

Marguerite had been gazing out at sea while she made her confession, as if half expecting to see the *Swallow* sail into view, not observing that their promenade had brought them round the somewhat abrupt curve of the beach to where the sea made a little cove, till, bringing her eyes back from wandering, from noting the color shift and quiver in the middle distance, the sails that leaned to windward, the light-house windows glowing like bale-fires, sun-smitten, they took in at last the full splendor of the tumbling wave, which, lapping and seething at her feet, drenched anew the man who lay with up-turned face across her path. It was Eustace Roborough.

Did you ask if she married Ruderstine? Well, what would you have done?

SURVIVORS OF CIVILIZATION.

TWENTY years ago there was a tradition twice as old that an otter was started in our valley in mid-winter under a wild apple-tree. He tumbled himself hastily over the bank into the creek, but was seized in the shallow water by a fox-hound and an old-fashioned cur that were of the party. "Dey stretched him long as a rail," said a certain remnant of Dutch feudalism who cheered them on; but what with squirming, splashing, choking, and collisions, they failed to fasten a final gripe. He gradually worked out to diving depth, then slipped away like an eel, and, with a quiver quick as the flashing of the pike, was safe under the "Otter Rock" in the opposite bank. This otter was the last of his tribe—its sole survivor of civilization. Reaching down obliquely to the eastern bank of the Lower Hudson, and lying in one of the original seven river-counties named from the titles of the last Sturats, this valley, with its mountain boundaries, may be taken as a type of thorough settlement. The effects of civilization, therefore, upon the order of nature are here sufficiently shown. Those species of animals yet existing will, as a rule, continue. As many trees are planted here as cut; less forest, indeed, but more grove. There will never be less shade that softens the glare of rock; always as full veins for the springs and streams. The sharpness of the contest between man and animal and vegetable life is now closed, or at least compromised, and we may conclusively study the manner and order of the subjugation.

The animals of the valley which the white man found at his coming divided themselves into three classes. First were those whose existence was to him a matter of simple safety. Others also, not ferocious, but kept by nature with poor economy, requiring extensive tracts to support a few, that would also destroy what he might produce. Both these must be domesticated or destroyed. He had brought with him his own horse, cow, cat, and dog, and had no need to Rarey the moose, or stall the buffalo, or make place for the tamed wolf and wild-

cat at his fireside. For these, then, there was warfare only to the bitter end, dying grim and game like the Indian, without assimilation or compromise. Some, indeed, he destroyed almost before his coming, by the market which he created for their furs. All those between whom and the new-comer there was what Charles Lamb would term incompatibility—all who would naturally, necessarily prove short survivors—make up the first class.

The second is of those less positive in character, which has become modified into a semi-domestication, as the squirrel, refining the exclusive rusticity of his forest life in the luxuries of cultivated walnut and apple orchards, or even in the artificial nature of a city park; the swallows, suited with the chimney better than with the rock or tree that nature had hollowed out; the redbreast and waxwing, counting his fruits as their own; or the gentle quail, coming to glean in his grain-fields, and find shelter under his strength and wealth, like Ruth in the barley harvest of Boaz.

The third class is a copy of the first in smaller type—as uncompromising as they, only not dangerous. Thus the fawcon is only a dwarf bear, eating the same food as the larger, sleeping away winter in the same style of economy, and living in a similar though smaller house. The fox is a wolf in like manner—each cowardly; but for the wolf's ferocity we have the fox's cunning. The hawk is only an eagle of groves and woods, as the other of mountain forests; the mink is a small otter, the musk-rat a beaver of the brooks. In each the habits of the counterpart may be certainly and sufficiently shown.

