we must certainly acquit them of malice, acting as they do through irresponsible necessity and in ignorance of
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causing pain. Cruelty, therefore, no more properly belongs to the preying tiger that tears its victim elephant with tooth and nail, than to the preying polype that grasps its victim water-worm with hairlike arms. One might as well impute it to that seemingly ill-natured, ill-mannered, and barbarous flower the fly-catching dogsbane, which, seizing its allured visitor actually by the nose, thus holds him prisoner till death comes to his release.

It would seem then, that as regards possession, we have the harpy Cruelty all to ourselves, or betwixt us and the powers of darkness. Of her inflictions we are not, thanks to each other and to them, without our share, but (Heaven mend us!) how great of these is the proportion that falls, through our agency, on unoffending animals! A few of these let us now exhibit, in proof of the depth and breadth of the crying evils of this description, which cry out upon us for relief, and (again we say, Heaven mend us!) we have not to call as "spirits from the vasty deep" those horrible shapes of cruelty to animals that haunt the earth, for they meet us at every corner of our streets and of our world.

To glance first at each quarter of the globe-See, in Asia, how fares the half-reasoning elephant under

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man's dominion? How is he first brought under it? A treacherous Delilah of his race, tutored expressly to effect his ruin, lures him from his native wilds into the toils of his arch-enemies; bonds, starvation, then active discipline, severe in proportion to his bulk and strength ensue, and his subjugation is complete.

How else, cries a pleader of necessity, could one deal with such a monster? One coûldn't tame an elephant as one tames a dormouse. Perhaps not, and perhaps the practitioners employed now-a-days to cure the elephant of wildness, are very careful not to administer one grain of cruelty beyond that which necessity prescribes. We would try, at all events, to persuade ourselves that their practice has assumed a milder character than that formerly in vogue. They do not now, to our knowledge, fit the rope of subjection to his stalworth neck in a groove cut for its reception through the thick epidermis, as through the rind of an orange ; no, they do not now, that we are aware of, obtain thus, by means of a skin or flesh-inserted bridle, a ready mastery over the ponderous pachyderm of the forest !

But we are alluding, surely, to one of the fables of antiquity. Not at all ; unless it is customary to re-
gard as fabulous the relations of the Greek, Arrian, by whom the above trick in the taming of the elephant stands recorded as of common performance in the days of Alexander's Indian conquests. And when (by fair means or by foul) our modern Behemoth is bowed into a beast of burthen, what, in this our day, is the character of the usage he receives? See here a specimen of his treatment from the trustworthy pen of Bishop Heber. Speaking of those elephants supplied to him for the transport of his luggage trains through the upper provinces of India, he tells how that, owing chiefly to the roguery of the commissariat, they were reduced from their proper allowance of twenty-five rupees per month to five. One of the train thus starved and aged, fell, through weakness. A cordial was administered, and vain efforts were made to raise the heaving mountain of skin and bone, from whence piteous groans were heard to issue. Another large elephant was then brought forward to assist in moving it, " when," continues the Bishop, "I was struck with the almost human expression of surprise, alarm, and perplexity in his countenance, on his approach to his fallen companion. A chain being fastened round his neck and to the body of the prostrate animal, he was by

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turns encouraged and urged by blows and spearthrusts to drag him up. For a minute the noble animal pulled stoutly, but at the first groan of his companion he stopped short, turned fiercely round, roared, and tried with feet and trunk to unfasten the chain from his neck. On this decisive refusal to assist in their proceedings, a cry arose from the bystanders of 'Le jas !'"-Take him away! "wherein," says Heber, "I heartily joined, and had procured for the poor prostrate one a bundle of greens." The narrator of this incident, whose heart was large enough to give place even to an afflicted elephant, was gratefully recognised and appreciated by the huge victims of as huge oppression.

The same indisputable authority may be also quoted for the treatment of the Asian ox, even the ox of Hindostan, where sacred bulls of Brahmah walk about,idle, petted, and impertinent. "Horned cattle," says he, "as well as horses, are treated inlıumanly by the Hindoos;" though sacred from the butcher's knife, they are objects of even greater barbarity than that which so often disgusts the eye and wounds the feeling of a passenger through London.

Let us turn to Africa, and see if her appalling pictures of man's cruelties to man are unmatched by
the like of man's cruelties to animals. Who has not read, and who not tried to discredit that traveller's tale of the Abyssinian festival, in which collops cut from the living cow constitute a repast, a repast to which the guests are invited, not by dinner . bell, but by din of the "prodigious bellowings " of the hapless creature under process of being carved. Bruce may have spiced his narrative highly, more highly than those gourmand cannibals their reeking banquet, but (alas for human nature in its natural deformity!) a similar and corroborative fact is related by a less doubted, if not more credible witness,* who, much more recently, found the rump-steak au naturel to be still in vogue amongst the marauding soldiery of Lasta.

But supposing, hoping that such monstrous horrors are now extinct, or even supposing them to have never had existence, we cannot, we sadly fear, look upon the dark hands of Africa as cleaner than those of their fellow-men (dark or fair) from stains of cruelty towards the brute creation. Little cause, we suspect, has the African elephant to boast itself over its more stately brother of the East, on the ground of more tender treatment from its captors or its

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keepers. And what says the African camel? Now, we have heard something, though not exactly from themselves, about the happiness of camels in general, of their light-heartedness under a load of from six hundred to a thousand pounds. We have been told of their delighted appreciation of sweet sounds; of their delighted acceptance (which we nothing doubt) of an occasional bon-bon, a handful of dates, or a cake of barley, from the hands of their masters, in addition to their natural desert fare.

The camel may be happy; happy in his early youth, while learning to bear his load, his feet tied under him, his body, by means of a weighted cloth, kept upright on the ground; he may be happy through his life-long day of abstinence and toil; under burthens, hunger, thirst, ailments, and exhaustion; for he bears all (so we are usually told) without a sound or sign of murmur, unless it be a tear; he may be happy, even to the moment when his life (long or short), being at its last ebb, "he falls on his knees, stretches out his neck, closes his eyes," and tells his master, by these mute signals, that he is dying in his service,-in the service of one who, in return, leaves him (still dying, not dead) to the jackals and hyenas. Yes, the camel may, withal, be

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happy, through the protective care of his Creator. Kind nature may have made him as insensible in body and mind to the pains of heavy lading and hard labour as she has made him in mouth and tongue reckless of the prickles which beset his provided food, the camel's thorn, spread upon his table in the wilderness. Truly he is a creature formed wonderfully as benevolently for comparatively unsuffering endurance of the natural inflictions of a dry and thirsty land ; and he may be equally adapted to undergo the imposed inflictions of a hard and cruel master. May it be so! but we cannot, withal, help fancying that a tale, the chiefest burthen of which is made up of suffering and wrong, is legible in the very face, the figure-head of this "ship" of the sandy sea. That face has been pronounced by some to be a model of patience and amiability, by others of obstinacy and ill-humour, and to us it seems that the countenance of the ponr desert drudge bears an expression of compound character: good, as originally stamped by the hand of nature; bad, as of subsequent impress by the hand of man. What can speak more plainly of oppression than does every line of the following portrait, though drawn with not the slightest intention to lay the blame of its ill-favour where, we suspect,

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it is most justly due. "I spoke awhile ago," says Lord Nugent, " of the long-suffering expression of the camel's face, but your opinion will, I think, change as mine did, upon further acquaintance. The truth is, he is but an ill-conditioned brute, after all. What you took for an expression of patience, becomes, one of obstinate, stupid, profound self-sufficiency. There is a vain wreathing of the neck, a self-willed raising of the chin on high, a drooping of the lack-lustre eye, and sulky hanging of the lower lip, which, to any who believe in the indications of countenance and action, betoken his real temper, (such, my Lord, as humanity has made it!) Then that very peculiar roar of his, discordant beyond the roar of any other beast, which continues during the process of his being loaded, from the moment that the first package is girded on his back to when he clumsily staggers up to begin his lazy journey, is a sound betraying more of moral degradation, (by whom caused?) than any I ever heard from any other four-footed animal,--a tone of exaggerated complaint (query exaggerated?) and deep hate (perhaps, for injury as deep) which the shape of his open mouth assorts with."

In the New World, new shapes of cruelty start up before us. To look only at South America-Cover-
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ing the rich savannas of Brazil, Buenos Ayres, and Columbia, we see innumerable herds of oxen, with as numerous troops of horses, both become wild through long possession of hereditary freedom, and both descended from European stocks, first planted in those luxuriant pastures by the early colonists. To her horned cattle does Columbia owe her staple commodity of trade,-the hides and tallow which form her principal exports to European ports. And how does she repay the benefit to the animals from whom it is derived? Surely she is careful to take their lives-the requisite preliminary to exaction of their tributary spoils-in the most humane and expeditious manner. Let us repair to the pampas for confirmation of this reconciling fact. We see them bestrewn with groups of hamstrung ruminants, awaiting the often tardy reception of their coups de grace, the merciful strokes of the pithing dagger which puts an end, at length, to life and agony. This weapon of prompt destruction, and its dexterous exercise by the Spanish or Spanish-American mataderos, have been often lauded, justly enough, and held up for home adoption by the few who care enough for animals to desire that their killing should be easy. So far well ; but only let a friend of humanity take his stand within view

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of a scene of butchery where this vaunted weapon is in use, and he must turn from it, not with a satisfied, but with a sickening and loathing heart. See the appended picture, revolting as graphic, of one of these slaughter-places at Buenos Ayres. "This spot was about four or five acres, and was altogether devoid of pasture. At one end of it there was a large corrál, inclosed by rough stakes, and divided into a number of pens, each of which had a separate gate. These cells were always full of cattle doomed to slaughter. I several times had occasion to ride over this field, and it was curious to observe its different appearances. In passing it in the day or evening, no human being was to be seen; the cattle, up to their knees in mud, and with nothing to eat, were standing in the burning sun, occasionally lowing, or rather roaring to each other. The ground in every direction was covered with groups of large white gulls, some of which were earnestly pecking at the slops of blood which they had surrounded, whilst others were standing upon tiptoe and flapping their wings, as if to recover their appetite. Each slop of blood was the place where a bullock had died; it was all that was left of his history, and pigs and gulls were rapidly consuming it. Early in the morn-

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ing no blood was to be seen : a number of horses, with the lassoes hanging to their saddles, were standing in groups, apparently asleep; the mataderos were either sitting or lying on the ground close to the stakes of the corrál, and smoking cigars ; while the cattle (without metaphor) were waiting until the last hour of their existence should strike; for as soon as the clock of the Recoléta struck, the men all vaulted on their horses, the gates of all the cells were opened, and in a few seconds there was a scene of apparent confusion which it is quite impossible to describe. Every man had a wild bullock at the end of his lasso ; some of these animals were running away from the horses, and some were running at them; many were roaring, some were hamstrung and running about on their stumps; some were killed and skinned, while occasionally one would break the lasso. The horse would often fall upon his rider, and the bullock endeavour to regain his liberty, until the horseman, at full speed, caught him with the lasso, tripping him off the ground in a manner that might apparently break every bone in his body."*

This is a pleasant spectacle, but it is all in the way of trade ; and however angels may look down

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on, men, in general, would think nothing of it. Nothing! Why, more than half the manhood, and nearly all the boyhood in the world, would think it capital sport, this cattle-killing of Columbia; look at with complacency, and long perhaps to enact a part in the bloody arena. The exhibition in it of strength and dexterity, and fearless intrepidity, may be allowed perhaps to redeem in part the murderous character of this work of slaughter, and invest it, both to actors and spectators, with wild excitement of a gladiatorial character. Thus much, and little after all, may be said for the death-dealing doings in the open shambles of Southern America. But what shall we say for other doings and other spectacles that meet and horrify us on her wide-stretched plains, or on the steeps of her stupendous mountains? What shall we say to the rough-rider of the trackless pampas (Guacho or European), whose "spur drops blood" as his panting, reeking courser flies under a burning sun, leaving a wake crimsoned with the same? Above all, as we ascend the mountain paths and passes of the giant Andes-rugged steeps inaccessible to man, but for the help of the surefooted, plodding, persevering mule,-what shall we

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say to, what think of, the common proceedings of the mule's master, the cruel "capitaz," who lives by the letting of the mule's labour ?-to do what in return? To starve, to goad, to over-burthen, to wring to rawness, to load on the raw places, to cut a back already bleeding, for adjustment more convenient of the hard pack-saddle!* What to these things must we say? That Columbia is not cruel? Yes, cruel we must confess her, like her older sisters of the world, even to the " good creatures" by whom (under their great Creator) she may be said, preeminently, to "live, and move, and have her being."

The animals, wild and domestic, of Australia do not appear to receive a meed of greater mercy at the hands of either colonists or natives of the soil. The forest tracks of the interior, bestrewn with carcases of draught oxen fallen on the way under the oppression of heat, dust, want, fatigue, and inhuman blows of black and white drivers, afford, at any rate, no evidence of such a fact. $\dagger$ Neither is it proclaimed by "the piercing squeals of agony" uttered by the pretty harmless opossum hunted from its hole in the white-

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barked gum-tree, and subjected to torturing and maiming by the black savage, who grins the while his delight in cruelty.*

But now, with unavailing pity, let us leave the elephant of Asia to groan and fall under the weight of skin and bone; the ox of Africa to be robbed of its living flesh by the Shylockian knife of brutal appetite ; the African camel to weep under its ponderous burthen ; the horned cattle of South America to struggle hamstrung in the mud of the corrál or the grass of the savanna; the playful opossum to scream within a human grip more cruel than the tiger's; and let us return to the cultivated plains, the busy coasts, the stately cities of wholly civilized, wholly Christian Europe. Happy there, surely, must be the favoured subjects of man's dominion! A paradise, surely, for the dumb and the dependent must be that Christian continent! Animals of Europe, let us question you. Does Cruelty lay there a lighter hand upon you? A roar from the bloody arenas of Madrid gives one rejoinder; the "bang" of the flesh-rending "flail" from the breaking-rings of Rome and Naples (each more like unto a place of slaughter than a school of training) affords another answer ; and who can doubt

[^10]its import when they see the poor poledro, the trembling colt, his nose-band of iron spikelets, his galling bit, his ponderous wooden saddle, his broken spirit and his almost broken neck, as he appears under the tender mercies of the Italian horse-breaker ?* Enough this, let us hope, for the whole of continental Europe.

