

Termites

When the moon shall have faded from the sky and the sun shall shine at noonday a dull cherry red, and the seas shall be frozen over, and the ice-cap shall have crept downward to the Equator from either pole, and no keel shall cut the waters, nor wheels turn in mills, when all cities shall have long been dead and crumbled into dust, and all life shall be on the very last verge of extinction on this globe, then, on a bit of lichen, growing on the bald rocks beside the eternal snows of Panama, shall be seated a tiny insect, preening its antennae in the glow of the worn-out sun, representing the sole survival of animal life on this, our earth — a melancholy "bug". — W. J. HOLLAND: The Moth Book.

THEN old Dr. Holland, that eloquent and erudite entomologist, wrote down some years ago these far-looking words of prophecy, he was engaging in no flimsy and tenuous flight of fancy. He was but making the acknowledgment, which daily forces itself upon all naturalists, that the human species, which we are proud to think so strong and sure and permanent, has in truth but a transient foothold upon this unstable star. Man has been in existence (to the contemplative eye of, for example, a geologist) only since this morning. There is an excellent chance that he will disappear again - along

with all his fellow mammals, and all the familiar furnitures of his accustomed earth—before the evening comes.

He is equipped to stand neither great heat nor great cold. His internal economy allows him to extract nourishment from only a limited range of undependable foods. He cannot withdraw, in time of catastrophe, into a state of suspended animation, and live motionless and foodless for years, like a tick. He can contrive to prosper and make his little day on earth a happy one, a glad fulfillment, before he goes. But let the planetary ice come sheathing the earth again,

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and he is defenseless. Let the sun flare hotter, and he must shrivel like an earthworm on a noonday rock.

As old Dr. Holland was well aware, the eight hundred thousand varieties of insects, which outnumber man and match their buzzing wings and hardy chitinous bodies against his agile brain, are a tougher breed of life. They are likely to outlast the two-legged mammal, when earth swings into the next titanic cycle of its metamorphosis. There is no absurdity in the fancy that when man shall have slipped into his oblivion, to remain no more than a secret potentiality of protoplasm until, perhaps, the whirling suns and stars are again in propitious conjunction - even as a seed lies secret in the winter earth, waiting the rain and the warmth; or even as the flame lies latent, so to speak, in the unstruck flint — there may still be heard on this then-manless grain of earth a crackling and crunching which will attest that it is still inhabited by a lingering populace of, for example, termites.

In the humid evening air, after a summer shower, a little cloud of insects hovers and flutters in dancing flight. They have somewhat the look of winged ants, and because of this and the paleness of their bodies, they are often called "white ants"; but in truth, they are male and female termites in their nuptial flight. They have come streaming from the nearby nest, in rotted log or timber, and now in the warm dusk they dance and flutter like May-flies. Presently, spent, they drop to the earth and the time is come to shed their wings. Across the base of each veinnetworked wing, there extends a delicate crease and along this the wing tissue breaks and falls away. When it is shed, the now flightless termites go creeping in couples to seek out the earth-cranny, or interstice of a rotted log, or hollow in the timber of one of mankind's buildings, where they will initiate a new colonial outpost of that vast termite empire which it costs man some seven billion dollars a year to combat.

In an earthen cell, the pair of termites, king and queen, establish themselves. It is the heart of the termite nest. In the case of some termite species, the cell's entrance holes are so small that the king and queen are sealed as prisoners in it. In the case of other species, they are free to travel, and, in the case of still others, the cell may contain more than one king. There are local and special variations in termite habits. But in any case, whatever the cell's construction and the number of kings, it is the queen's development and activity that are now of central importance and these are everywhere the same. The queen turns into an eggproducing factory.

At the time of her nuptial flight, a queen termite's body is about a quarter of an inch long. Now, as time passes in the dark cell to which she has withdrawn with her consort or consorts, her segmented abdomen gradually swells. More and more distended it becomes, the chitinous plates of the original segments separating farther and farther apart as the elastic tissue between them is stretched and stretched. Finally, though her tiny head and thorax and legs are still the same size as ever they were, the queen termite's abdomen has grown to the dimensions of a man's finger. She bulges monstrously with eggs. Presently, prodigiously, she begins her laying. The eggs begin to issue from her at the rate of several a minute — one every fifty seconds, one every twenty seconds, ten thousand in a day. And in the monstrous abdomen, as the eggs stream from it, there is under way a process of continuing replenishment.

With the hatching of the eggs,

the new termite colony is thoroughly established. Its denizens are of three kinds, to supplement the winged males and females. They are the workers, the soldiers and peculiarly immature males and females that are incapable of bearing progeny. It is the function of these last to constitute a reserve force, against the time of possible calamity to the breeding elders. Should such occur, they are capable of maturing and bearing, to carry on the line. They are complementary kings and queens, their powers in abeyance, waiting. Upon the workers and the soldiers, meanwhile, falls the enormous enterprise of maintaining the colony's activity.

Ant workers are sexually imperfect females, but termite workers may be sexually imperfect individuals of either sex. The labors to which they now devote themselves are chiefly three. It is their chore to collect the incessantly issuing eggs from the queen, and to carry them along the dark earth galleries and woodwork galleries to the place where they may best be incubated. It is their chore to repair damages to the structure of the nest, chinking and filling and making new tunnels. It is their supreme chore, finally, to bring a constant food supply to the king and queen and to the horde of soldier termites,

PRODUCED 2005 BY UNZ.ORG ELECTRONIC REPRODUCTION PROHIBITED busy respectively with the colony's reproduction and defense. The soldiers, equipped with specialized head-parts for battle, cannot feed themselves.

