

CLASSICS TO GO

THE LIFE AND LOVE OF THE INSECT



JEAN-HENRI FABRE

**The Life and Love
Of the Insect**

Jean-Henri Fabre

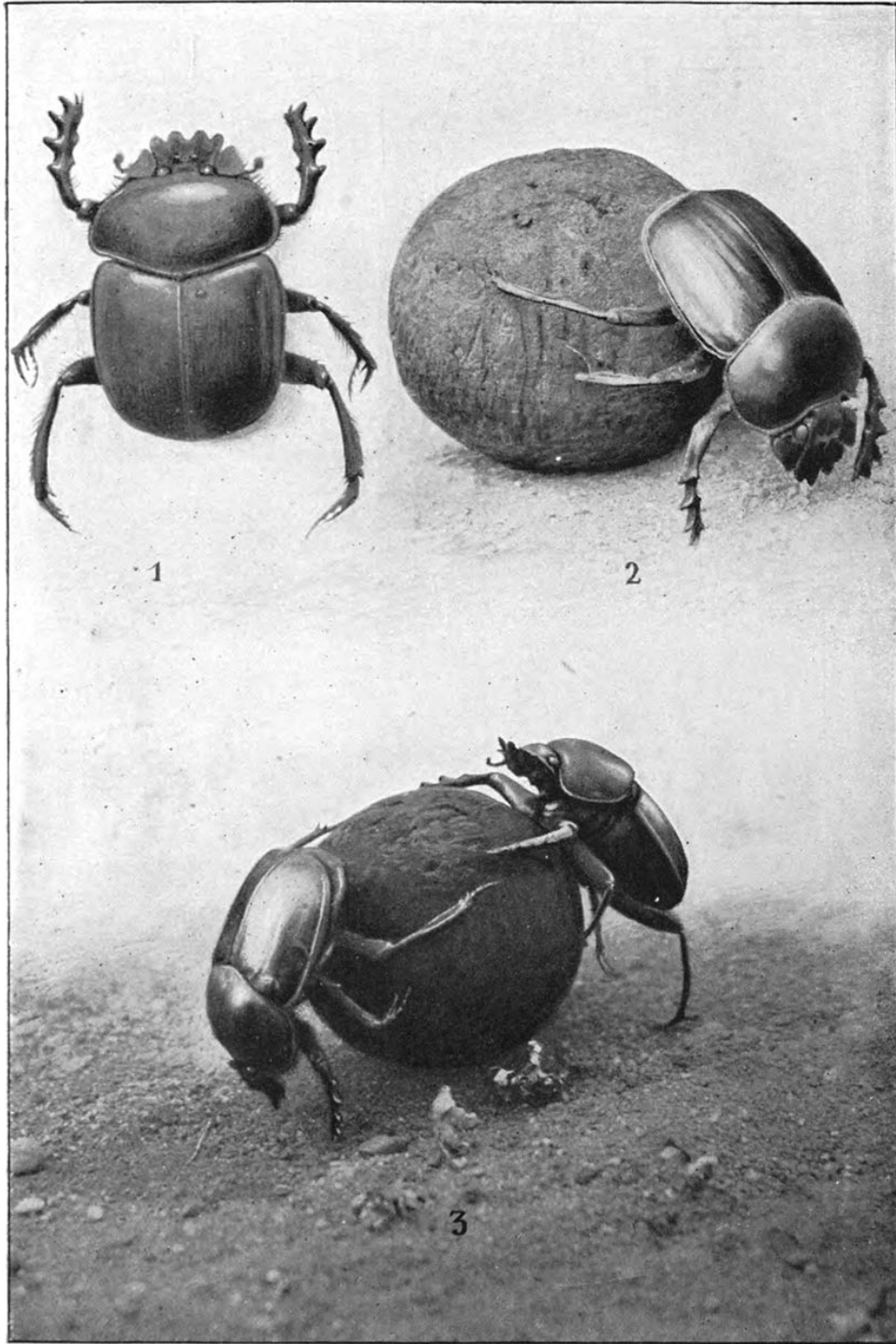


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CHAPTER I

THE SACRED BEETLE

The building of the nest, the safeguard of the family, furnishes the loftiest expression of the instinctive faculties. That ingenious architect, the bird, teaches us as much; and the insect, with its still more varied talents, repeats the lesson, telling us that maternity is the supreme inspirer of the instinct. Placed in charge of the duration of the species, which is of more serious interest than the preservation of individuals, maternity awakens a marvellous foresight in the drowsiest intelligence; it is the thrice sacred hearth wherein smoulder and then suddenly burst forth those incomprehensible psychic gleams which give us the impression of an infallible reasoning power. The more maternity asserts itself, the higher does instinct ascend.

The most worthy of our attention in this respect are the Hymenoptera, upon whom the cares of maternity devolve in their fulness. All these favourites of instinct prepare board and lodging for their offspring. They become past masters in a host of industries for the sake of a family which their faceted eyes never behold and which, nevertheless, the maternal foresight knows quite well. One becomes a manufacturer of cotton goods and mills cotton-wool bottles; another sets up as a basket-maker and weaves hampers out of scraps of flowers; a third turns mason and builds rooms of cement and domes of road-metal; a fourth starts a pottery-works, in which the clay is kneaded into shapely vases and jars and bulging pots; yet another adopts the calling of a pitman and digs mysterious warm, moist passages underground. A thousand trades similar to ours and often even unknown to our industrial system are

employed in the preparation of the abode. Next come the victuals of the expected nurslings: piles of honey, loaves of pollen, stores of preserved game, cunningly paralyzed. In such works as these, having the future of the family for their exclusive object, the highest manifestations of the instinct are displayed under the impulse of maternity.