But in peaceful, religious, freedom-loving England, there surely should be a quiet corner where the weak and weary amongst animals, as well as men, may look for forbearance and for rest ; where alone Cruelty has no perch for the roosting, no prey for the clutching of her harpy claws ! It cannot be that the capital of England is a capital of cruelty ! It can never be that in London she reigns a tyrant-queen, that in Smithfield she still holds her weekly court ; drovers her ushers of the goad, butchers her yeomen of the axe, common-councilmen her ministers-the stout supporters of her throne; Christmas (the birth-time of the Lamb of God) her time of annual jubilee. Oh ! things like these can never be existent in our beloved island. We have been reading and thinking and writing of barbarities abroad, till we are dreaming of

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cruelties at home. We must be dreaming, surely, how that Cruelty, even while seated on her throne of reeking bones and blood-stained hides, also presides daily over the starvation, revels in the garbage, sniffs in the odour of a hundred knackers' yards, her licensed places of authority; how that from these she still dodges her victims through all the extra stages of their already broken-down career ; how that, defrauding them for awhile of even their last, and, at the last, their best inheritance, the knife, she follows them in the rag and bone, the dust, the costermonger's cart, even to the moment when the last demand upon their bankrupt strength unanswered, the skeleton body lies stretched upon the road, and the oppressed spirit is rescued by the angel of death from her demoniac grasp.

Other visions of urban Cruelty spring up before our, perhaps deceived, perhaps dreaming sight. Fiendish shape! preyer more ruthless than hawk or kite, or fox or polecat! do we not see thee smothering thy feathered prey in the crowded, jolted poultry basket? Do we not see thee smiling at the agonies of the fluttering goose, swung head downwards by dislocated leg or broken wing? And have we not seen thee laughing in mockery at the living larks
immured in dens of death and slaughter, surrounded by disgusting offal, to regale man's appetite instead of making heavenly music to regale his ear? From hideous fancies, or realities like these, of how life ends, and how death comes to God's good creatures within crowded cities, let us away, away to the sunny fields and breezy hills; away from the tainted air of urban and suburban precincts, to breathe the fragrant atmosphere of flowers, to hearken to the joyous voices of living things, making the country a garden of delight. Let us lay our heads upon the fresh green sward, where all around is, as it should be, as He who loveth all would have it ; where happiness abides, where Cruelty dares not come. Lulled by all the sights and sounds of unmolested nature, let us repeat, as we gently close our eyes, that "Cruelty comes not here !" and with the words upon our lips, their happy meaning in our heart, sleep peacefully, and repeat again in dreaming, that "Cruelty comes not here!"

Now, is it not strange, but not more strange than true, that often as we have been thus reposing on the flowery turf, resting beneath a wide-spread oak, under a hawthorn in the glory of its bloom, beside a murmuring streamlet, or on a heathy hill, we have
been awoke (or else we were dreaming still) by Cruelty herself, come, as it would seem, upon a country excursion, to take a wider swing in her peculiar pleasures, in league (strange companionship!) with joyous Sport. Sometimes she has awoke us with the merry shout of childhood, laughing at sight of a battered butterfly expiring on the grass ; an impaled chafer pirouetting on a pin, a struggling fish gasping on the hook, or an unfledged brood upon their rifled nest. Sometimes she has startled us (still in companionship with Sport ') by reports charged with death, but often false enough to bring only torture, or she has sounded our réveillé with that " merry, mellow" horn, that has for its applauded accompaniments the panting breath, the bloodthirsty bay, the yelling shout, the thrilling death-cry; or Cruelty, more social still, or fairly tipsy, taking as her boon companion, Madness, as well as Sport, tears helter-skelter past us, perhaps runs over us, in what of yore was termed a " wildgoose," now, a "steeple" chase.

But enough of our Protean harpy, in her broader features and general forms. Leaving these, we will only describe, simply and veraciously, some two or three of her particular appearances, as encountered by ourselves. They are but faint illustrations of what
seems to us the lamentable fact that cruelty (of the sort we are considering) does meet us at every corner of every by-way, as of every highway in the world.

We had long been living within sight of city spires, almost within sound of city bells, when, on a certain summer's day, (oh! was it not a fine one!) we found ourselves in the country, in as pretty a village as any we know of, on the border line betwixt Herts and Middlesex. How delightedly when evening came, did we draw our tea-table to the open window, which, facing a picturesque common, looked out also on a highroad passing over it. A shower had laid the dust, and all was fresh, and calm, and beautiful. The sun was near its setting, gilding the edges of its cloud curtains and the faces of its watery mirrors-the shallow pools which, beset by willow pollards, appeared here and there upon the green. A few sheep were dotting the turf, and how could we help contrasting them there in their peaceful happiness, cropping so quietly the short sweet herbage, their fleeces reddened in the evening glow, with the last we had seen, in the morning, of their gregarious kind, panting, bewildered with terror, blackened with smoke, under the wheels of our omnibus and at the tender mercy of a licensed drover.

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"Types of innocence! here, at least, you are not marred by Cruelty!"

The pleasant thought was yet adding flavour to our cup of tea and relish to our country bread-and-butter, when we perceived, running towards the sheep, a group of little children, who began dispersing them in all directions by the help of shouts and stones. The object of this manœuvre was to drive them to the road, but we no more guessed at it than the poor browsers themselves, and were about calling from the window to the juvenile tormentors, when we found, that in following their own pleasure, they had been obeying also, though not very efficiently, the behests of a higher power. Our heart, so lately sunning itself in the happiness of the little flock, sunk within us at sight of a fat, sottish, lazy-looking fellow in a green wide-awake hat, a blue frock, and sleeves tucked up to the elbow. "The wretch! the monster!!" we ejaculated, then checked the exclamations and the feelings whence they rose. "What a sentimental fool I am! I eat mutton. As the world stands, mutton must be ate, and mutton must be killed." The angry voice of the lazy-looking butcher scolding his infant emissaries for their awkward performance of his mission, interrupted our self-reproof. With very little
trouble, though he seemed to think it a great deal, he collected the dispersed fleeces, and had nearly brought them to the roadside, when one of the number finding, at the moment, the attraction of the grass more powerful than even the promptings of fear and fellowship, stayed behind its companions to snatch a last sweet bite. Poor innocent! it cost thee dear! That green-hatted, blue-frocked monster, seized the unwitting offender with his bare brawny arm, held it up, head downward, and with a thick cudgel, inflicted on it a shower of blows. Death was not sufficient punishment for cropping, in farewell, a blade of grass. The poor delinquent fell, crippled, from the fiendish grasp, and so, helped on by blows repeated, followed its doomed companions to the place of slaughter.

The sun had left the landscape, and the sunshine had faded from our heart-Cruelty had come to put them out.

We left the window-cared to look no longer on a scene that had just been background to a tableau vivant such as that,-went to bed soon, but (albeit the curtains were white as milk, the sheets correspondent) went not soon to sleep, and were awoke at midnight by the sound (it was no dream) of loud

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distressful bleatings, the roll of heavy wheels, and the rough voices of men. It was a Thursday night, and a waggon-load of lambs was passing by on its road to London for the morrow's market ; there was nothing in that, nothing that we knew of, particularly cruel, but the voices of those condemned innocents, the silent moon silvering their yet unsullied fleeces, sounded to us, then, and always, very pitiful. Next morning, and continually afterwards, the hero of the cudgel passed and repassed our window. He was generally lolling lazily in his cart, or sleeping while another drove. We were always seeing him, and every time his deed of barbarity seemed re-enacted before our eyes. Daily too, sometimes earlier, but most often in the dusk of evening, we saw sheep driven from the common towards the neighbouring town, sometimes by an official blue-frock, oftener by little ragged brownfrocks, but invariably under infliction of stoning with sharp fragments of granite, heaped for its repair, by the roadside. Owing, we suppose, to late markets, or to meet other conveniences of trade, this practice of driving to the shambles at close of day is a very common one; but must it not, through deficiency of light, add, of necessity, to the inflictions of the slaughter-house?

Another apparition of Cruelty daily haunted us-it was that of a little old cart, dragged by a little old donkey, white with age, and occupied by a little old man sprinkled with the same wintery snow. The boards of the old cart seemed just dropping asunder ; the bones of the old ass seemed but just held together by its worn-out, damaged hide; the bones of the old man seemed in a like predicament, and his rags only just held together by fragmentary threads; the donkey's harness by bits of string, the blinkers flapping down with every step of their wearer. The whole turn-out seemed to have arrived at the extremest verge of decay, the very point of a break-up, and there to have been arrested - a thing of endless perpetuity, perpetual infliction, perpetual endurance, perpetual motion, perpetual appearance. The old man's trade was of dubious character; it had something, we believe, to do with cabbages and coke, but his main occupation, his chief mission in the world was evidently the business of tormenting. His arms were never idle, the left, for ever pulling, jerking, twitching, at the mouth; the right, for ever poking, thrusting, thumping, on the bony posterior of the old ass. That poor old ass ! we never saw it standing, eating, sleeping, taking a nod in the sun at
beershop doors, or a pluck at a thistle by the dusty way. Deviations like these from the usual character of its seemingly perpetual motion, possibly might occur; but to us, the creature appeared for ever on the go, keeping up for ever, never slackening because it dared not, never mending because it could not, that little jerking, tottering trot. We sometimes thought, that even in sleep and midnight stillness the arms of the old master must have kept up mechanically their action of goading, and the legs of the old slave their action of going. With all his pulling, and poking, and thumping, that old man never seemed angry. There was always a sort of smile, perpetual, like all that belonged to him, on the wizened face of that automaton player upon asses' bones. He didn't seem to think he was inflicting, and though there was nothing like a smile (God help it !) lighting up the large mild eye of the animal played upon, we tried all we could to persuade ourselves that even he, from dint of use, or ill-usage, didn't feel that he was suffering.

It was not enough that these living perpetuities of aggression and endurance were for ever casting their shadows across our path (we wonder, by the way, that they had any shadows to cast, the ass for want
of substance, the man for want of humanity); but there came in our way, in the same place, another visitation of Cruelty, hardly less continual, and of which an ensign was set up for ever just before our eyes. Amidst a cluster of village habitations commanded from our window was a white cottage, rendered most glaringly conspicuous by a bright red board, on which was blazoned in yellow letters the promise of Peter Potts, carrier, to visit, daily, all parts of London (distant from the village at least fourteen miles), with that long-established errand-cart, known as "Stump's Original." Whatever else its cause for blushing, that rubicund board did not testify to other than the truth, for in "all parts of London" was Stump's Original daily to be seen.

This notable errand-cart, painted en suite with the notice of its performance, bore on its tilted sides its own title, with the name of its present proprietor blazoned in yellow on a blood-red ground. When the flaring vehicle first seized our attention it was drawn by a white horse, high enough in bone, low enough in flesh, broken in knees, short in wind ; but we had seen scores of such animals before, in such conveyances, so, with a sigh to think it was nothing but an everyday sight, turned our head, and tried to
turn our thoughts in another direction. We were taking an early stroll on the common, when "Stump's Original" thus passed us on the road, and turning our eyes, as we have said, from the heavy blazoned cart and the thin white horse, what should they fall on but another quadruped-no, that is a misnomer, a triped-which was grazing-no, here again we must correct ourselves-trying to graze upon the turf, shaven already by sheep and geese, and parched by summer drought. A plump, powerful hack was the thin white mare in the errand-cart, compared with the brown anatomy now before us. Quixote's Rosinante would have been to it as a brewer's drayhorse. The phantom steed that bore Leonora behind her phantom lover might have matched it in height of bone ; but in lowness of condition, utter wretchedness of mien, the knacker's stud itself could scarcely have produced its equal. The attenuation of that hapless animal wanted but one thing for perfection, and that was the absence of a horrible excrescence, an enormous swelling, on a useless knee, wherein seemed collected every particle of flesh remaining on that wasted body. A few handfuls of grass, gathered from the roadside ditch, and consumed, when we proffered them, with all the eagerness of craving
want, afforded tolerable proof, though not satisfactory evidence, that a spectral horse, and not a spectral shadow, stood before us. Nevertheless (under the influence, doubtless, of our monomaniac sympathy for suffering animals), after we had left it far behind, it seemed to haunt us still. After the gate of the common had fallen-to behind us, it still seemed limping after us; and when we had plunged into the depths of a secluded wood, we seemed to hear the sound of those three halting hoofs on the velvet, even, of the mossy turf around us.

Could the visitations of Cruelty any further go ? Sympathizing reader, follow us, and see. The carrier's whitewashed cottage and stable-the latter a whited sepulchre of living bones-stood, as we have said, in too glaring proximity to our temporary abode. We could never look out without having our eyes assaulted by his outrageous board, and not often, while at breakfast, without a gratuitous exhibition of "Stump's Original" in the laborious act of starting. On the morning after we had first beheld that " miserrimus" of horses, the brown of the common, which, for all that we could do to drive it out, was halting still on the skirts of memory, we resolved not to look even at the white in the cart. We would
keep a steady eye, and, if possible, a steady thought, on our weekly newspaper. There was sure to be enough in its columns of human suffering, and cruelty of man to man, to afford bitter food for interest and compassion. "Perhaps," thought we, "we have been bestowing overmuch of ours upon afflicted animals-those poor mute ones, who, without organs of speech, have, seldom enough, even an organ of the press to advocate their rights and publish their wrongs." In the midst of some such wanderings (from our paper), the sound of persuasive lashes from before the door of Peter Potts assailed our ears; but for that we would not raise our eyes. At length we heard the "Original" machine in something like progressive motion, but so marvellously, so even unusually, slow and interrupted was the revolution of its wheels as they neared our window, that we couldn't, for the life of us, and for all our resolution, help taking just a look to see what ailed it. Then (powers of humanity!) what did we behold? The brown " miserrimus" itself, actually enshafted, and beginning to limp towards London. Up we started-flew to the open window-were about to call from it to the driver (a poor, puny-looking lad), and ask if he were going with that horse to town-then checked
the absurd inquiry. "Impossible, perfectly; perhaps it's going a mile or two, this warm morning, to save the old white mare ; that is, if it doesn't (happily) drop down and die before it's off the common." A sultry day followed-as long and sultry as the landlord of any roadside public needed to have wished for,-but evening returned at last, and with it returned the reviving breeze, and the gentle moon, and the bright stars, and the refreshing dew, and the dusty "Stump's Original," and (was it credible?) dragged in, even as it had been dragged out, by that three-legged locomotive, the living anatomy that we should have sworn to be of no-horse power !