The beaver was the first victim. His fur was valuable even in early days, when luxury took the form of neatness and cleanliness. He was easily captured, and the fertile meadows where he had his home were first demanded for culture. When the wolves yet perhaps outnumbered the watch-dogs, and Bruin's clumsy plantigrades often stamped the March snows about corn-stacks and orchards, what time he had waked too early from his winter nap, but yet would not turn in again, the beaver even then was never seen, hardly remembered. The Dutch seal of New Netherlands had a beaver waddling across the shield; and also in all those of the English province the female figure which forever kneels to the changing line of kings and queens holds out a beaver for tribute and peace-offering, as she might offer her baby for a hostage. The first and maybe the only hostile shot fired in the East Valley of the Lower Hudson in Indian history, was when some graceless red pirates off Rhinebeck hailed an opposition canoe of beaver peltry paddling down to Manhattan market. Near the outlet of a side-swamp that finds the main stream just below the Otter Rock is the "Beaver Dam." Tradition gives no record of its residents; but now for one hundred years, without repairs, it still stops the unused water. The bank that formed the dam when

the beavers kept it full is yet plain, braced with elm-roots, and green with a century's sod. Was it Todleben at the Crimea, or did these engineers first discover the durability of earth-works?

Species destroyed by man are not usually killed off outright; but, as Shylock would say, we take their life when we do take the means whereby they live. There are some factories above where the waters make their last fall from the hills, and the villainous alchemies they disgorge poison the purity until a gipsy could not find a fin in the pools below. Sometimes an adventurous school, bred in the clearness of a tributary brook, will venture out into the main stream; but when the mills "let off the bleach," smitten as if by pestilence, they will turn over on their backs, their bright bellies flashing autumn hues, and float away as helpless as October leaves. The washings of the silk-works that used to spoil the Rhone now make fifty thousand tons of soap a year. In the name of Nature, wild and human, may we not hope for a millennium of manufactories when they will consume their own foulness and swallow their own dust like a dummy engine? But the fishes were also a means of life to many. Even now, when the swollen freshets burst the ice, and we have no longer a slender stream in a sunken bed, worn by nature indeed, though fashioned as if by art, but a whirling tide rushing along between long lines of hills, when the broad meadows on either bank swell into their primitive lakes, and the thirsty pebbles of distant terraces, rounded by currents of preadamite date, are again wet and chafed by the welcome ripples, then those migrating myriads of winged life easily trust that nature will be restored; the flocks of canvas-backs alight on the flats to feed on the soaked esculent roots, or sometimes wild-geese to go ashore and browse the bordering grain-fields; and even the solitary loon, that we are wont only to see spread out like a cross on the lofty sky between the tropic and the iceberg, sometimes drops down to rest in the placid level. But these were only transient visitors, taking us, a Cæsar would say, *ex itinere*; there were others that used to linger until they almost gained a residence.

Straggling files of sheldrakes, and divers fishing ducks of gay plumage, would linger about, every spring and autumn, following the windings of the creeks, or shooting across the bends, or drawing long parallels of scallops with the tips of their wings as you started them out of some quiet cove. Then hawks always attended these ducks in their slow migrations, watching like sharp-shooters from the trees above, and when the business was very lively the eagle sometimes came up from the river and interposed his sovereign claw. The minks also had their hiding-places at the water's edge, the kingfishers their burrows higher up the bank, while the cranes and the whole family of bare-legged waders, like boys with turned-up trousers, found good support in spearing. But all miss the fishes—those that ate them, and those

that ate the eaters—for they were all connected closely as the characters in the house that Jack built.