In the rest of the entomological order, the mother's cares are generally very summary. In most cases, they are confined to the laying of the eggs in favourable spots, where the grub can find a bed and food at its own risk and peril. Where education is so rustic, talents are superfluous. Lyncurgus banished the arts from his republic, as enervating. In like manner, the higher inspirations of the instinct are banished among insects brought up in Spartan simplicity. The mother neglects the gentle cares of the cradle; and the prerogatives of the intellect, the best of all, diminish and disappear, so true is it that for the animal, even as for ourselves, the family is a source of perfection.

While the Hymenoptera, so extremely thoughtful of their progeny, fill us with wonder, the others, which abandon theirs to the chances of good luck or bad, must seem to us, by comparison, of but little interest. These others form almost the entirety; at least, to my knowledge, among the fauna of our country-sides, there is only one other instance of insects preparing board and lodging for their family, as do the gatherers of honey and the buriers of baskets full of game.

And, strange to say, those insects vying in maternal tenderness with the flower-despoiling tribe of Bees are none other than the Dung-beetles, the dealers in ordure, the scavengers of the meadows contaminated by the herd. We must pass from the scented corollas of the flower-bed to the droppings left on the high-road by the mule to find a

second example of devoted mothers and lofty instincts. Nature abounds in these antitheses. What are our ugliness and beauty, our cleanliness and dirt to her? With refuse, she creates the flower; from a little manure, she extracts the blessed grain of the wheat.

Notwithstanding their filthy trade, the Dung-beetles occupy a very respectable rank. Thanks to their usually imposing size; to their severe and irreproachably glossy garb; to their short, stout, thickset shape; to the quaint ornamentation either of their brow or, also, of their thorax, they cut an excellent figure in the collector's boxes, especially when to our own species, oftenest of an ebon black, we add a few tropical species flashing with gleams of gold and ruddy copper.