Was it possible that animated skin and bone could have thus far gone in distance and endurance?-the distance some fourteen miles, exclusive of all London, and returning; the endurance past, in amount, all human calculation. It was even so. As for the method by which this marvel was accomplished, that was probably a terrible secret betwixt the driver and the dragger of that "infernal machine." How? a secret! when it was open as the daylight to all passengers upon the broad highway! True: but have we not observed how that all such highway passengers (with here and there, perhaps, an unfortunate
exception) are blessed with a most comfortable measure of insensibility-a measure that involves nothing less than a partial suspension of the faculties of sight, hearing, speech, in all matters that concern infliction of torture on the dumb domestics of their neighbours, however they may serve their own.

The miraculous journey above spoken of was not, it is true, of daily performance. Though "Stump's Original" visited London every day, it was only conveyed thither two out of six by the brown "miserrimus." Had, indeed, the achievement of that unhappy animal been oftener repeated, we must then have believed it a veritable phantom-no horse of bone and hide, and have ceased, in consequence, to commiserate its lot. No ; it was only twice a-week that it threaded the London labyrinth, with its load of goods and misery! Intermediately, it enjoyed all the privileges of limping liberty on the grass-bare common. Oh! how that common had become to us denuded also of every rural charm, through the haunting presence of that spectral victim of oppression. Excepting on the days for town it was for ever in our sight; sometimes, as we had first beheld it, striving to crop the grass, where grass was none; sometimes painfully effecting its descent into
the roadside ditch, where a portion of coarse, weedy verdure yet remained; sometimes gnawing, for very want, the boughs of the willows which stood upon the common, or the hawthorn of the dusty highway hedge; and sometimes (oftenest, perhaps, of all) standing with utter exhaustion depicted in its frame, utter despair in its poor melancholy face, and still as death, except for the quiverings of its swollen limb.

There was yet an aggravating ill in the last " doing up" of that afflicted drudge. On the two nights previous to the two days on which it was made to take the road in the "Original," it had been the custom to drive it from the embrowned common to the whitened stable, there to receive, doubtless, a mouthful of hay, possibly a handful of corn, to prime it for the morrow. Soon learning to remember, as well it might, these unaccustomed doles, such gleams of feeding would often flash across the darkness of its hungry void, and then the poor starveling would limp its best across the desert common to seek the oasis which imagination pictured. But never was mirage of the wilderness more fraught with deceit and disappointment to the thirsty traveller than was that image of stable entertainment to our hungry outcast. The door of the whitened wall, except only on the occa-
sions aforesaid, was almost invariably a closed door to him ; and there he would stand, vainly imploring with his eye of misery, till chased away by the children of the village, to return and be again rebuffed by shouts, and sticks, and stones. Occasionally, indeed, the way to rack and manger (what besides we know not) would, by accident, be open; but worse woe to the hapless intruder if he chanced to find it! for he was sure then to be ejected by notice of a broomstick, wielded by no less a personage than Mistress Potts. A tall, gaunt, white-faced woman was that Mistress Potts, late the Widow Stump, Mistress then, and still, of "Stump's Original," of the brown " miserrimus," and of its only less woe-begone white companion; mistress of the white house and red and yellow sign-board, eke of a little shop from whose tempting window-show of gingerbread, lollipops, apples, and ginger-beer, many a little mouth, to say nothing of big ones, went watering away. She was also mistress and mother of a boy and girl, worked only a little less, and fed a little more, than her horse and mare ; and mistress, finally, and wife of Mr. Potts, an idle young fellow, who, for the sake of all, or nearly, of the above possessions had been content to give his name to the relict of the "Ori-
ginal Stump," and to have the same painted inconspicuously on "Stump's Original." The errandcart business thus obtained was made by its nominal master a tolerable sinecure, his hardest work being to drink hard out of its receipts. As for Mrs. Potts, late Stump, she, to do her justice, worked hard enough, if it was only in grinding the faces of her customersthe little ones who ate lollipops, and the big who drank ginger-beer. Then, she made her young daughter work as hard, or harder, than herself, in the doing of a woman's work in household drudgery; and, as for her young son,-a sickly, consumptive branch from the Stump that was dead and gonehim she made work in right good earnest. The weight of his labour might be estimated in degree according to the lading of "Stump's Original," but the labour of his day no tongue but his own could tell, connected as it was with that terrible secret, the modus operandi of the errand-cart's metropolitan performances.

Well, all things that belong to earth come to an end, even that thing of seemingly endless duration, the last stage of a broken-kneed, broken-winded, broken-hearted horse. One day we missed the object of our commiseration both from the common
and the cart. While yet in the shafts he had been released from them-not a buckle loosened of his galling harness, the heavy collar still on his smarting neck,-by the gentlest hand that for many a day had been laid upon him-the hand of Death. Since Stump himself had died, it was a common thing (so we were told) for the horses of "Stump's Original" to die upon the road. The late master of the concern had been, by all accounts, a good, comfortable sort of fellow, and left a thriving business, which might have been thriving still but for the grasping parsimony which was, it would seem, his widow's ossifying disease. That had hardened even the mother's heart within her, and hard herself to a degree like this, no wonder that she should have done her best (or worst) to turn all that belonged to her into congenial hardness ;-that, for example, she had turned, first into hard cash, then into skin and bone, the flesh and blood of Stump's original stud; that also, for example, she was now taking means to turn the malleable nature of her young son into hard-heartedness resembling that into which avarice had brassified her own. We couldn't help it, but somehow this Mistress Potts (late Stump) this cruel white-faced woman, became to us every day an object of increasing and, we fear,
unchristian-like aversion. We couldn't, either, help seeing her for ever from our unlucky window. Sometimes she would be anxiously watching the start or the coming-in of the "Original," always, of course, with an eye to its weight of goods,-never to its weight of evils. Sometimes she would be overlooking the labours, at the wash-tub, of her little daughter; sometimes herself wielding the broom, perhaps industriously, perhaps as before described, inhumanly. On such occasions we couldn't, we repeat, help regarding our careful, hard-working neighbour opposite with anything but neighbourly feelings. The utmost we could do, in self-restraint and for self-consolement, was to cherish this belief, -that her young consumptive son would be, like her old starved horses, taken off the road by friendly Death-and that, ere enforced Cruelty and infectious Vice had quite corrupted him,-that her young, drinking husband would soon swallow up; or swallow down, every penny of her sordid gains, and that the whole concern of "Stump's Original" was dragging surely, if slowly, to a close.

Enough, perhaps too much, of particular manifestations of Cruelty, as exhibited in the rural neighbourhood wherein Stump's Original cut so conspicuous

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a figure. Suffice it, that around that central object, and the two or three others we have slightly sketched, we might place (all drawn from the life in that narrow spot) a variety of corresponding groups, such as altogether would make up a tolerable tableau of a rural Inferno for the brute creation. No, we need not attempt the completion of a picture such as this. Aided by Memory's pencil, any one may complete it for himself-any one, that is, who has ever sauntered on a village green or common, rested under the shade of its pond willows, or threaded the paths of an adjacent wood in the pleasant spring-time of the year. Who has not " then and there" beheld joyous companies of geese and goslings, ducks and, ducklings, in which the joy of some among them has not been quite extinguished-put out, together with perhaps a leg-joint, perhaps an eye; and the joy of others amongst feathered parents and callow nestlings, who has not also witnessed, converted into sore distress and gaping anguish? This, and the like, who has not seen in springs innumerable, and all to serve the joyousness of budding Humanity in the joyous spring-time of its opening life. Such objects as these are all, we know, much too common for detailed description. If we dwelt on them, the

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humane might think it for very love of cruelty, and not thank us; the indifferent might think it for very love of reprobation, and laugh at us. But we have glanced at these, the cruelties of youth, as we have looked longer at some of those of maturity, not, certainly, for pleasure, nor entirely for reprobation. Is it then for toleration? Hardly. Cruelty! we hate thee with a cordial and a sinless hatred. Practisers of cruelty, we have hated you a deal more, perhaps, than we ought. Have we not said that we got (Heaven forgive us!) to hate the sight of "Stump's Original," and thence the widow of the original Stump; to loathe the sight of the sleepy-looking, wide-awake-hatted butcher; to detest the apparition of the old automaton who played with stick and bridle on his ass's bones? Did we not confess that we even got to look upon the ruddy, chubby urchins of our village, from two years old and upwards, not as so many little angels, but as so many little-demonsborn imps of Cruelty !

Yes, as long as we saw them, one and all, old and young, we hated them; and only now-our anger cooled and contrition come-can we bear, as we are bound, not to acquit, but to do them justice. We began by absolution (hardly needed) of cruel-seeming
animals (not human) on the ground of instinct, (an instinct sprung of demoniac and human evil,) making cruelty in them an appearance, not a reality-a shadow, not a substance.

In fairness, we must end by seeing if we cannot say a word for cruel children, and even for cruel men, on the ground of something-a something which is the ground of cruelty in them.

Only let us look back for a moment on our two or three rural exhibitions, and we shall see that Cruelty did not in one of them play more than a secondary part. The atrocity of the brutal blue-frock, albeit dark enough to extinguish the sunshine of our first evening in the country,-even that would scarcely have seemed prompted by cruelty per se. It came rather of thwarted indolence, and the callousness, happy as horrible, induced by a pain-giving, deathdealing occupation.

In the automaton tormentor of his ass, Cruelty, born doubtless of stupid Ignorance, had been deadened by Habit into mechanism. In the mistress of "Stump's Original," Cruelty was only the harpy-in-waiting on her sovereign passion, Avarice.-Avarice! whose griping fingers had drained the heart of every drop of pity, and dried the humours of the mental eye,
till unable, in its blindness, to discern even the proper road to profit!

Then, for the common offences against common humanity of juvenile offenders.

What lames the duck and maims the goose on every village green? Often nothing but the love of " a capital shy." What tortures the fish and frog in every village pond-the pond especially beside the village school? Only the love of "a capital bite," or "a capital leap." What empales the may-bug under every new-clothed tree? The love, simply, of "a capital spin." And, what rifles the bird's-nest, and robs the bird of happiness? What, chiefly, but the love of "a capital climb," or of "a capital" string of many-coloured eggs. But wherefore are such toying taxes on the commons of creation being levied for ever by tiny tax-gatherers amongst its young nobility? It must, surely, be because those who have the bending or the tending of these human "twigs," (where tending is allotted them) never care to use the pruning-knife against their early shoots of selfhood-wanton mischief-working tendrils, whose very nature, like those of the bindweed and the dodder, is to fasten on, and bring destruction to the "verdant joys" of everything within their

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grasp. Hardly, perhaps, are the dodder and the bindweed more innocent of deadly purpose, when they choke the blossoms of the bean, than are, mostly, our childish wantons, when, for very joyousness, they kill the joys of other creatures. Then, where the $\sin$ ? It must lie, as we have hinted, in the teachingthe teaching which teaches few enough that all things living are created for enjoyment. That this, their joy, is their inheritance from Heaven, and that to lay a hand on it for idle sport is a grievous wrong, wanting but knowledge to make it very sinful.

In like manner the features of Cruelty, even to animals, which disfigure nations, are generally growths of some other originating vice or evil. In Asia we have seen the Cruelty sprung of Dishonesty and Misrule defraud the elephant, while the Cruelty which consorts with, if it springs not from, Idolatry, maltreats the ox where the bull is worshipped. We are told how, in Africa, the knife has been whetted by worse than brutal Appetite, for worse than a cannibal repast, and how the camel groans beneath a burthen, over-piled for Convenience or through Custom. In Columbia we have seen Cruelty a resulting, almost a requisite condition of a half-civilised, not halfChristianised, almost wholly cattle-feeding, cattle-fed; community.

In Europe (in her Western Peninsula) we behold Courage, Pride, and Nationality, those three Hidalgo attributes, sitting in the bull-fight circus, thinking only to regale themselves on its pomp and circumstance, peril and prowess; all the while that lowborn, low-bred, dastard Cruelty, crouches unseen beside them, their fellow and fellow-feeder at the bloody banquet.

In none, then, of the above manifestations, individual or general, can we recognise Cruelty in its original and most hideous shape-its simple, uncompounded, most deadly essence,-as the Cruelty which inflicts pain, for the sake, solely, of the pleasure thence derived. Would that in Hell only (if anywhere), such hideous shape were seen, such hellish elixir quaffed! but alas! from time to time we are reminded that so it is not,-that creatures in the human form are walking on our earth, our island, of whom we have heard tell that they use torture and commit murder, not thoughtlessly, lightly, madly, as means, but purposely, gravely, soberly, as ends; of whom we have heard say, that they gloat delightedly on the process, "long drawn out," of driving life by inches from some attenuated frame, the frame (be sure) of a dumb and helpless, or a poor and friendless one.

But let us leave these (oppressors and their victims) to the Power alone adequate to touch their hearts and avenge their wrongs, and return, reformingly, if it may be, to our Cruelties of less hideous aspect.

Shadows, we may not call them, but with shadows we might almost as well fight as wage war with them independently of their bases-the ignorance, thoughtlessness, self-indulgence, graspingness, necessity of hardening occupations, the endurance of poverty extreme, and other evils, individual and social, on which, as on pedestals, these forms of Cruelty are supported.