These fishing ducks illustrate well a familiar principle of natural history, viz., that the habits of animals are regulated by their supplies of food. This it is that controls migrations and sojournings; this explains the destruction of life. These ducks as well as the others love the luxurious hot baths of the Gulf Stream, but given food and they will stay out our terrible winter. Last January I saw them in large numbers about the rapids of the Upper Hudson below Stillwater, thermometer -13° , dashing through the mist that seemed to congeal into a column as it arose, or plunging like an edged stone into those deep eddies of liquid ice, and just when you felt sure they would be swept under by the current that ran like a mill-race, they would suddenly emerge dripping and sparkling, whether a fish or a failure. They always pass the winter there. A friend of mine, and of the ducks, used to place corn on the ice opposite his mill, where they would rest like white bears about a seal-hole, but they never ate the grain unless it lay on the bottom of the river, and they reached it by diving. The duck pulls and pushes with his scoop of a bill, but is incapable of pecking, and would starve with his food before him if it lay on a smooth surface. He feeds awkwardly enough standing on his feet on land, but quite at ease on his head in the water, where his strength, aided by his buoyancy, breaks the sedge-roots in which he delights, backing water doubtless with his wings, for all the divers use their wings for deep swimming. Those credulous skeptics who will accept any method of making except that of creation, hold that a need, desire, or effort to swim or fly will in time, or in duration at least, produce a fin or a wing. But there would be literally less extravagance, and something nearer sober science, in an assertion that food creates consumers. Wherever the carcass is, there will the eagles be gathered together. A camel faints and falls on the waste—there is only sand every where below, a copper sky every where above—no animal life you would say in such a world, no place for it; but before the flavor of decay creeps out upon the air you see a speck in the sky—it comes nearer swiftly, but in so straight a line that you see only enlargement, no motion; you look about—there are many such motes in your vision; quickly you hear the rush of wings—crowds of foul-looking creatures are alighting, own sisters they are to Virgil's harpies; they stare at you and the prey without a show of surprise at finding either there. Æschylus would have named them "winged things," not attempting further classification.

Again, the sailors will strike a whale at some time when the sea is more barren than the desert; in a little time the albatrosses will come drifting out of the distance like thistle-downs—a downy, feathery mass, floating without a flap of the wing, and for many an acre around

they will lie on the still sea like flakes of foam. They vanish just as they came, and you think that Banquo's explanation of the witches' exit was not altogether unscientific—

"The earth hath bubbles as the water has,
And these are of them."

Last autumn I added a katydid to my collection, drowning him *à la* Clarence, and then impaling him upon a needle. The next morning he was literally swarmed upon by those specks of red ants that sometimes give entomological character to the sugar-bowl. They were running up and down his long legs for ladders, and over and about him like the Lilliputians with Gulliver. A bit of sponge soaked in spirits of camphor scattered the host, and there was no indication where they were or had been. But set forth katydid flavored with Bourbon, omitting camphor, and they will start up like the host of Roderick Dhu. Yet the room was newly painted, papered, and carpeted, and nothing likely to keep them alive nearer than two floors. Again, a climbing rose in the yard was infested with bugs, and I touched them with a swab dipped in turpentine, preferring this method to crushing them in the hand, as commended in our State authority. Soon a pair of honest but homely looking toads established themselves under the frame, and every morning they would breakfast on scores plump with vitriolic-looking juice, catching them up quick as flash on that club of a tongue, soaked as they were with the horrid sauce. *De gustibus non disputandum.*

Food can make us cosmopolitan. Eat fish with the Feejee, sour milk with the Tartar, or tallow with the Esquimaux, and with the aid of intellect you may beat each upon his own and his fathers' ground. No apparatus is at all equal to universal diffusion of inner warmth which heat-making food produces. Stoves will warm us in warm climates, but fire was not used by Dr. Hayes in that ice-desert a thousand miles beyond any permanent dwelling-place, in that wonderful march that will one day get into mythology as a thirteenth labor of Hercules. The pig—for he gives as good illustration as the polar bear, and is, moreover, one of the family—has a scanty external covering, but give him food to his appetite and he will weave an under-wrapper of adipose compared with which Siberian sable is summer style. So with neat cattle. Before scientific economy had begotten rinderpest and diseased livers they used to be fed natural food in a natural way, and if sometimes they were foddered on hill-sides bleak as the site of Goody Blake's cottage, plenty made them warm, and their habits left them healthy.