They are the sedulous guests of our herds, for which reason several of them emit a mild flavour of benzoic acid, the aromatic of the sheepfolds. Their pastoral habits have impressed the nomenclators, who, too often, alas, careless of euphony, have changed their note this time and headed their descriptions with such names as *Melibæus*, *Tityrus*, *Amyntas*, *Corydon*, *Mopsus* and *Alexis*. We have here the whole series of bucolic denominations made famous by the poets of antiquity. Virgil's eclogues have lent their vocabulary for the Dung-beetles' glorification.

What alacrity around one and the same dropping! Never did adventurers hurrying from the four corners of the earth display such eagerness in working a Californian claim. Before the sun becomes too hot, they are there in their hundreds, large and small, promiscuously, of every sort, shape and size, hastening to carve themselves a slice of the common cake. There are some that work in the open air and scrape the surface; there are some that dig themselves galleries in the thick of the heap, in search of choice veins;

others work the lower stratum and bury their spoil without delay in the underlying ground; others—the smallest—stand aside to crumble a morsel that has fallen from the mighty excavations of their more powerful fellow-workers. Some, the newcomers and, no doubt, the hungriest, consume their meal on the spot; but the greater number mean to put by a substance that will allow them to spend long days in plenty, down in some safe retreat. A nice, fresh dropping is not found just when you want it, amid the fields bare of thyme; a windfall of that sort is as manna from the sky; only fortune's favourites receive so fair a portion. Wherefore the riches of to-day are prudently stored for the morrow.

The stercoraceous scent has carried the glad tidings half a mile around; and all have hastened up to gather provisions. A few laggards are still arriving, a-wing or on foot.

Who is this that trots towards the heap, fearing lest he come too late? His long legs move with a sudden, awkward action, as though driven by some mechanism within his belly; his little red antennæ spread their fan, a sign of anxious greed. He is coming, he has come, not without sending some few banqueters sprawling. It is the Sacred Beetle, clad all in black, the biggest and most famous of our Dung-beetles. Ancient Egypt held him in veneration and looked upon him as a symbol of immortality. Here he now sits at table, beside his fellow-guests, each of whom is giving the last touches to his ball with the flat of his broad fore-legs or else enriching it with yet one more layer before retiring to enjoy the fruit of his labours in peace. Let us follow the construction of the famous ball in all its phases.

The shield, that is to say, the broad, flat edge of the head, is notched with six angular teeth arranged in a semicircle. This constitutes the tool for digging and separating, the

rake that lifts and casts aside the unnutritious vegetable fibres, goes for something better, scrapes and collects it together. A choice is thus made, for these dainty epicures differentiate between one thing and another: a casual choice, if the Beetle be interested in his own provender, but a most scrupulous choice, when it becomes a question of constructing the maternal ball.

For his own needs, the Beetle is less fastidious and contents himself with a wholesale selection. The notched shield scoops and digs, eliminates and gathers somewhat at random. The fore-legs play a mighty part in the work. They are flattened, curved into the segment of a circle, supplied with powerful nervures and armed on the outside with five sturdy teeth. If a powerful effort be needed to remove an obstacle or to force a way through the thickest part of the heap, the Dung-beetle makes play with his elbows, that is to say, he flings his toothed legs to right and left and clears a semi-circular space with a vigorous thrust of the rake. Room once made, a different kind of work is found for these same limbs: they collect armfuls of the material raked together by the shield and push it under the insect's belly, between the four hind-legs. These are shaped for the turner's trade. The legs, especially the last two, are long and slender, slightly bowed and ending in a very sharp claw. One has but to look at them to recognize a pair of spherical compasses capable of embracing a globular body in their curved branches and improving its form. In fact, their mission is to shape the ball.

Armful by armful, the material is heaped up under the belly, between the four legs, which, by a slight pressure, impart their own curve to it and give it a first fashion. Then, betweenwhiles, the rough-hewn pill is set spinning betwixt the four branches of the two spherical compasses; it turns under the Dung-beetle's belly until it is rolled into a perfect

ball. Should the surface layer lack plasticity and threaten to peel off, should some too-stringy part refuse to yield to the action of the wheel, the fore-legs correct the faulty places; their broad beaters pat the ball to give consistency to the new layer and to imbed the recalcitrant scraps into the mass.