Or viewing them as growths-A plant may be here and there uprooted by direct reprobation, a branch lopped off (to grow again) by direct punishment, but we must go to work upon the ground they spring from, if we would eradicate slowly, but surely, the prickly weeds of Cruelty, all, like thistles, frequenters of barren and ungenerous soils. For this, we must do all we can to soften the rock of selfishness-all we may to hinder its formation. The thoughtlessness of youth may be but as sand, made up of particles small and glittering, but who has not known their aptness to consolidate into that same rock of Self. The loose, light material needs, to bind and soften it, some genial, fertile element, in lieu of the silicifying springs
of self-indulgence. The clay of Ignorance has also to be tempered by infusion of knowledge, and by appliances of kindness, where hard-bound by poverty, oppression, and indurating employs. In short, to mellow and enrich the moral soil, is to deprive the thistly growths of Cruelty of their congenial nutriment; and then only will they gradually decay, giving place to others, fair, instead of frightful, to the moral sight. To illustrate our meaning by two or three familiar instances, take Cruelty in the shape of Sport. Sport, for instance, amongst sporting gentlemen, whom we will not call cruel, only a little thoughtless, a little selfish, taking their own pleasure at the unheeded cost of a fellow-being's pain. Suppose such gentlemen, or some of them, could be forced to listen to that solitary voice from the pulpit, put forth annually against cruel practices, and paid for punctually by the Anti-Cruelty Society ; or suppose, by rare accident, certain of these gentlemen to sit weekly under a parish pastor, by whom cruelty of every description is frequently and gratuitously denounced as quite opposed to Christianity; the chances are, that not one of them would care more for the pulpit or the pastor than for a five-barred gate or sunken fence. Or let another Quixotic Martin,
backed by a host of Martinic members, make hunting, racing, and steeple-chasing, not merely offences against humanity and common sense, but offences against law, punishable as such by fine or imprisonment, and every sporting gentleman would only smack his whip and ride a higher horse. So we must let all grown-up sporting gentlemen ride on, and if they ride to the Devil, there's no help for it. But take all the sons of all such fathers; draw out their gentler sympathies with Nature, and with the animals that Nature's God created to enjoy, with them, her bounties; give them an interest in objects of the country deeper than a sunk fence, wider than a racecourse, higher than a five-barred gate or ten-foot wall; and the race of racers, hunters, and steeplechasers will by degrees diminish. One can even contemplate a day on which they will have become races of extinct animals, as extinct as many whose remains, buried in chalky downs or beneath verdant pastures they now, unwittingly, ride over. How infinitely richer in enjoyment may be those downs and pastures to their descendants than to them, in such coming times of which the advancing steps are already visible-times in which country gentlemen (not the few, but the many) will esteem it
better sport to exhume and reunite the bones of fossil animals, than to break their own and those of the living quadrupeds they bestride; better amusement to collect, preserve, and arrange the vegetable productions of earth's surface with their own hands, than to trample and destroy them under their horses' hoofs.

Or take Cruelty as it appears in its lowest and widest bed of productions-the hard unbroken soil of unlettered Ignorance. Lecture as we may under Humanity's prompting, or fine and imprison as we may under Martin's Act, and what, in nine cases out of ten, is the result? Why, that the bare ribs of the animal oppressed, be it in cab, or coke or costermonger's cart, will smart doubly for what we do ; that, from the degraded, brutish biped who belabours, and must belabour it, the wretched quadruped whose cause we espouse, will receive so many extra blows, and perhaps under-feeds, for every word of reproof, every day of imprisonment, every penny of fine imposed on its miserable owner or driver. We may scarcely perhaps hope, in such cases, to improve the condition of the brute, except by improving the condition and nature of the man-the one through the other. This work, a compound labour of love, is now happily begun, and assuredly will prosper in the
impulse and progression of all things goodwards and truthwards, which the Ruler of all is now pleased to make so strikingly apparent. With every forward step of the human race, a link is broken from the galling fetters, a knot untied from the cruel scourges permitted, for a while, to afflict the races under its subjection. But this (itself a work of generations) can do but little to mitigate the misery of the present generation of suffering animals. Are they, then, in the slow march of moral reform, to suffer on, suffer to their miserable ends, without a voice uplifted, or a hand stretched out for their relief? Oh, no. However slight the benefit of preaching, however inadequate the restraint of punishment, we must preach still, and still enact penalties (and enforce them) against the cruelties of which dumb things are victims. We call them dumb; but are they not endowed, even by their persecutors, with a speech of signs which appeal, through the senses, to the heart? Who is deaf to the threatening roar of the infuriated oxthe strong, the noble, the laborious, the patient mildeyed ox,-that speaks to our fears? and is it possible that passing thousands can be blind to the records of Cruelty scored upon his panting flanks, traced upon the pavement or the road-dust by his truncated
blood-distilling tail, graven on his weight-worn, travelworn hoof, cloven by Cruelty as well as Nature, because these speak only to humanity?

Few enough of us want ears for the furious bark of an angry watch-dog,-few of us an eye for the foaming mouth of a suspicious strange dog; and can one of us be blind to that object strange, too, though very common upon every country highway, an abused draught dog,-a dog in harness.* Only look at him, that misused creature! Look at his hollow back and sides; his dirty, wiry coat, wet with perspiration; his tongue, dripping with the same; his eyes, red with inflammation; his feet, with soreness. See his gaze of generous confidence turned into a cowardly, wolfish, lowering look, as he glances round furtively at his tyrant master. "Master," says that look, "I was made to love, to follow, to wait for, to watch for, to defend, to die for you,-anything but this, to labour for you as a beast of burthen !"

Is it possible to shut our ears or eyes against appeals like these? Surely, no ; and till the moral law has softened the soul of the social system, even to its lowest depths, penal law had need to persevere

[^12]in its partial work, and do it, if it can, less partially. For instance, in the case of the canine oppression last adverted to, it is not for us to dive into the mysteries of legislation, but if we attempted it, we should certainly grope vainly in the darkness that belongs to them, or to our own stupidity, for the reason why dogs in the country are permitted to groan still in the harness, which, when they near the metropolis, falls off them at the touch of Law, like the shackles of a human slave when he treads on British soil.

We might also ask, en passant, why vehicles dogdrawn, are not made liable to turnpike toll; and why, while dogs draw at all, the masters of dogs drawing are not obliged to furnish them with shoes,-
"With holes in the soles for their claws to come through,"
such shoes as we have read of as in use amongst some of the sledge-dogs* of Kamschatcha.

We have heard about inspectorship of knackers' yards, markets, and slaughter-houses. If such really exists, is it not the greater puzzle that horses doneup with work, and no longer fit to live, are not better protected in their right to die; and sheep and oxen,

[^13]over-done with food, in their right to die without unnecessary pain?

Apropos of working-horses that have no working strength left in them, may we in our admitted ignorance of all legislative matters, humbly venture a suggestion for amendment of the Martinic Act.

As there is a certain standard of price imposed by common interest, if not by law, on most articles of common use, should there not be a certain legal standard imposed by common humanity on that article of common ill-usage, living horse-flesh? Now, if not a bit of it could be sold legally (excepting to the knacker) for less than a five-pound note, we should see nowhere the wretched remnants of equine vitality, which we now see everywhere under the still lingering process of completely wearing out.

We once said something of this to a talkative old farmer, whom we fell in with on the road as he was leading his fat pony down a steep hill. "Ah," said he, " that mightn't do amiss, only d'ye sèe, there's many a bit of horse-flesh that's brought so low as to carry, I may say, no flesh at all, that a man, if he knows what he's about, may pick up for, perhaps, some five-and-twenty shillings, and sell, when he's
got up agen, for a'most as many pound. I've done as much myself. Look at that 'ere pony. I bought him at Barnet Fair for I wont say what, and yesterday refused for him the same twenty times told."
" That may be," said we, " but if our law of humanity were the law of the land, so many unhappy animals wouldn't be brought to such a pitch of lowness, and sold, not usually to get up, but to bring lower still."

The old farmer smiled, and thought, no doubt, that we were more compassionate than wise; some of our readers may very likely do the same.

Well, our plan may be Utopian, we contend only for all plans that are practicable towards relief of those poor mute petitioners, whose sore and heavy grievances are thrust upon our notice at every corner. Though the walls of St. Stephen's ring with laughter, let members of "the House" work bravely at improvement of laws for their protection. Though scoffers, without, abound, let members of society aid us bodily (in defiance of trouble as well as ridicule) to carry such laws into effect. Let all, also, who can do it without injustice to yet higher claims, contribute their mite or their mountain to those brave societies, which in the cause of the dumb creation are fighting
at once against Cruelty and Scorn. All this, and more, as much as may be, are we bound to do for suffering animals of the present generation; but our most effectual work for afflicted brutedom is chiefly, we repeat, of prospective efficacy. We may, for instance, do something to lighten or to shorten the woes of the aged roadsters, whose multiplied miseries now stare us in the face and prick us in the heart; but we may do a great deal towards lightening the last stages which await their descendants-the yet unborn, or those living yet in clover-the youthful, fat, highfed, high-groomed, pampered animals, now prancing under the well-appointed saddle, pawing or puffing under the enriched harness, or standing in the heated stables of present wealthy owners, cruel, even in their "tender mercies" of tender-making tendency. It is for the horrors of their future, and of future living creatures, that mitigation may now be best provided; and where are the places where this work of compassion (already, be it hoped, in progress) should be carried on with double energy? Not so much the road, the street, or the police court, as the printing office, the church, the lecture-room, and above all, the school-room-school-rooms for all classes, but in especial for the poor.

With some little influence, direct, the press exer-
cises, already, a large amount of that which is indirect towards improving the condition of domestic animals.

To the press, then, we may look in their behalf for benefit incalculable; not alone through "voices of humanity," voice upon voice put forth in lamentation or reproof of Cruelty; not alone through sickening details of its daily doings; but much more through increased issue of books, volume upon volume, continuing to exhibit that mystery of deep, if saddening interest, brute existence, as a fertile field for description, exploration, thought, admiration, and alas! commiseration. Thus will the press use adequately a portion of its mighty power, in lessening the amount of mighty wrong done to the dumb creation. Thus will it make more clearly seen, more deeply felt, the nature of that relationship (ordained by the Creator to be just and tender) betwixt man and beast. The " beast" for whom God careth, whom, together with man, "God saveth," and for whom, therefore (interpret these words of the Psalmist as they may) God's ministers need never be ashamed to lift up a protective voice, even from the pulpit.

In lecture-rooms we may expect to hear, on this as on other topics, the sense of the press made audible; but it is as we said, to school-rooms, above
all, that we look with hopefulness for the planting of growths of humanity, such as will check and supersede the growths of Cruelty-cruelties of all species which flourish so universally (as grafts from a stock) out of early cruelty to animals.

It would be an aid, surely, to this important object, if the walls of every school-room, but in especial those of every National, Sunday, Ragged, and Infant School, were furnished with pictures such as those which were the last to occupy the benevolent heart, the imaginative mind, the skilful hand of Bewick. To the honour of that celebrated wood-engraver it stands recorded that, " on the morning of his death, he had the satisfaction of seeing the first proof impression of a series of large engravings on wood, which he had undertaken in a superior style, for the walls of farmhouses, inns, and cottages, with a view to abate cruelty, mitigate pain, and imbue the mind and heart with tenderness and humanity; and this he called his last legacy to suffering and insulted Nature." Has this compassionate bequest found zealous executors for its fulfilment? If not, let it now be carried out beyond the letter and in spirit. To cheap prints from the above designs of this gifted and benevolent artist let others be added of like tendency, amongst
them, as lessons of terrible warning on the progress and end of Cruelty, its four stages, as so fearfully depicted in the well-known pictures of Hogarth. Let these be tongues upon the wall, for instruction and reproof, and let their lessons be seconded amusingly, persuasively, warningly, by the tongues and books of teachers. Through every channel-eye and ear, mind and heart-let the claims of the dumb creation to tenderness, gratitude, love, and admiration be made apparent; their possession of the same bodily feelings, and of intelligence and affection resembling our own, be impressed upon the opening apprehension of childhood. Let natural history, in simple, familiar, interesting garb, with stories-especially of domestic animals,-form a leading branch; come next to the familiar stories and plain precepts of the Bible, in the tuition of young children, the children in particular of the poor ; and we shall be doing something towards abatement of that want of feeling through want of knowledge, from which is derived by far the largest portion of cruelty in act. For dispersion of this element of darkness-aliment of this and of a thousand other evils, brightening influences are, as we have seen, at work, and will work on in the great school-room of society, even in
its lowest and hitherto neglected forms. With the adult it must of course be slower, harder, and less productive labour, than with the infant million. All, however, that is bettering the condition of the poor, thereby softening their asperities as well as opening their intelligence, must be contributing to improve the condition of the four-footed fellows of their toil, and victims of their ignorance and depression. In proportion, in short, as the wrongs of the degraded man become redressed, the wrongs of the oppressed brute, received so largely at his hands, though not to him most morally imputable, will diminish.

A word, in conclusion, for the cruelties which seem sprung of necessity out of the requirements of certain requisite occupations. In the persons, for example, of cabmen, drovers, butchers, can we look for the virtue of humanity-humanity towards dumb animals? What are our cab-drivers? Men with minds left stagnant and open to the corruptions-the drainings from the dunghills-of low city life; with frames stagnant, too, and exposed, like the ribs of their wretched cattle, to all the inclemencies of a wintry sky. Would it not be cruel to expect clemency from them? clemency, above all, to the jaded brokendown hacks which necessity bids them drive, and of
whom cruelty is the spur which necessity buckles on. Equally, almost, are the barbarities of, drovers to be considered as consequences of their calling, so long, at any rate, as that calling obliges them to force streams of terrified sheep and bewildered oxen through street obstructions, perils, and provocations, such as might ruffle the temper of the most serene philosopher. Of a mere philosopher? nay, it is much to be doubted if the temper of a truly Christian man could maintain its placidity, in discharge of that trying office imposed each Monday and each Sunday upon men untutored, who owe small thanks to their fellows for any opportunity to become Christians at all.

Then for the butcher-he who, for daily living, is required to ossify his heart by infliction of daily death; he on whom devolves all that is most rough, and coarse, and hideous, in the ministration to carnivorous appetite-the appetites of us delicate fleshfeeders, who can't (some of us), for the very soul of us, help looking on the greasy apron with something like disgust, and on its red-faced wearer with something like aversion.

Alas for us! these and the like do wear the aspect of necessities, cruel for man and beast. But must they last to the world's end? Hardly. In that
the harpy that broods in every corner. 161
brightened future, at which, through the mists about us and the haze of distance, we have been trying to catch pleasant glimpses, we have ventured to contemplate a time.when starved and broken-down horses will have no existence; when cruelly uncaring, and cruelly uncared-for drivers shall have become, with them, a race extinct. We are looking now to a much earlier epoch, when horned cattle will cease from our crowded streets-when the bleat of flocks will be heard to mingle no longer with the roll of crushing wheels. But vassals as we are of the bulky "baron," the noble sirloin, votaries of the juicy saddle, may we-can we-dare we-will we anticipate the time, much more remote, when the butcher will find his " occupation gone?"