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The head of a soldier termite, in its way, is as monstrously developed as the queen's abdomen. Colossal mandibles, big as the rest of the body together, equip it; and it is equipped also with a chemical gland. The monstrous mandibles are for battle against ants, the inveterate termite enemy, and for two other uses. Thrust into a break in the nest, they can secure it against collapse until the workers come. Rapped staccato against the dry woodwork, they can sound a help call which brings the workers hastening. (It also brings, often enough, a puzzled look to human countenances, when a man hears the tiny rapping in the walls of his house and does not know - since the termites work always in the interior of the wood and make no external sign - that he is entertaining this implacable company.) From the chemical gland within the gigantic head, the termite soldier can send forth a viscous discharge to tangle the enemy ant and terrify it.

Compact, self-contained, operating as smoothly and efficiently as the proliferation of cells: this is the life of the termite colony. In their dark, hidden world of riddled wood. the termites creep blindly (for, though eyed, they are sightless in most species) about their intricate and interlocking duties. Ever and ever the queen issues her colossal output of eggs. Ceaselessly the soldiers patrol the musty galleries, groping with sensitive feelers for the evidence of an ant incursion, or of a break in the runways. Endlessly the workers ravage the rotting wood, digesting, as almost no other creature can, the cellulose, and attending to their feeding errands. In the feeding, as in all else about the termites' life, there is the suggestion of the fearful efficiency of a machine, a knowledgeless automatism whose parts are all organized for an economy of terrible exactness. When a queen or king or warrior termite is hungry, it approaches a worker and strokes the worker's belly. The worker voids its dung. The stroker eats it. Then, when the thus-provided termite has extracted what residual nourishment it can from this predigested meal, it voids its own droppings and these are promptly re-eaten by another termite. Over and over, in cycles of digestion and voiding,

dung pellets are eaten and re-eaten, until the last vestige of organic nutriment in them has been extracted. In a termite nest there is no waste, no refuse. Cast skins are eaten; the dead are eaten; the sick are eaten. In the termite world, the drive of life is very strong and the machinery of life is very economical.

It is a truth of the natural world that all things die. This is not to say, bitterly, that all things end; but merely that all things change and undergo translation, and that nature's eternal symbol is a flux, not a point. The repose-in-progress of the universe means that mice are born and die, and that trees are born and die, and that the human race is born and will die. The earth exists now; it will not always. The sun shines now; it will not always. Men and planets, as much as milkweed pods and Mayflies, manifest themselves only temporarily under their familiar appearance; and then, in the spinning cycles, they are become something else. Because all this is so evident to any contemplative human consciousness (that apparatus of percipience which appears, to the lasting bedevilment of philosophers, to stand somehow outside the processes of change which it watches, and to transcend and encompass them) there is always a

certain sense of admiring astonishment when we behold any creature or phenomenon that holds with uncommon tenacity to its individuality. It is queerly stirring to look at a California big tree, and know that it has stood — in its particular arrangement of carbon and air and water — for two thousand years. We are given an odd feeling when we touch granite that crystallized a billion years ago. And we do not need the imaginativeness of an entomologist like Dr. Holland to be struck by the life tenacity of the creatures called insects, which may so probably be insects still when humanity has lost, as the theologians like to put it, its "accidents of flesh," and become otherwise manifested, in terms of new appearance.

Termites, of course, will one day die. There will be an end of termitehood, as of all else. But it will not be for a long, long time. There will be no quick translation into new terms for a species so socially efficient, so sheltered in habitat, so fantastically digestive, so fecund. A female termite may lay several eggs a minute — ten thousand of them in a day. Now, just recently, a flabbergasted world of science has discovered how long she can keep up this vast production. She can keep it up for forty years.



## Poetry in a World at War

THE names of great poets have L almost always had some cutting edge or melody that seemed not inappropriate. From Homer to Swinburne, from Sappho to Edna St. Vincent Millay, the luck on the whole has been good. A great many people, I suppose, have had to ask: "What are Keats?" But after they found out, the clean and simple brevity of the phrase "John Keats" has seemed a fit receptacle for that golden wealth of meaning. Shelley is an ideal name for its wearer, once you get rid of "Percy Bysshe," and the poet's fame has taken care of that. Shakespeare has a more than tuneful fitness and so have Sophocles and Wordsworth. Verlaine and Baudelaire. It is really astonishing that no Heine happened to be named Katzenjammer, and no Milton, Hoptoddle or Hornblower. I suppose a certain musical good taste in the forbears accounts for part of this. And then the poets have collaborated. Walt Whitman showed a fine ear for music, as well as publicity, when he dropped the "er" from his Christian name.

Walter Savage Landor, by contrast, is a phrase of great dignity, but Walter Landor would have called to ear a gander.

All this is introductory to a word of genuine admiration for Robert P. Tristram Coffin, whose recent volume of poems,1 forcibly thrust into my hands, is so much superior to one by Robert Frost,2 which I went out and got. I am, or have been up to this moment, constitutionally incapable of buying a volume of poetry by a man who calls himself Robert P. Tristram Coffin. To be surnamed Coffin is perhaps an unavoidable accident, but it is an accident out of which one could make a melancholy music. Robert Coffin seems a trifle crisp and flip, but Tristram Coffin strikes me as a noble dirge, fit for inscription on the frieze of some spacious room dedicated in a great library to those who lived life vividly and richly.

As to the poems in this volume, they would adorn the shelves of such a room. Never was life on a

<sup>&</sup>lt;sup>1</sup> There Will Be Bread and Love. \$2.00. Macmillan. <sup>2</sup> A Witness Tree. \$2.00. Holt.