Under a hot sun, when the work is urgent, one stands amazed at the turner's feverish activity. And thus the business proceeds apace: what was but lately a scanty pellet is now a ball the size of a walnut; soon it will be a ball the size of an apple. I have seen greedy-guts manufacture a ball the size of one's fist. Here, of a certainty, is food in the larder for days to come!

The provisions are made. The next thing is to withdraw from the fray and carry the victuals to a fitting place. Here the most striking characteristics of the Scarab begin to show themselves. The Dung-beetle sets out without delay; he embraces the sphere with his two long hind-legs, whose terminal claws, planted in the mass, serve as rotatory pivots; he obtains a purchase with the middle pair of legs; and, using the armlets of his fore-legs for leverage, he travels backwards with his load, bending his body, with his head down and his hinder part in the air. The hind-legs, the principal factor in the machinery, move continually, coming and going, shifting the claws to change the axis of rotation, maintain the equilibrium of the load and push it on by alternate thrusts to right and left. In this way, the ball finds itself touching the ground by turns with every point of its surface, a process which perfects its shape and gives an even consistency to its outer layer by means of pressure uniformly divided.

And now, cheerily! It moves, it rolls; we shall get there, though not without accident. Here is a first difficult step:

the Beetle is wending his way athwart a slope and the heavy mass tends to follow the incline; but the insect, for reasons best known to itself, prefers to cut across this natural road, a bold plan which a false step or a grain of sand disturbing the balance may defeat. The false step is made; the ball rolls to the bottom of the valley; and the insect, toppled over by the impetus of its load, kicks about, gets up on its legs again and hastens to harness itself once more. The mechanism is working better than ever. But look out, you scatterbrain! Follow the dip of the valley: that will save you labour and mishap; the road is good and level; your ball will roll quite easily. Not a bit of it! The insect prepares once more to mount the slope that was already its undoing. Perhaps it suits it to return to the heights. Against that I have nothing to say: the Scarab's opinion is more far-seeing than mine as to the advisability of keeping to lofty regions. But, at least, take this path, which will lead you up by a gentle incline! Not at all! If he find himself near some very steep slope, impossible to climb, that is what the obstinate fellow prefers. And now begins a labour of Sisyphus. The ball, that enormous burden, is painfully hoisted, step by step, with infinite precautions, to a certain height, always backwards. I ask myself by what static miracle so great a mass can be kept upon the slope. Oh! An ill-planned movement frustrates all this toil: the ball comes down, dragging the beetle with it! The escalade is repeated, soon to be followed by another fall. The attempt is renewed, better-managed this time at the difficult points; a confounded grass-root, the cause of the previous tumbles, is carefully turned. We are almost there; but gently, gently! The ascent is dangerous and a mere nothing may yet spoil all. For see, a leg slips on a smooth bit of gravel! Down come ball and Dung-beetle, all mixed up together. And the Beetle begins over again, with indefatigable persistency. Ten times, a score of times, he will attempt the thankless ascent, until his obstinacy vanquishes all obstacles, or until,

recognizing the uselessness of his efforts, he takes to the level road.

The Scarab does not always push his precious ball alone: sometimes he takes a partner; or, to be accurate, the partner takes him. This is how the thing usually happens: once his ball is ready, a Dung-beetle issues from the crowd and leaves the work-yard, pushing his spoil behind him. A neighbour, one of the newcomers, whose own task is hardly begun, suddenly drops his work and runs to the ball now rolling, to lend a hand to the lucky owner, who seems to accept the proffered aid kindly. Henceforth, the two cronies work as partners. Each does his best to push the pellet to a place of safety. Was a compact really concluded in the work-yard, a tacit agreement to share the cake between them? While one was kneading and moulding the ball, was the other tapping rich veins whence to extract choice materials and add them to the common store? I have never observed such a collaboration; I have always seen each Dung-beetle occupied solely with his own affairs in the works. The last-comer, therefore, has no acquired rights.