Yes, gentle vegetarians, for all our beef-eating, we can envisage and enjoy with you the pleasant, peaceful prospect which you, in advance of the age, have begun, in yourselves, to realize. Would we could even join you on those wholesome herbivorous hillocks on which you are standing, raised above our blood-stained pastures! But (alack for habit!) in these we must still feed on. With you, however, do we look (in hopeful earnest) to that blessed time when it may be said of man regenerate-

## 162 THE HARPY THAT BROODS IN EVERY CORNER.

## " No longer now

He slays the lamb that looks him in the face;" when it may be seen of animals (man's representatives), that the fierce are fierce no longer; and when the harpy Cruelty (in some shape of horror now meeting us at every corner) will have ceased both in substance and in shadow to haunt the earth.


V.

## THINGS AND THOUGHTS IN A THICKET.

" A thing of beauty is a joy for ever."-Keats.
Things in a thicket? What can they be, except brambles and briars, snakes and slow-worms, vexations, impediments, and hidden perils? Thoughts in a thicket? They must all be merged in one-the thought of how to get from out of it. Well, the thicket wherein we have now found (not lost) ourselves, has certainly its brambles and briars-likely enough, its snakes and slow-worms-but neither incommode us just at present. As with life's troubles, we have м 2
managed to get through, or pass by them ; so let them pass. We are now somewhere about the middle of a thick green underwood, shaded by an upperwood of stately trees. The copse, chiefly of hazel, is intersected by numerous nutting-tracks, as by so many crossing threads, knotted at their junction by turfy patches, each the carpet of a shady bower. It is in one of these, hardly bigger than a sentry-box, that we have taken refuge from the mid-day heat. A verdant retreat, at all events, it is: a green canopy shields our head; green tapestry walls us round; the green carpet sends its coolness through our feet, and its freshness through our nostrils; and in the stump of a fallen tree, velveted with green moss, we have found a convenient seat whereon to rest and look about us. But what is there to look at? Our box has scarcely a peep-hole to admit a sighi of anything beyond itself, excepting through its leafy lid, at a patch here and there of the cloudless sky. It is only through our ears that we are reminded of a living, that is, moving world about us. A flock of rooks has just sailed cawing overhead ; a cart is rumbling by on a road that skirts the wood; the impish shouts of birds'-nesters come from within its deep recesses ; a parent bird, wild with grief and terror, has just dashed
by us through the thicket: but of things-objectsto arrest the eye, there seems not one within the little circle of which we sit the centre. Here is no prominent peg whereon to hang a notion; so, for our thoughts, they must either, like the rooks in this parching weather, fly far in search of food, feed upon themselves, or go to sleep. Fly far they cannot; this green box seems to cage them. To feed (in their present emptiness) upon themselves, would be but fasting. So there's nothing for it (nothing here to help it!) but to go to sleep.

The parti-coloured fabric of a woven carpet has suggested many a thought, conjured up many an image, rising, through the down-cast eye, into the vacant mind. Who has not sat in the dreamy twilight, looking down upon the flowers of the loom, faded, perhaps, and threadbare, till there have seemed to look from out them faces, which, fair and young when they were in their freshness, have faded with them ; or merry "twinkling feet" that have trodden them, but are never to tread carpet more. Out, even, of a new untrodden " tapestry" or Axminster, unsullied visions may arise of budding spring, or blooming summer, or, at worst, reproving apparitions may start from out them. Those trailing leaves and flowers
may reveal their lurking serpent-some silvertongued beguiler of the trade, who may have tempted us to empty our purse upon the floor. Even a Turkey-a dining-room Turkey-whereon is imaged no likeness of a living thing, may be suggestive to Memory and Fancy of a thousand forms of life. To Memory, its parti-coloured surface may seem afloat with good red wine, smoking with savoury viands, laughing with Christmas merriment ; and to Fancy, manifold the shapes constructed at her bidding from those variegated patches which shape have none.

But here, with this little carpet of greensward, both Memory and Fancy are quite at fault. Flowerless, figureless, wearless, fadeless, stainless ; protected ever from the changes and chances of vegetable life --from cropping scythe and cutting share, from scorching heat and biting cold ; green now, green always, blade upon blade in smooth monotony; what serves it at the very best, except as a resting-place to eye and mind, wooing both to the luxury of repose.

Here, though, comes a ray of sunshine falling through the leafy skylight. It has dropped at our feet, and, roused at its illuminating touch, Memory and Fancy start up to meet it over a cluster of cup moss. Ah ! these fairy goblets! how, at sight of them, returns
the memory of days when life was fairy-land before us-when life's cup, gilded by its morning sun, seemed, like these Lilliputian vases, wrought of gold, soon to pale into silver, then to darken into lead.

Well, if the fairies were only for cnce to walk by daylight, and just now to walk this way, how they would start, and lift their little hands, and rub their little eyes with joy and wonder, to see this, their plate of silver, in the moonlight, transmuted into plate of gold !

Beside these cups and salvers, and lighted by the same enriching beam, stands a lowly plant, which must stand high, too, (we are sure of it,) in fairy favour. Its smooth tripartite leaves, always of a green most delicate and bright, are now, in the partial sunlight, fairly luminous. Some of them are spread wide open, and look like heart-shaped shields of fairy warriors; of others, the leaflets are suspended drooping, and form (the three together) a pagoda parasol mounted on a pink handle-nay, a parasol hardly, but a paralune, a shade for fairy faces from the glare of moonlight, or the midnight dew. And there are other uses, more economic, to which this fairy wood-plant, leaf and stalk, are put (one can hardly doubt it) by members of Titania's household.

The pinky juices of the stalk must supply a dye most delicate for fairy stockings-a rouge most beautiful for fairy faces, likely in moonlight, or through moonlight revelries, to wax a shade too pale. Then, the juices of the plant, so delicately acid and refreshingthese, sweetened with honey-dew, must be the staple material for the wine of woodland elves. The juices of the grape they leave to vulgar gods and vulgar men. Yes, the more we look at it, this beautiful native of the woods-wood-sorrel*-too delicate almost for touch of human fingers, the more sure we are that it was made expressly for the fairies. Its time of flowering is past. It shows at present no drooping buds, or fair white petals veined with pink; but in absence of bloom, it is still exquisitely beau-tiful-leaf, stalk, down to the root's end-the root an assemblage of pink scales, with light proceeding fibres. Let Wordsworth and the bees unite in special homage to "the brilliant features" of the lesser celandine ; let Burns and the skylark (each after his manner) carry up to Heaven's gate the undisputed praises of the "Wee, modest, crimson-tipped" daisy; give us, for entireness of beauty, not as a flower only, but a plant, our favourite wood-sorrel! But if the favourite,

[^14]as imagined, of the fairies also, the elves may even now have "dropped a juice into our eyes," whereby " enthralled to its shape," they may see in it more of favour than it really has. It were well, perhaps, to test by judgment the correctness of our sight, and try the object by the measure of comparison. Here are wood-fellows in abundance wherewith to measure it.

Here is the Robert geranium, with its deep pink flowers, and graceful, deep-cut leaves, and tapering crane's-bills ; the dog-violet-a few remaining of its pale, scentless blossoms; an all-bone chickweedonly capsules left to tell where white flowers, or silvery stars, have lately been; and a yellow poten-tilla-its stars of gold still shining, but, as if fallen, lying scattered on the ground. All these have their graces and their merits, but the crane's-bill offends by its odour ; the dog-violet disappoints by its want of it; the all-bone is too stiff and starch; the potentilla is too prostrate. There's none of them, in short, with which we cannot find a fault, except our dear wood-sorrel, which, as we have said, for entireness of beauty, is, and ever shall be, our favourite of the woods.

Clustering round the edge of our green carpet,
like a border of bouquets, we can see, now, other and nearly resembling groups. Strange that we did not see them sooner,-not till that gleam of sunlight fell upon the fairy cup-moss, and thence drew attention upon all the rest ;-strange this, but stranger still, a corresponding phenomenon, too common to be, in one sense, a phenomenon at all. Dwellers on the spot where our "lines have fallen," perhaps in some quiet green retreat-one of the shady bowers of the dusty world-we are surrounded by a thousand unobtrusive blessings. Like these woodland flowers, they have been for a while (perhaps a long while,) overlooked. At length, through some awakening influence or incident, as through the entrance of a sunbeam, one, perhaps, of these disregarded gifts is displayed in a new and striking light. Hence, eye and heart may be opened unto all; and strange-we confess it,-strange and thankless, that these bordering flowers of our heritage were never seen before!

We can hardly call flowers yet the budding clusters of the bramble, which here mingles profusely with the hazel, white and black thorns which hedge us round.

Now, the bramble, in our estimate, is no beggarly brier, no Pariah of the woods. We would not have
the trees acknowledge it a king, but incline to regard it, in the light it seems to look upon itself, as a sort of captain of copse and hedgerow-as a bold free out-law-a Macheath of forest and of highway. Is he not a robber? robbing the fat mutton of its fleece, the forest pony of its flowing honours, laying thorns on every passer-by, without respect of persons-levying tribute on "rags and jags and velvet gowns."

Yet has he, withal, his points of generosity. To the poor, in especial, he offers freely of his fruits, and clothes the waste, else bare and barren, with the best he has to give.

Contemned, cut up, and hunted down-what cares he? Wherever he can gain an entrance he coolly mingles with the best among his betters, dressed often in as gallant bravery as they, of bud and blossom. Then, look at the bold and graceful freedom of his wild embraces, as, just like a Macheath about his Poily, he throws his arms about the laughing May and blushing eglantine.

There is another aspect, under which we have often looked upon a bramble. In the time of blackberries it presents a picture of life in all its stages. In the compass of a bush, we look at once upon the Poet's Seven Ages.

Here, in a group, we have budding Infancy, blooming Childhood, verdant Youth, vigorous Prime, fruitful Maturity, fading Decline, withered Age. Even death itself has, here, in the midst of life, its representatives. See them in the brown dead leaf, the stiff dead arm, the stone-dead fruit that has never come to ripeness. All seem as silent preachers of mortality to the growths of every stage about them. They are heeded no more-ah! not much less! than the silent preachers of the graveyard by the Seven Ages that live hard by.

Here are some young ash trees, growing from amidst the underwood. Their feathery foliage looks, on the whole, as at Midsummer it should-smooth, verdant, healthy; but a few amongst the pinnate leaflets look strangely stricken: they are contorted in form, and have exchanged their complexion of glowing green for one of sickly yellow ; they are at once shrunken and swollen, and their swellings are all chequered as by a compressing network of dark purplish threads, the veins, filled in health by green vegetable blood. They look, these leaflets, as if they had been under the influence of an evil eye, but if a witch has wrought the mischief there has been method in her malice, whether her instrument was
eye or needle. The edges of these bits of puckerwork are all drawn inwards-from the outer to the inner surface of the leaf. Let us explore the recesses which the puckering has produced. The hollows are not empty-they are stuffed with white wool or cotton, or what resembles it, and imbedded in the same we discern a multitude of little moving bodies. Now they are routed from repose, they are scampering off as fast as legs can carry them, under the weight of as large a portion of their bedding as they can contrive to carry with them. We see enough of them to know that they are insects. A look through our pocket magnifier may tell us something more. The animals look now something like a flock of Southdown sheep-black-faced, black-legged-and here we have one stripped, somehow, of its coat of wool. The creature looks not amiss. Happy if all animals could show as well when stripped of their sheep's clothing. This has an ovate annulated body, tipped at the nether end, and otherwise variegated, with black-black legs, black winglets, large red eyes, and a sharp proboscis,-one of the needles, we suispect, by which all this puckering work has been effected. Yes, we know it now (it and its woolly comrades), for an aphis and aphides of the ash. The aphis
known to all apple growers, and known to their cost as the white blight,* is a resembling species, and clothed, like this, in an investiture of wool, a secretion from the animals' bodies. Dispersed together with the insects throughout the wool, are a number of little round, white, semi-transparent objects-eggs as we take it, to perpetuate the generations of these blighting puckerers of the leaf. Well, their mischiefs fall here harmlessly enough, as compared with those wrought by their cousins of the orchard. Let us leave them, therefore, to their warm companionship and ash-leaf wine.

Other insect lives, numerous as the leaves, perhaps out-numbering them, are here in enjoyment (each after its manner), as we after ours, of this green retreat ; one is, though not happier, more evidently happy than the rest. He is a magnificent individual of his kind, sleek and bulky, attired in a jerkin of dark-grey velvet, "freaked" with gold and frogged with silken tufts. Reclining lazily on a cushion of grass, he is discussing the tender blades, with a relish such as fasting gives to feasting, the relish of an eater and a drinker (a drinker caterpillar) who has. passed through pinching Winter to arrive at Summer

[^15]plenty. Joy be with thee, master drinker, and a happy accession to thy winged estate.

The sun is lowering, and, travelling downwards, has sent another of his beams to pry into our privacy. Entering now through a loop-hole in the bowercurtain, he comes to sit beside us on our oaken settle, and, though we move for his convenience, or our own, the cheerful visitor is, like his predecessor, welcome. Even now, as he plays upon his seat, and ours, the mouldering monument of what was once a tree, we read an inscription on its face, which might never have been noticed in the shade. This once so noble oak, not in one sense of the noblest, testifies of itself that it was a promise-breaker. On the day of its falling, it brought, most likely, disappointment heavy as its fall. Circle after circle (year after year) are drawn by the compasses of Time upon the face which axe and saw have worked together to lay bare; but, as we follow back the record towards its central beginning, we come, before we reach it, to a blank. The tree was hollow. The oak was without a heart.

Wonderful existences are trees ! Longest livers of all the things that live on earth! Silent witnesses of
past events, and silent survivors of passing generations, which one would like them to be talking trees, or singing trees, to tell one all about. Like them? Why they do talk, and they do sing. A dull ear and a dull spirit must that dullard have who could stand under the Wallace Oak, or Baron's Yew,* 'and not hear songs of liberty with every stirring of their branches in the breeze ; or under the Baobab of Africa, $\uparrow$ older it is reckoned, than the flood of Noah, and not hear the sighings and moanings of a sinning and a drowning world!

Patriarchs of patriarchs, which thus number their years by hundreds or by thousands, and die at last not so much because their constitutions fail as because they have exhausted the nutriment or the depth of soil essential to their mighty requisitions ! What dwarfish ephemeræ do we feel ourselves beside these giants of earth and ages ; while earth and ages are boundaries to our thought! But though trees stand while men and generations pass, they stand as our abiding symbols. We repair to the forest and the garden not alone for green boughs and garlands, but to gather also leaves and flowers of speech-figures

[^16]that serve to represent us, both in what belongs to physical existence and moral growth.