Is it, then, a partnership between the two sexes, a couple intending to set up house? I thought so for a time. The two beetles, one before, one behind, pushing the heavy ball with equal zeal, reminded me of a song which the barrel-organs used to grind out some years ago:

Pour monter notre menage, hélas! comment feront-nous?
Toi devant et moi derrière, nous pousserons le tonneau.¹

The evidence of the scalpel compelled me to abandon this domestic idyll. There is no outward difference between the two sexes in the Dung-beetle. I, therefore, dissected the two beetles engaged in conveying one and the same ball; and they often proved to belong to the same sex.

Neither community of family nor community of toil! Then what is the motive for this apparent partnership? It is just simply an attempt at robbery. The eager fellow-worker, under the deceitful pretence of lending a helpful hand, nurses the scheme of purloining the ball at the first opportunity. To make one's own ball at the heap implies drudgery and patience; to steal one ready-made, or at least to foist one's self as a guest, is a much easier matter. Should the owner's vigilance slacken, you can run away with the treasure; should you be too closely watched, you can sit down to table uninvited, pleading services rendered. It is, "Heads I win, tails you lose," in these tactics, so that pillage is exercised as one of the most lucrative of trades. Some go to work craftily, in the way I have just described: they come to the aid of a comrade who has not the least need of them and hide a most indelicate greed under the cloak of charitable assistance. Others, bolder perhaps, more confident in their strength, go straight to the goal and commit robbery with violence.

Scenes are constantly happening such as this: a Scarab walks off, peacefully and alone, rolling his ball, his lawful property, acquired by conscientious work. Another comes flying up, I know not whence, drops down heavily, folds his smoky wings under their elytra and, with the back of his toothed armlets, knocks over the owner, who is powerless to ward off the attack in his harnessed posture. While the dispossessed one struggles to his feet, the other perches himself atop the ball, the best position from which to repel the assailant. With his armlets folded under his breast, ready at all points, he awaits events. The victim of the theft moves round the ball, seeking a favourable spot at which to attempt the assault; the thief spins round on the roof of the citadel, constantly facing him. If the first raise himself in order to scale the wall, the second gives him a cuff that stretches him on his back. Safe at the top of his fortress,

the besieged Beetle would baffle his adversary's attempts indefinitely, if the latter did not change his tactics to recover his property. Sapping is brought into play to bring down the citadel with the garrison. The ball, shaken from below, staggers and rolls, carrying with it the robber, who makes violent efforts to maintain his position on the top. This he succeeds in doing, though not always, thanks to hurried feats of gymnastics that enable him to regain a level from which the rolling of his support tends to drive him. Should a false movement bring him to the ground, the chances become equal and the struggle turns into a wrestling-match. Robber and robbed grapple at close quarters, breast to breast. Their legs twist and untwist, their joints intertwine, their horny armour clashes and grinds with the rasping sound of filed metal. Then that one of the two who succeeds in throwing his adversary and releasing himself hurriedly takes up a position on the top of the ball. The siege is renewed, now by the robber, now by the robbed, as the chances of the hand-to-hand conflict may have determined. The former, no doubt a hardy filibuster and adventurer, often has the best of the fight. Then, after two or three defeats, the ejected Beetle wearies and returns philosophically to the heap, there to make himself a new pellet. As for the other, with all fear of a surprise at an end, he harnesses himself to the conquered ball and pushes it whither he pleases. I have sometimes seen a third thief appear upon the scene and rob the robber. Nor can I honestly say that I was sorry.

I ask myself in vain what Proudhon² introduced into Beetle-morality the daring paradox that "property is based on plunder," or what diplomatist taught Dung-beetles the savage maxim that "might is right." I have no facts whereby to trace the origin of these spoliations which have become a custom, of this abuse of strength to capture a lump of ordure. All that I can say is that theft is in general

use among the Scarab tribe. These Dung-rollers rob one another among themselves with a calm effrontery of which I know no other instance. I leave it to future observers to elucidate this curious problem in animal psychology and I return to the two partners rolling their ball in concert.

Let us call the two fellow-workers partners, although that is not the proper name for them, seeing that the one forces himself upon the other, who probably accepts outside help only for fear of a worse evil. The meeting, however, is absolutely peaceful. The Beetle owning the ball does not cease work for an instant at the arrival of his assistant; and the newcomer seems animated by the best intentions and sets to work on the spot. The way in which the two partners harness themselves differs. The owner occupies the chief position, the place of honour: he pushes behind the load, with his hind-legs in the air and his head down. The assistant is in front, in the reverse position, head up, toothed arms on the ball, long hind-legs on the ground. Between the two, the ball rolls along, pushed before him by the first, dragged towards him by the second.

The efforts of the couple are not always very harmonious, the more so as the helper has his back to the road to be traversed, while the owner's view is impeded by the load. Hence arise constant accidents, absurd tumbles, taken cheerfully and in good part: each picks himself up quickly and resumes the same position as before. On level ground, this system of draught does not correspond with the dynamic force expended, for lack of precision in the combined movements: the Scarab at the back would do as well and better if left to himself. And so the helper, after giving a proof of his good-will at the risk of disturbing the mechanism, decides to keep still, without, of course, abandoning the precious ball, which he already looks upon as his: finding is keeping; a ball touched is a ball gained.

He will commit no such imprudence: the other might give him the slip!

He, therefore, gathers his legs under his belly, flattens himself, encrusts himself, so to speak, on the ball and becomes one with it. Henceforth, the whole concern—ball and Beetle clinging to its surface—rolls along, pushed by the lawful owner. Whether the load passes over his body, whether he occupies the top, the bottom or the side of the rolling burden matters little to the intruder, who sits tight and lies low. A singular helper this, who has himself driven in a carriage to secure his share of the victuals!

But a steep ascent heaves in sight and gives him a fine part to play. He now, on the stiff slope, takes the lead, holding the heavy mass with his toothed arms, while his mate seeks a purchase to hoist the load a little higher. Thus, by a combination of well-managed efforts, the one above gripping, the one below pushing, I have seen them together mount acclivities where the stubborn determination of one alone would have come to naught. But not all have the same zeal at these difficult moments: there are some who, on slopes where their assistance is most needed, seem not in the least aware of the difficulties to overcome. While the unhappy Sisyphus exhausts himself in endeavours to pass the dangerous place, the other quietly leaves him to do his best and, himself encrusted on the ball, rolls down with it, when it comes to grief, and is hoisted up with it anew.

Let us suppose the Scarab fortunate enough to have found a loyal partner; or, better still, let us suppose that he has met no self-invited colleague. The burrow is ready. It is a cavity dug in soft earth, usually in sand, shallow, the size of one's fist and communicating with the outside by a short channel just large enough for the passage of the ball. As soon as the provisions are safely housed, the Scarab shuts

himself in by stopping up the entrance to his dwelling with rubbish reserved for the purpose in a corner. Once the door is closed, no sign outside betrays the banqueting-hall. And, now, welcome mirth and jollity! All is for the best in the best of all possible worlds! The table is sumptuously laid; the ceiling tempers the heat of the sun and allows but a mild, moist heat to penetrate; the calm, the darkness, the concert of the crickets overhead all favour the digestive functions. So great has been my illusion that I have caught myself listening at the door, expecting to hear the revellers burst into that famous snatch from the opera of *Galatée*:³