As full of life and variety, and beautiful as trees themselves, are the similitudes in the Book of books, wherein trees are made to represent the states and stages of individuals and of nations: the vine, the olive, the cedar, and the palm, are not rooted deeper in their native soils than in the hearts of men, wherever the gospel of the palm has true disciples.

Parallels particular and minute do not belong to figures of poetry, divine or human ; but even these are noticeable betwixt the things that live and grow, and the creatures that live and grow and movecurious the correspondences both of structure and function betwixt vegetable productions and animated beings. But, to leave these and to look only to the organic life of trees and the spiritual life of men, we find enough of comparisons, or analogies, more than general, whereby to liken them to one another.

The tree makes wood, through assimilation of external elements, its root and leaves the organs of absorption. As root and leaves, to us our faculties and senses. Through these, imbibing matter from the world without, the man makes mind; his mind becomes, at least, enlarged and fashioned.

Then, what are the concurring agents for development of vegetable life?-what but light, heat, air, moisture, soil?

What the requisites for expansion of the mind? What but the light of derived intelligence, the heat and softening influence of imparted affection, the air of social freedom, the soil of a "fair ground" in the allotment of life? Where these concur upon the favoured spot where a man is planted, they suffice, in general, to make him very good, or goodly, in the world's eye, very healthily flourishing to his own consciousness, even as this oak, when exultant in its prime. But thus growing, all intelligences, all affections nourished upon outward things, a man is only, after all, an external man, as the oak is an external tree; his vitality, like the oak's, lying more in the circumference than the centre.

It is known to almost every one, that trees have been divided into two principal groups; the exogenous, or those that make wood externally, and the endogenous, or those of inward increment. Of the external is the oak and other of our native foresters. The growth of these is by a yearly-added ring or cylinder, the bark, however rugged, never failing to expand its breast, to make room for and protect the
soft in-comer ; and it needs protection, as at once the most tender and most vital part.

Of trees that are internal is the palm and its tropic bretbren; and in these, contrary to the last, the most inward is the newest, most tender, and most vital portion of the trunk. The palm, like the oak, derives its nourishment from external elements, but the matter thence acquired is laid at once to heart.

These endogenous, or inward trees, rank lowest of the two divisions; yet would they seem the aptest symbols of the highest type of mind—of mind in its highest, which is also its innermost degree-of the internal rather than external man. Or, perhaps, a compound symbol, the oak and palm together, may represent most perfectly the most perfect development of which mind is capable while imprisoned in a fleshly trunk. In all external qualities, such as well befit us for the external world, let the strong, the durable, the useful, the comely oak be our representative.

In the central vitality of our spiritual frame, where, admitted to our heart of hearts, the Mighty One who dwelleth with the humble and the contrite, disdaineth not to enter, let the graceful, the heavenaspiring, sun-adoring, sacred palm-tree be our fitter emblem.

Then, as a sturdy oak, deep rooted, may we stand stedfast here, though the storm rage and the waters swell; and then, as a palm, may we humbly hope to flourish in the house of our God for ever.


VI.

## LEAVES OF INSECT APPROPRIATION.

"All that we see is dome, or vault, or nest.
. . . . . prolific Art

Of bud, leaf, blade, and flower, was fashioning Abodes where self-disturbance hath no part." Wordsworth.

One August evening we went out as usual for a ramble, but not, as usual, by the evening's invitation. That was decidedly uninviting. The air was not refreshing, the sky was not glowing; a dark curtain of cloud hung on high, and a cold, yellow light glared from under it. A long-continued drought had parched the verdure of turf and tree, and a veil of dust hung upon their faded freshness. Our path crossed a com-
mon where beds of wild camomile disputed possession of the ground with the worsted and daily weakening grass. The scent of its trodden flowers rose refreshingly from our feet; but of no other refreshment were our senses sensible. The ponds, with their willow pollards, had ceased to be oases in the heathy desert-ponds no longer, it was only their muddy bottoms that betokened where water had once been. The sun had here deprived himself of at least a dozen of his million mirrors-liquid mirrors-and left nothing to reflect his yellow setting but fragmentary potsherds, bright even in their breaking up, with remains more melancholy of once bright kettles, and once brave rat-catchers, from whence (both cats and kettles) all power of reflection had departed.

Through sympathy, or by coincidence, our mood of mind was exactly correspondent with the aspect of the evening. It was cold, dry, unreflective, or reflective only of all these qualities in all around. If, as poet, painter, or philosopher, we had ever been so happy as to draw inspiring draughts out of Nature's wine-pipes-to quaff of the distilled essences of her loveliest and best-we should have found it impossible in that hour to have turned the spigot of one mighty cask. Even as her much more humble votary, a
seeker of her less concentrate, less exciting gifts-a gatherer of her grapes, rather than a quaffer of her wines-we were on that evening utterly at fault.

We seldom, as we have elsewhere said, or signified, set forth upon a country ramble without that best of walking-sticks, a pursuit in hand. It may be-it has been far too often-a pursuit taken up only to be cast aside-a pursuit, hence following, almost as childish as to chase and heap up leaves only for the wind to scatter; to pluck and drop flowers only for the sun to wither; to pursue and catch butterflies only for their colours to be lost in capture. At the time we are speaking of, butterflies and flies various, were the objects of our chase, followed (for once, so at least we fancied) for better purpose than for idle sport. It was only, however, mechanically, and with listless eye, that we began on that cheerless evening to seek for acquisitions to our insect gatherings of the summer, and it was long before our seeking was to any purpose. It was vain to peep into the hollows of old willows; vain to poke into the recesses of old posts; vain to pry into the dusty hedges; nothing was discernible of insect presence or production, except a few lurking earwigs, and the cocoon of a vulgar lackey-moth.

We turned at last through an open and half-hingeless gate, into the garden of a deserted house. It was a wilderness, where rampant weeds were exulting over " garden flowers" that " grew wild." We took, unquestioned and unquestioning, a seat upon the door-step, whose hearthstone whiteness had been long since clouded by the green of dampness and disuse. Like its neighbour flower-beds, it was insulted in its day of neglect by impertinent growths of grass and dandelion, pushing through every crack and crevice. Over it, at one end, lay the prostrate branches of a purple clematis, fallen from the rotted shreds that had once braced it trimly to the wall. On the side opposite, and beside us as we sat, was an over-grown rose-bush, with not a rose upon it, only one golden coronal which the garden queen or peeress (last, for the summer, of her race) had left upon her vacant throne-a token, like crown or coronet on coffin, of fugacity and pride.

That rose-bush had become to the florist a thing of nought. To the poet and moralist only an emblem trite as true of fading beauty and lasting worth. To the entomologist, it was still an object of undiminished, nay, augmented interest. Had it been still " a rose-tree in full bearing"-buds and blossoms
without stain, notch, or perforation, leaves all in freshest verdure, unsullied, unbitter, unwarped, it would have been to the fancy of an insect-fancier somewhat imperfect for its very perfection;-for its very fulness of life it would have been lacking to him in something of vitality. It would have been to him as a land beautiful, indeed, but without living inhabitants or signs of their habitation.

But it was not thus, we could see at a glance, with the rose-bush of our deserted garden and departing summer. Though its flowers were gone, its leaves were for the most part left behind; some sere and yellow, some curled and distorted, some reduced to fragments. This, their general aspect, sufficed of itself to indicate that they bore (some of them) inscriptions worth perusal-notices, most likely, for a history of their own " decline and fall," with that of living agents contributory to the same

We begin to look into these foliaceous records. First, we find a leaf simply notched or scalloped, one that has been employed as food, after the most simple and open manner, by some insect feeder, doubtless a caterpillar-now a moth, if it be anything at allso, at least, we venture to infer, from the aged complexion of the leaf, and the dark brown of its bitten edges.

Next we have a group of leaflets spun together; this also is the work of a moth caterpillar, but of one that has worked its mischief after a more covert fashion,under cover, that is, of the enfolding screen into which, as well as food, the leaves have been converted.

Thirdly, and with increase of ingenuity we find a single leaf rolled lengthwise, edge to edge, the edges spun together so as to form a case. Out from one open end of it protrudes a small brown chrysalis. This, in altered form, is another caterpillar, feeder on rose leaflets, issued thus from its secret chamber (the chamber wherein the mystery of transformation has been wrought) preparatory to final coming out.

Coming? Nay, it has come already and gone! Skin of chrysalis is empty as well as leaf-case; its occupant flown, there is no telling when or whither, as a full-fledged moth.

So it would ${ }_{\psi}$ seem after all, that though signs of habitation are not wanting, inhabitants are few, or none, within this leafy city. Its very canaille, least in magnitude, most in multitude, its defiling, blighting " million," the million of green aphides that have helped more than all the rest to turn these green leaves yellow, are, like the rest, departed or defunct. Some of their remains are yet visible, but, like the
leaves they lived on, they are dry, sapless, and turned brown, or pearly white. Of their plump little bodies (once green, living, moving honey-jars), a few, though brown and empty, look like jars still, the rest being re-duced to filmy skins, ghosts of the departed sap-suckers, and trophies of their lady-bird and lace-winged foes.

Signs enough, these, of a living world, but with life in it no longer. But stay-what has been at work here? What upon this dozen or so of variegated leaflets, has chequered their native verdure with patches of dark-brown and brownish-white? The leaf painters are here to answer for themselves, and to present us, at least, with something living and moving in this dearth of life. The painters are caterpillars working late in the day of summer, as well as in the summer's day, at the work to which a caterpillar is born. They are small and young, and their mode of working, that is, eating, is accordant with their tender age and jaws. They do not scallop the leaves, or even bore them; they are only shaving them, paring off the green in patches from one or both their faces. Painters or shavers, they are busy, some on one side some on the other, of their fibrous canvasses, denuding them as they work of all but one transparent membrane.

The caterpillars thus busy in variegation of the rose leaves, are coloured themselves somewhat correspondingly. Their bodies are of a greenish semitransparent yellow, with a stripe down the back of a darker green, marking the current of their circulating fluid. They have light-brown heads, and in addition to six fore-feet furnished with claws, they have sixteen hinder ones without, a number over and above the usual pedal complement assigned to caterpillars of butterflies and moths. By this and the curved position of their tails, we know them to be larvæ of saw-flies-of the saw-fly of the rose.

The history of these, as well as of other species of the same extensive and interesting family, belongs to books on entomology. We shall only follow it here to notice their progressive modes of feeding, as indicated by the different degrees of damage wrought upon their leaves of pasture.

Not long will these young defacers of rose foliage be satisfied, as now, with superficial grazing. As their oral and digestive organs acquire strength they will begin to discuss, together with the pulp, the smaller fibres of the leaf, whose face they will then perforate with holes, still avoiding the fibres that are large and tough, as well as the outer edge. Finally,
as the devourers increase in days, size, powers, and appetite, even these coarser parts come within their compass, and the leắf is scalloped and excised ad libitum till reduced often to the fragment of a skeleton, a spinal or central stalk, with perhaps a few side-ribs.

The leaves of elm trees are often, in July and August, almost honeycombed by irregular perforations, the work, in their second stage of feeding, of similar agents-the green caterpillars of another species of saw-fly peculiar to the elm.

To return to our rose-bush.-Its foliage as above described, under insect appropriation, presented no objects new in themselves or entirely new to our observation, but from our notice of them on that evening (dull as we had felt it and unsuggestive) sprung a notion suggestive of something like a new pursuit. We thought for the first time of the collection and arrangement of specimens of leaves, as converted and appropriated by insect employers. Our walk home was amused by projected details of the plan, and we have found amusement since in its partial execution.

A leaf of insect appropriation is a leaf or a chapter in the autobiography of its appropriator. A preserved collection of such self-inscribed records gives ocular
evidence concerning the earlier portions of their authors' lives. They are lives, it is true, of which the activities have been directed\%only to the ends of self-support and self-preservation, with, occasionally, that of offspring; but it is curious to trace the variety of modes whereby these objects have been accomplished, and curious to see each exemplified within the compass of a leaf.

Every hedge, from spring to autumn, and, partially, from autumn to spring, affords specimens of leafappropriation; and a saunterer in quiet places may do worse (doing and thinking, perhaps, of nothing) than to seek, carry home, preserve, and arrange them, with notes appended of all he knows or can learn about them. Leaves that are simply shaven, perforated, otherwise excised or mined, can be pressed and dried like the plants of a hortus-siccus. Those that, either whole or in excised portions, are curled, rolled, folded, twisted, or fashioned, shaped, and joined (so as to form portable habitations), can, of course, be only dried. Such can be gummed, where minute, to slips of card, and pinned on cork, and retain sufficiently their form and character to admit of cabinet arrangement. When arranged, they form a set of pretty and interesting objects, figures cheaper, and
sometimes better, than engraved ones, for illustration of that insect destructiveness and constructive skill which finds food in foliage. In nine cases out of ten, it is the caterpillar of a moth which is the born possessor, to become the consumer or converter of the leaf. Whether moth, saw-fly, or fly of other sort, a specimen of the perfect insect should be placed beside that of its foliaceous work, when (it must be added) such can be obtained. Those little moths, for instance, " miracles of nature," with their gold and silver bravery, that are nurtured to perfection, or towards it, within the interior of a leaf, are not so easy to lay hands on as the leaf itself with its enclosed occupant, then yclept a miner. To gather the leaf when we know the sign of its occupation, is of course easy enough ; but as the leaf dries, the feeder on its interior substance dries, of course, and dies therewith. There are means, however, of averting such a fatal contingency. The occupied leaf may be kept fresh for several days, by exclusion of air (preserving-jars covered with glass have been recommended for this purpose), and its occupant may be tempted to leave it for a new one when there is need for such to be supplied. By such contrivances, the little miner may be kept working-that is to say, feeding-till it enters
on its stage of idleness; becomes, in other words, a chrysalis; and thence comes forth a moth, in our safe keeping. Be it, however, here noticed, that many little caterpillars that begin their larvæ-life as " miners," end it in a different vocation-from feeding within the leaf, and on its pulp only, they sometimes come to pasture on its exterior, and consume it wholly, sometimes openly, sometimes under cover of a portable leaf-case of their own construction.