Ah! qu'il est doux de ne rien faire
Quand tout s'agite autour de nous.⁴

Who would dare disturb the bliss of such a banquet? But the wish to learn is capable of all things; and I had the courage. I will set down here the result of my violations of the sanctity of domestic life: the ball by itself fills almost the whole of the room; the rich repast rises from floor to ceiling. A narrow passage runs between it and the walls. Here sit the banqueters, two at most, very often but one, belly to table, back to the wall. Once the seat is chosen, no one stirs; all the vital forces are absorbed by the digestive faculties. No little movements, which might cause the loss of a mouthful; no dainty toying with the food, which might cause the waste of some. Everything has to pass, properly and in order. To see them so pensively seated around a ball of dung, one would think that they were aware of their task as scavengers of the earth and that they consciously devoted themselves to that marvellous chemistry which out of filth brings forth the flower, the joy of our eyes, and the Beetles' elytra, the ornament of our lawns in spring. For the purpose of this transcendental work, which is to turn into live matter the residue discarded by the horse and the mule, despite the perfection of their digestive organs, the

Dung-beetle must needs be specially equipped. And, in point of fact, anatomy compels us to admire the prodigious length of his intestine, which, folded and refolded upon itself, slowly elaborates the materials in its profuse circuits and exhausts them to the very last serviceable atom. From that whence the stomach of the herbivorous animal has been able to extract nothing, this powerful alembic wrings riches that, at a mere touch, turn into ebon armour in the Sacred Scarab and a breast-plate of gold and rubies in other Dung-beetles.

Now this wonderful metamorphosis of ordure has to be accomplished in the shortest possible time: the general health demands it. And so the Scarab is endowed with matchless digestive powers. Once housed in the company of food, day and night he will not cease eating and digesting until the provisions be exhausted. It is easy, with a little practice, to bring up the Scarab in captivity, in a volery. In this way, I obtained the following evidence, which will tell us of the high digestive capacity of the famous Dung-beetle.

When the whole ball has been through the mill, the hermit reappears in the light of day, seeks his fortune, finds it, shapes himself a new ball and begins all over again. On a very hot, calm, sultry day—the atmospheric conditions most favourable to the gastronomic enjoyments of my anchorites—watch in hand, I observe one of the consumers in the open air, from eight o'clock in the morning until eight o'clock at night. The Scarab appears to have come across a morsel greatly to his taste, for, during those twelve hours, he never stops feasting, remains permanently at table, stationary at one spot. At eight o'clock in the evening, I pay him a last visit. His appetite seems undiminished. I find the glutton in as fine fettle as at the start. The banquet, therefore, must have lasted some time longer, until the

total disappearance of the lump. Next morning, in fact, the Scarab is gone and, of the fine piece attacked on the previous day, naught remains but crumbs.

Once round the clock and more, for a single sitting at table, is a fine display of gormandizing in itself; but here is something much better by way of rapidity of digestion. While, in front of the insect, the matter is being continuously chewed and swallowed, behind it, with equal continuity, the matter reappears, stripped of its nutritive particles and spun into a little black cord, similar to a cobbler's thread. The Scarab never evacuates except at table, so quickly are his digestive labours performed. The apparatus begins to work at the first few mouthfuls; it ceases its office soon after the last. Without a break from beginning to end of the meal and always hanging to the discharging orifice, the thin cord is piled in a heap which is easy to unroll so long as it is not dried up.

The thing works with the regularity of a chronometer. Every minute, or, rather, to be accurate, every four-and-fifty seconds, an eruption takes place and the thread is lengthened by three to four millimetres.⁵ At long intervals, I employ the pincers, unfasten the cord and unroll the heap along a graduated rule, to estimate the produce. The total measurement for twelve hours is 2.88 metres.⁶ As the meal and its necessary complement, the work of the digestive apparatus, went on for some time longer after my last visit, paid at eight o'clock in the evening by the light of a lantern, it follows that my subject must have spun an unbroken stercoraceous cord well over three yards in length.

Given the diameter and the length of the thread, it is easy to calculate its volume. Nor is it difficult to arrive at the exact volume of the insect by measuring the amount of water which it displaces when immersed in a narrow

cylinder. The figures thus obtained are not uninteresting: they tell us that, at a single festive sitting, in a dozen hours, the Scarab digests very nearly its own volume in food. What a stomach! And especially what a rapidity, what a power of digestion! From the first mouthfuls, the residuum forms itself into a thread that stretches, stretches out indefinitely as long as the meal lasts. In that amazing laboratory, which perhaps never puts up its shutters, unless it be when victuals are lacking, the material only passes through, is worked upon at once by the reagents in the stomach and at once exhausted. We may well believe that a crucible so quick to purify dirt plays its part in the general hygiene.

1

“When you and I start housekeeping, alas, what shall we do?
You in front and I behind, we’ll shove the tub along!”

2 Jean Baptiste Victor Proudhon (1758-1838), author of *De la distinction des biens*, *Traité du domaine public*, etc.—*Translator’s Note*. ↑

3 A light opera, with music by Victor Masse and libretto by Jules Barbier and Michel Carré (1852).—*Translator’s Note*. ↑

4

“Ah, how sweet is far niente,
When round us throbs the busy world!”

5 .11 to .15 inches.—*Translator’s Note*. ↑

6 Close upon 9½ feet.—*Translator’s Note*. ↑

CHAPTER II

THE SACRED BEETLE: THE PEAR

A young shepherd, who had been told in his spare time to watch the doings of the Sacred Beetle, came to me in high spirits, one Sunday, in the second half of June, to say that he thought the time had come to commence a search. He had detected the insect issuing from the ground, had dug at the spot where it made its appearance and had found, at no great depth, the queer thing which he was bringing me.

Queer it was and calculated to upset the little which I thought I knew. In shape, it was exactly like a tiny pear that had lost all the colour of its freshness and turned brown in rotting. What could this curious object be, this pretty plaything that seemed to come from a turner's workshop? Was it made by human hands? Was it a model of the fruit of the pear-tree intended for some child's collection? One would say so.

The children come round me; they look at the treasure-trove with longing eyes; they would like to add it to the contents of their toy-box. It is much prettier in shape than an agate marble, much more graceful than an ivory egg or a box-wood top. The material, it is true, seems none too nicely chosen; but it is firm to the touch and very artistically curved. In any case, the little pear discovered underground must not go to swell the collection of nursery treasures until we have found out more about it.

Can it really be the Scarab's work? Is there an egg inside it, a grub? The shepherd assures me that there is. A similar pear, crushed by accident in the digging, contained, he

says, a white egg, the size of a grain of wheat. I dare not believe it, so greatly does the object which he has brought me differ from the ball which I expected to see.

To open the puzzling "find" and ascertain its contents would perhaps be imprudent: such an act of violence might jeopardize the life of the germ enclosed, always provided that the Scarab's egg be there, a matter of which the shepherd seems convinced. And then, I imagine, the pear-shape, opposed to every accepted idea, is probably accidental. Who knows if chance has anything like it in store for me in the future? It were wise to keep the thing as it is, to await events; above all, it were wise to go in search of information on the spot.

The shepherd was at his post by daybreak the next morning. I joined him on some slopes that had been lately cleared of their trees, where the hot summer sun, which strikes so powerfully on the neck, could not reach us for two or three hours. In the cool air of morning, with the flock browsing under the care of the sheep-dog, we went in search together.

Scarabæus' burrow is soon found: it is recognizable by the recent mole-hill that surmounts it. My companion digs with a vigorous wrist. I have lent him my little pocket-trowel, the light, but workmanlike tool which, incorrigible earth-scraper that I am, I seldom omit to take with me when I go out. I lie down, the better to see the arrangement and furnishing of the hypogeum in process of excavation; and I am all eyes. The shepherd uses the trowel as a lever and, with his free hand, pushes back the rubbish.

Here we are! A cave opens out and, in the moist warmth of the yawning vault, I see a splendid pear lying full-length upon the ground. I shall certainly long remember this first