We are not writing for people who have made insects their especial study. We have only supposed our readers to know a little, in a general way, of the objects with which we would have them make improved acquaintance. To assume this is not likely to be assuming too much. Entomology, once only swelling as a rivulet the stream of science, has been flowing of late (ever since, we might say, the day of its well-known 'Introduction'*) into the stream of general knowledge. Most people, therefore, of the day we live in, know a great deal more about the "populace" of plants, than did the human generations past or passing. Some, nevertheless, there are, conversant enough with other subjects, inclusive of much that appertains to flower and leaf, who yet

[^17]know comparatively nothing of their insect appropriators. Or, perhaps they know enough, just enough, of the most conspicuous, to look on them (they and their doings) as nothing but enemies and eye-sores, to load them, under the sweeping name of "blight," with sweeping censure, and pursue them with vengeance, often impotent for lack of understanding. Let these only learn a little more about them, and the maudite blight, the maudite bise, and all the maudite bêtes it has credit for bearing on its wing, would assume a different aspect-one partaking, perhaps, as much of blessing as of cursing. Let us see-and you in particular, to whom leaves of insect inscription have borne, hitherto, a motto, equivalent only to " We destroy," or, "We are destroyed,"-come with us, look closer, and read on them, at least as clearly, " We convert," or, "We are converted.".

The caterpillar appropriators of leaves, (those at least, which do more than simply eat them,) have been chiefly recognised under the three general divisions of leaf-miners, rollers, and tent or case-makers, names first given them by the fanciful and ingenious Reaumur.

In the leaf-miner, we discern a minute worm (caterpillar or other larva) emerged from an egg laid by its
winged parent (moth or fly) upon the leaf's surface. It thence plunges into the leaf's substance, to mine therein under cover of the upper and lower membranes, a tortuous tunnel, of which each excavated particle ministers, by consumption, to the growth of the little miner's body. The mine, or covered way, therewith augmenting, winding, and widening as it winds, comes to a stand-still, either with the completed growth of its excavator or the completion of its feeding within the leaf. In the former case, the submembraneous traveller having ate itself to the end of its first stage, either rests (as a chrysalis) at the terminus of its tunnel, or issues thence to spin a cocoon, and undergo therein its appointed change. When that change is not immediate on the miner's exit from the leaf's interior, from a feeder within it he becomes a feeder without, sometimes openly, sometimes under cover of a portable case, for which a piece of leaf, or of the leaf's membrane, has supplied material. These, and other varieties of operation, are dependent not on the fancy, but the species, of the operator.

A leaf, marked by an insect miner for its own, is to be distinguished most often by a tortuous line, which has been likened to a silvery strearnlet wind-
ing through a green plain. Sometimes, a circular brown blotch or blotches, more comparable to a muddy pond, betokens the mining possession. There is hardly a vegetable growth, from the stately oak to the creeping ground-ivy, of which the leaves are not, at some season or another, subject to the operations of these insect excavators. The honeysuckle, rose, and bramble, afford common and conspicuous examples. The miner's course, in especial through the bramble-leaf, is often crimsoned or empurpled on either margin.
The leaf-roller is, more universally than the last, though not without exception, a moth caterpillar. This is a little agent working, like the miner, to the combined ends of self-support and preservation, but working after a much more ingenious manner.

To eat, eat, eat, and push itself forward into the vacuum its eating leaves, is all that the miner has to do ; but the roller has more laborious and complicate operations to perform for its living. It has to roll (or fold), to spin, often also to cut ; to roll the leaf in its length or breadth into a scroll, or, perhaps, a cone; to spin silken braces to retain it in the required form ; to cut (in some instances) without detaching, a portion of the leaf employed. This has it to ac-
complish before (reward of its labour) the leaf-roller can begin to feed in comfort and comparative safety upon the interior of the covering which Nature has taught it to construct. The above description will indicate sufficiently the leaf-roller's presence. Sometimes it is made additionally evident through appearance of a small brown chrysalis or its deserted shell protruded from one end of the scroll or fold which lately sheltered it. The leaves of the holly, though often seized upon by miners, defy, we believe, in their polished rigidity, the mechanic power and skill of caterpillar rollers, but with this exception, there is hardly a foliaceous expansion, from that of the spiny thistle to the thinnest of opening rose-leaves, which they cannot bend in some way to this purpose. This purpose is effected with a thousand differing degrees of ingenuity and (seemingly) of trouble. Two leaves found or brought together, laid one upon another, the upper forming a concavity,-one leaf turned back and over, edge to edge,-another partially turned down, each kept as its appropriator would have it, by silken cords,-these suffice, with many, to constitute a befitting
dome, or vault, or nest;"
but by numerous other and more complicated
processes, are the like abiding-places constructed by other occupants. By the three combined operations of cutting, rolling, and spinning, it is wonderful into what a variety of altered forms the plane of a leaf, or portions of the same, are to be seen converted. These shapes are too manifold to enumerate here, much more to describe, but they will repay observance with admiration and delight. In going through green places, their seeker will discover, where a pursuitless stroller sees but green leaves, may-be a scroll or roll, may-be a cone or pyramid, may-be a button or a tassel, may-be a horn or cornucopia.

Apropos to these latter we shall take leave to borrow an extract from our "Episodes of Insect Life." -" A June ramble, in Highgate Wood, furnished us last summer with two most elegant specimens of the leaf-rolling combined with the leaf-cutting art. A number of young oak-leaves having been each roughly cut across the centre, from the edge up to the midrib, the half comprising the tip was formed into a hard compact roll, of exquisite neatness, closely resembling a barrel-button. In the centre of each was a bright yellow egg. . . . . . .
"In the same wood, on the same day, we noticed certain leaves of the hazel, cut and rolled in a form
much more graceful, if not more curious than the above. These leaves, as those of the oak, were severed, only more smoothly, across their centres, the main stalk alone being left undivided; but the terminating halves employed by the little artificers of the oak to form the barrel-buttons, were in this instance simply rolled or twisted into a spiral form, so as to resemble in their suspension by the mid-rib an ear-drop, or a pendant tassel, the serrated edge of the leaf adding to the elegance of their appearance."* The barrel-button-maker is still with us an insect incog. The tassel-maker we had believed, on the seeming evidence of our own eyes, to be a moth-caterpillar, but on the better authority of á German entomologist, we must acknowledge it to be a small beetle of the weevil family. $\dagger$

The cornucopian leaf-cases are not at all uncommon on rose-trees, both of hedge and garden. The first which attracted our observation was " of hornlike shape, wide and open at top and pointed at bottom. It was formed of a leaf twisted spirally, and suspended by silken strings to the main stalk of a group of young leaflets. One of the latter, nearest to the mouth of

[^18]the pendant horn, displayed marks of excising jaws ; and presently, protruding from the open end of this curious leaf-case, appeared the head of a green caterpillar, which, thus protected, resumed its juicy repast."*

Lastly, in the leaf " tent" or case-maker we have an insect artificer (also usually a moth caterpillar) of yet higher stamp-a cutter, shaper, and joiner (eke weaver) of nicest accuracy,-the manufacturer for itself of a portable "tent," or leaf-case, fitted at first to the minuteness of its maker's body as just issued from the egg, and altered and enlarged with its increasing growth. This cover, being formed, in general, only of the leaf's membranes, cannot, like the leaf-scroll, be in part consumed to satisfy its inmate's appetite, but remains in its perfection a permanent abode. Under its shelter the tiny tent-maker, as a snail beneath its shell, perambulates the leaves of its pasture, which it begins by shaving, and ends (sometimes) by excising. These leaf-wrought tabernacles of course turn brown soon after their construction. The larger, those in especial that most resemble tents, are often, therefore, conspicuous enough on the green plain of their erection, be it leaf of elm, oak, hawthorn, or other denizen of wood or orchard. Often, however,

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\text { * " Episodes," 2nd series, p. } 245 .
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the "tented field" is shaded from observation from being on the leaf's under, instead of upper side. Sometimes also the leaf-cases (with their occupants) are flat and close setting-therefore inconspicuous, whatever be their forms; these are varied and curiously differing in point of "finish" as well as shape. Amongst their figures are the oval, the elliptic, and (rarely) the fiddle-shaped.

The case-maker may sometimes be discovered by his cuttings, or cuttings-out, not scattered as the carpenter's chips, but visible in the shape of vacuities, holes of different forms and sizes in the leaf of its appropriation. The beautiful circular excisions of the leaf-cutter bee, seen so frequently on rose-trees, are examples, on a larger scale, of this sort of leafcutting. It differs chiefly in the different purpose of its appliance-the upholsterer-bee having worked to line her tunnelled nursery, the tent or case-making caterpillar to make its own body-coat or habitation.

Detection and collection of the curious insect tabernacles formed of leaves, or portions cut from them, is sure to lead to discovery of others. Others there are, in plenty; tents or body-cases (also, for the most part, of moth-caterpillars*) formed of a variety

[^19]of materials, such as fragments of straw, stalk, grass, moss, lichen, wood, bark, stone, fur, wool, inwrought and generally lined with silk of the occupant-artificer's own weaving. But one cannot, at a glance, follow these general appropriators into the three kingdoms, not even into the Vegetable, through all the provinces wherein they hold possessions. How could one, seeing that, equally at home with growths of every degree, from the oak to the mushroom, it is on every part of them, leaf, flower, seed, bud, stalk, trunk, bark, fruit, and root, that they levy contributions for their structures or their food? So, "revenous à nos moutons," the flocks that pasture upon leaves.

Our few remaining instances of leaf-appropriation may not be less common than the above, but they are less commonly described.

Early in the September of 1850, we took notice that the eastern face of a hawthorn hedge* had turned prematurely brown. By the east wind it had been doubtless smitten ; but on looking closely into the embrowned and falling foliage, we had reason to suspect that the wind had had allies in mischief.

Many leaves were on the ground. Of those upon

[^20]the branches, some few were marked on their still green faces by circular brown spots, one, or several, raised slightly as a blister. In many more, these circles, though still defined, were surrounded by irregular patches of nearly the same colour, seeming to have spread from the nucleus of the plague-spot. In the greater number, the whole leaf was overspread by this hue of death, and hung trembling on its stalk. Specimens of each were taken home, of course, for further scrutiny. Then we broke carefully into the skin of the round blisters, sure, almost, of laying bare some latent leaf-miner. But thief might as well have broke into an empty larder. The circles seemed as fairy-rings, not of verdure heightened, but destroyed, and vanished utterly was the elfish agent who had caused them-not even a pinhole for its exit was in one discernible. At length, however, a blighting felon was discovered-a miner, in shape of a tiny whitish grub.* One or two more were detected in other leaves. In several that were far advanced in brownness, the place of this white, moving, pulpeating occupant was supplied by a little body, black, shining, motionless, the pupa, clearly, of the late larva. It was not at all like the barrel-shaped pupa

[^21]of a common fly; neither resembling the chrysalis of a moth, only that, as with the latter, the polished case was close fitted to the form within, of which every member could be seen, when magnified. These black mummy-cases were put by, with their inclosing leaves, to see (if it might be) what would come of them. Something did, worth their keeping! In ten days' time appeared, flitting about its gauzeroofed prison, a most glorious little four-winged fly, glittering in green and gold, and boasting itself of a pair of bright red eyes. It corresponded in shape, as far as we could judge, with the folded form discerned darkly within its black encasement.

This first emergement was followed in a few days by another, and another, giving active life and liberty (the liberty of a pill-box round-house) to similar exquisites, winged and jewelled, images (unless parasitic) of the parental flies which must have lighted, by hundreds, on the blighted hedge. They must have committed, to its leaves, while fresh in verdure, a fatal deposit of minute eggs, whence the mining multitude, whose labours had anticipated the season's work.*

[^22]The above may, or may not be a prevailing mode of leaf appropriation, at least with hawthorns, and hence, of accelerated decay. Be this as it may, the influence of autumn, in effecting what is called the change and fall of the leaf, is much more assisted by little individual agents than is generally thought about. All the operations we have named, the work of insect parers, perforators, scallopers, rollers, folders, miners, to which may be added gall-makers, are largely contributory to the same ; and besides exposure to the inroads of consuming animals, the leaf is subject to assault from consuming vegetables, parasitic fungi, engendered from and fastening on its substance.

One more instance of leaf possession, by insect agents, must conclude our few examples.

There is a common saw-fly, of the willow, whose thorn miner above described?-" Here, it strikes me, will most opportunely come in a very singular polyphagous mining larva (perhaps not Lepidopterous), but which not having been claimed by the collectors of any other order, I think we ought not to despise and utterly reject till we have bred it. It mines the leaves of hawthorn, sallow, \&c., in autumn, making small blotches. I have called it an onisciform miner, but that does not exactly define its singular form, which is nearly egg-shaped, the head being placed at the broader end. I do not know what this larva can be, and should probably do wrong by hazarding an opinion; but granted it is a larva, which I think can hardly be doubted, then it foilows it must turn to something. It may be something as little suspected by us as were the strepsiptera before they had been observed."
caterpillars feed openly in the common way, and as those of the rose and elm before noticed ; but there is a small species, belonging to the willow also, whose leaf consumption is carried on in a more curious and covert manner.

Towards the end of summer, and on to late in autumn, the leaves of willows are often seen studded with high, irregular, warty protuberances, usually tinged with red, and projecting from the under, as as well as upper side of the leaf's surface.

We had repeatedly noticed, and often explored these remarkable excrescences to detect the living inmates, by whom, and for whose accommodation, they were doubtless raised. It was only last autumn that we first met with one of these residents "at home." The shape, in which it was brought to light, was that of a little whitish, semi-transparent, black-headed, curly-tailed animal; the caterpillar, or larva, not as we had expected of a gall, but of a saw-fly. It was snugly ensconced in the centre of one of the leaf protuberances, which are composed in their interior, of a green spongy substance, dark in the middle and surrounded by a circle of lighter colour.

It was in the month of October that we found some of the leaves thus occupied, but the excrescences
of many were quite vacant. The green pulp was partially scooped out, and a round hole visible outside, looked very like a door of exit to the departed tenant. It had been warned, seemingly, by the leaf's approaching fall; also, perhaps, by the diminution of its pulpy provender, to quit its fugacious habitation just in time. But whither had it gone? Perhaps, we conjectured, to the ground, for better protection through the winter, and for undergoing there its appointed changes-or, perhaps-but in tracking the steps of nature conjecture will not do; so, to put observation in its place, we gathered some dozen of the leaves with their tubercles and tenants-consigned them to a box and a bed of vegetable earth, and left them to their rest or business.

By the beginning of December it was evident what they had been about. Some of the tubercles had withered with the leaves, and were still imperforate. Others were pierced with holes, through which their occupants had issued, to plunge into the ground, which they had not far to seek. Here they were, now with as little trouble to be found, no longer in a caterpillar form, as when inhabiting the leaf, but enwrapped in little ovate, bright-brown cases, coverings of the chrysalides, maturing in darkness and silence
to their winged perfection. These cocoons, as well as those of saw-flies in general, contain but little, if any silk-but are composed of a secretion which forms; as it hardens, a stiff, and sometimes semi-transparent cover.

Insect consumption, conversion, and occupation of leaves in the modes above described-to which may be added their possession by various gall insects and aphides, is extensive, far beyond general estimate or observation. This, their partial dominion over the vegetable kingdom, is usually looked on, as far as noticed, in the light of usurpation, and every leafconsuming insect is condemned as a marauder and destroyer, while it may often be more just to view it as a rightful possessor and enjoyer of an appointed heritage. We are sometimes, it is true, sufferers to a considerable, and even serious extent from the ravages of some peculiarly mischievous tribe of leaf-feederssuch as some species of gregarious caterpillars-often leaf-rollers-and swarms of aphides, leaf-sappers, and curlers, amongst the latter, the notorious hopground "fly." But even these are kept usually under tolerable control through the counter-checks of natural (often insect) agencies, while the discoveries of entomology, practically applied, will lead probably to their entire extirpation.

Setting aside these partial mischiefs, and considering in their aggregate the insect million, (millions upon millions,) which are for ever drawing their nutriment from leaves, it is only astonishing how harmlessly they feed. The foliage they appropriate towards autumn is already approaching its natural term, and is only (as we have seen) hastened in its fall by insect agencies. Even in spring, or summer, when the mischief they are working would seem to be irreparable, Nature often stands by as if waiting only to repair it.

It was thus in the summer of 1848 with the depredations (the defoliations) of a notorious leaf-roller* in Highgate, and doubtless other woods of oak. Numerous, nearly, as the leaves themselves, these little caterpillar varlets rolled and ate, and ate and rolled till scarce anything was left of all the leaves of all the oak-trees but a beggarly assortment of stalks and shreds and patches, just big enough to enwrap for their approaching transformation the devouring rogues that had reduced them to this condition. The monarchs of the forest were utterly denuded of their vernal robes, and the hamadryads might have wept at beholding their dishonour. They might also have

[^23]been led to buffet with their handkerchiefs (if weeping dryads ever use them) the pea-green moths-a sylph-like multitude-resting at noon on the ravaged branches, or flitting at sunset above and around them. Thus, in sorrow and in anger, the dryads might have acted had they known, which, perhaps, they might not, that those harmless moths and harmful caterpillars, were, in diverse forms, the same. But sorrow and anger both dispelled, how might these woodnymphs have rejoiced-laughed till the old oaks rung again, at sight, in July, of their venerable lieges clothed again (Nature their dresser) in regalia full, fresh, and verdant as in spring!

In a plant of double white rocket, we noticed last summer a lowlier example of the same vegetable powers of renovation. Its leaves had been curled, eaten, and almost annihilated by a set of green caterpillars. On the back of a few, spared seemingly for the express purpose, the devourers had enclosed themselves in elegant cocoons of open network, through which they, and afterwards their chrysalides, were plainly to be seen. By the time, or soon after, that these chrysalidan cases and their reticulate covers were broken by the egress of a flight of moths, the disfigurement they had wrought in their caterpillar
estate was entirely effaced by a new growth of luxuriant leaves, with a budding show of blossom.

Such phenomena are of no uncommon occurrence; and if we looked more closely into the course and sequence of those natural agencies which wear on the face of them an ill-looking aspect, we should find, with many, that their evil is but superficial, temporary, or, like sin and sorrow in the moral world, made, in the end, to issue forth in good. Often, indeed, where the plant-infesting insect would seem to be working injury, it may be, in reality, conferring absolute benefit. Pertinent to this, we may quote the following from "The Entomologist's Companion." The author says, speaking of the caterpillars of certain moths (the Tineina), that "the larvæ, in order to do as much mischief as possible with the least amount of labour, eat out the buds of the young shoots of plants. However (as I have elsewhere observed), the luxuriance of vegetation counterbalances their evil propensities; and it may be, that but for these insignificant-looking insects, the plants would suffer from a redundant growth of their shoots not allowing them sufficient flow of sap to ripen their seeds."

It cannot, however, be denied that leaf appropria-
tions by infesting insects are all, in a manner, malappropriations; while all the outward tokens of their presence must be looked upon as blemishes. They are exhibited in forms which one cannot imagine to have ever been in a world natural, which should have represented a world moral, intact from sin. Why then, it may be asked, should we pry into the face even of a leaf, for spots on the face of creation? Can it be pleasant, even if profitable, to detect and examine into blemishes? Yes; very pleasant, as well as profitable, where, as with these blurs and blotches on the leaf, they serve to show the perfection of an omnipresent, pervading Creator, even in the permitted injuries or imperfections of His works. In the narrow compass of a blighted leaf may be seen (but only by narrow scrutiny) the unsightly and the evil, or what at a distance seems so, replaced and overcome by the beautiful and good. The leaf's verdure may be blighted, its smoothness crumpled, its entireness broken, its vitality destroyed. It may have become a lung impaired, or cease to be a lung at all, to the vegetable body of which it was a breathing organall this through insect appropriation. Yet withal, the leaf may not have been rendered a less beautiful, a less vital, or a less interesting object. How so?

Why, it may be still beautiful (though not after the beauty of a leaf), in that, through insect agency, it has been made material for beautiful and ingenious work-still vital, in that it has been converted partly into nutriment for support of animal life, partly, perhaps, into a tabernacle for preservation of the same; and still interesting, most interesting, in that it has been turned into a tablet or a scroll for record of insect histories, endlessly varied, but all illustrative of Adaptation, Nature's leading theme.

Nowhere is adaptation more apparent than in all the connexions between the insect and the vegetable world, and nowhere amongst these is it more beautifully displayed than in the mutual relations of insect and of leaf. The leaf is yet encased within its seed or bud; the caterpillar designed to feed on it is yet an embryo within the egg. The leaf is unfolded, bursts from its winter cerement; the caterpillar issues from its minute eggshell. The leaf is soft and tender ; the caterpillar's jaws are tender too, just suited for its discussion. The leaf expands, matures, thickens, affords a more nutritious, strengthening food; the caterpillar enlarges and matures in proportion, and with stronger jaws to excise, and digestion to assimi-
late, finds its proper provender. The leaf, losing its sap and colour, is prepared to fall; the caterpillar, changing colour too, has attained its growth and done with leaf-feeding. The leaf quits the branch, falls upon the ground, to enter there into new combinations; the caterpillar, having most likely descended to the earth also, becomes a chrysalis, to issue thence in a new, or completed form.

On the whole then, the course of a leaf under insect appropriation is worth pursuing-none the less so, in that a leaf, thus possessed and converted, is carried out of the regular course of foliaceous existence.

It is only to dive, be it ever so little, beneath the surface of created things, to make them mediums of approach towards their First Great Cause. He, as the Author and Source of universal nature, may be considered to occupy, in every natural object, its very inmost and its very centre. Inasmuch, then, as we rest upon the surface of the things about us, we keep, as far as in us lies, from the Divine presence that dwells within them all. But let us penetrate, "with understanding," though, as it were, but into the thickness of a blighted leaf-then " with under-
standing" also, shall we be ready to "sing praises," seeing this-that God is not only in what are miscalled the meanest of His works, but in what we, perhaps, miscall as much, their blots and blemishes, their injuries and imperfections.


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[^5]:    * Pteriglossus.
    $\dagger$ Capricornus.

[^6]:    * Burdach's "Physiologie," quoted by Burmeister.

[^7]:    * Mr. Pearce.

[^8]:    * Head's " Journey through the Pampas."

[^9]:    * See Head's " Passage across the Great Cordillera."
    + Letter from a Surgeon in the Emigration Service.

[^10]:    * See Meredith’s " New South Wales."

[^11]:    * See an article on Roman and Neapolitan horses in the "Penny Magazine" for September, 1845.

[^12]:    * Since the above was written the law (sometimes evaded) has put down this abuse.

[^13]:    * See previous note.

[^14]:    * Oxalis acetosella.

[^15]:    * Aphis Lanigera.

[^16]:    * The Aukerwyke yew, near Staines.
    + Estimated by Adanson at 5000 years.

[^17]:    * By Kirby and Spence.

[^18]:    * "Episodes of Tnsect Life," series 2nd, p. 244-5. + Rhynchites betulæ.

[^19]:    * Of the Tineina.

[^20]:    * At Hadley.

[^21]:    * A larva with six feet, not clawed.

[^22]:    * Can the following passage from that useful and clever little work, Stainton's "Entomological Companion," have reference to the baw-

[^23]:    * Tortrix viridana.

[^24]:    "This reprint of reviews forms a charming book of miscellaneous essays. The criticism is genial, sensible, comprehensive, and compact. It is not common to find eminent scientific men graceful, easy, and piquant littérateurs; but whenever such a union of claims to public favour is manifested, it should meet with honour due. But, besides being a scientific professor, a critic, and littérateur, the late Edward Forbes was before all things a man-genial, sympathetic, brave and true-a thorough good fellow, as good a fellow as he was a naturalist. The reader cannot do better than possess himself of this amusing and instructive volume, if he have a liking for science without solemnity, criticism without ill-nature, and with knowledge of the subject; pleasant talk with a definite result, and a sense of the comic without the vulgar error of turning all things to a jest."

    Globe,

[^25]:    " Mr. Archer's volume, we are surprised to find, is the first popular book that has been devoted exclusively to the commercial products of the VegetableKingdom-of that which constitutes nine-twelfths of the whole commerce in raw produc.'

    Examiner.

[^26]:    " In this work we have the first results of Dr. Hooker's botanical mission to India. The announcement is calculated to startle some of our readers when they know that it was only last January twelvemonths that the Doctor arrived in Calcutta. That he should have ascended the Himalaya, discovered a number of plants, and that they should be published in England, in an almost unequalled style of magnificent illustration, in less than eighteen months, is one of the marvels of our time." Atheneum,

[^27]:    "Mr. Moore's 'Popular History of British Ferns' forms one of the numerous elegant and instructive books by which Mr. Reeve has endeavoured to popularize the study of natural history. In the volume before us, Mr. Moore gives a clear account of the British Ferns, with directions for their cultivation; accompanied by numcrous coloured plates neatly illustrated, and preceded by a general introduction on the natural character of this graceful class of plants."

    Spectator.

[^28]:    "Such a work was a desideratum in this country, and it has been well supplied by Dr. Badham; with his beautiful drawings of the various edible fungi in his hand, the collector can scarccly make a mistake. The majority of those which grow in our meadows and in the decaying wood of our orchards and forests, are unfit for food; and the value of Dr. Badham's book consists in the fact, that it enables us to distinguish from these such as may be eaten with impunity."

    Atheneum.

[^29]:    "The book is as well executed as it is well timed. The descriptions are scientific as well as popular, and the plates are clear and explicit. It is a worthy sea-side com-panion-a handbook for every resident on the sea-shore."

    Economist.

[^30]:    " The drawings are beautifully executed by the author himself on stone, the dissections carefully prepared, and the whole account of the species drawn up in such a way as cannot fail to be instructive, even to those who are well acquainted with the subject. The greater part of our more common Algæ have never been illustrated in a manner agreeable to the present state of Algology."

    Gardeners' Chronicle.

[^31]:    " In the exquisite illustrations to this splendid volume, full justice has been rendered to the oddly formed and often brilliantly coloured flowers of this curious and interesting tribe of plants."

    Westminster and Foreign Quarterly Review.

[^32]:    "The present increase of our stores of anecdotal matter respecting every kind of animal has been used with much tact by Mr. White, who has a tcrse chatty way of putting down his reflections, mingled with easy familiarity, which every one accustomed daily to zoological pursuits is sure to attain. The book is profusely illustrated." Atlas.

[^33]:    "Vous savez qu'a l'égard d'un grand nombre d'espèces, leur détermination réclame le secours de figures. Il cst done de mon devoir de vous indiquer les livres où vous trouvercz les meillcures. Celui de M. Curtis, sur les genres d'inscetes indigènes de l'Angleterre, me paraît avoir atteint l'ultimutum de la perfection.'"-Latreinile.
    "M. John Curtis, naturalistc Anglais, a commencé la publication d'un Genera iconographique des genres d'insectes et de plantes propres à la Grande Bretagne. Lcurs caracteres y sont représentés avce la plus grande fidélité."-Cuvier.

[^34]:    "To render the subject of ornithology clear, and its study attraetive, has been the great aim of the author of this bcautiful little volume. . . . It is embellishcd by upwards of scventy figures of British birds beautifully coloured."

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    Liverpool Standard.

[^36]:    "When camping out on the mountain-top or in the wilderness; roughing it in his long journey through the interior ; observing the very singular mode of life there presented to his notice; describing the curious characters that fell under his observation; the arts or substitutcs for arts of the people; and the natural productions of the country ;-these travels are full of attraction. The book, like the country it describes, is full of new matter."

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    . Some of the regions he visited have seldom been trodden by Europeans-never by Englishmen; so that his observations derive value from the novelty of the matter to which they relate."

    Athenaum.

[^37]:    "With extensive knowledge in geography and its cognate sciences, Mr. Seemann possesses a close and sober but vivid style, which expresses his idcas not only with clearness, but animation."

    Spectator.
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    Gardeners’ Chronicle.

[^38]:    " Mr, Smith, who is a landscape gardener and garden architect of great experience, has worked out his design with ability and judgment."

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    Spectator.

[^39]:    "A brief abstract of the discoveries of Newton, clearly explained and elegantly illustrated."

    Westimnster and Foreign Quabterly Review.

[^40]:    "A little excursion in the track of Paley and the broad road of the Bridgewater Treatises. Animals, Atmosphere, Organic Matter, Light, and Electricity are the natural elements out of which the author deduces his pious lessons, leading to a First Cause in wonder, admiration, and worship."

    Literary Gazette.