The habits and characters of the eagle, the wolf, bear, and others may yet be ascertained, even in localities where they no longer exist, by observing the ways of the hawk, fox, and raccoon. Thus the large hen-hawk keeps the nature of the eagle with fidelity and dignity. Sometimes when you sit down in summer

woods and look up through the leaves into the still sky you will see this bird repeating an orbit with a slight precession toward some wooded hill, and as he swings round to his perihelion five hundred feet zenith distance he scans the very buttons of your coat with a fixed, fearless gaze, but yet with that expression of pain such as all the eagle faces wear. Or when held out motionless on some outstretched arm of a giant oak, like a falcon on the wrist, he looks noble enough for a nation's emblem.

But the fox, though a wolf in a small way, fills the position of largest quadruped with sorry dignity. A dull walk to school used to be enlivened with successive daily glimpses at a captive Reynard, that had been holed and dug out, and was being kept in reserve for a scrub-race on New-Year's Day. His grief in confinement was not loud but deep. He would not meet your eye with the savage glare of all the cat kind when cornered, nor with the prying, impudent peering of the weasel and his cousins, but he just acted the culprit, sneaking and shamefaced, though, mind you, not a whit penitent. He remained downcast and dumpish, though sometimes making the quickest, quietest use of a splendid set of teeth upon any nose or paw that invaded the house of his bondage—his castle now, for which he claimed the privilege of Saxon common law. Finally his day of trial came. He was let loose in the Place du Carousal, in front of a country tavern, before a picked-up pack containing almost all cross-breeds, and a few stanch old fox-hounds. His first move, after recovering from his bewilderment, was characteristic enough. In full hearing, and almost in full view, of the yelling mob of men and dogs, each dog struggling to the grin, with his owner holding him by the nape of the neck by way of extempore leash, he rolled again and again on the hard, clean crust of a snow-bank, then, rising like the stag in Canto First, and "stretching forward free and far," led a lively musical party down the valley of the Wappinger. He belonged on the other side of the stream, and many a fowling-piece was brought to bear on the points where it was judged he would cross—a farm bridge and a fallen tree—the hunters confident that he would run no risk of wetting his tail, since it would then become clogged with snow and prove a heavy baggage-train. But he did risk it, nevertheless, crossing on the ice and dodging the whole gauntlet, not one of the many leaden pellets raising a fibre of his fur, and reached his den, safe and deep, under a mountain of Lime Rock.

But a very faithful companionship, known to all the country round, was broken that day. For as the few thorough-breeds, that clung dangerously to the track, struck straight across, true fox-hound fashion, seeing nothing unless they hit it with their nose, one of the leaders, a fine pair of twins, tan-colored, the first introduced of the breed, broke through, was swept under, and lost.

In the west slope of Gore Hill, in Dutchess County, there has been a fox-den from time long back. There is usually a flourishing young family, and to bring these up properly requires more young turkeys than the farmers like to spare. A flock of sixty was destroyed in a single night, and were found next morning scattered over a rough pasture-field, each bitten through the neck. They were too young to roost in the trees, but had huddled like quails under some bushes. They had been scattered, doubtless, by the first pounce, and then hunted, as if with pointers, partly for sport, and partly for the fresh blood that flowed from the throat. Dogs will do the same in flocks of sheep—two curs biting, and in the most cases poisoning, a flock of fifty. Seizing one by the throat, chucking the teeth as the delicious fluid pours out, and then in an instant catching another, "ravenging like a wolf" in wanton waste, becoming so gorged with blood that guilt is sometimes detected by hanging them up by the heels. Some of the dead turkeys were placed in a heap and surrounded by a thistle hedge with an opening over a steel trap. The next night a rash young Reynard found an unlucky foothold, but the old one knew the trap as well as Falstaff knew Poins and Prince Hal. On another occasion the old one was ambushed and shot at just as she was approaching the hole. She dropped a mouthful, which proved to be six field-mice, from which it was known, according to an old hunter, that she had six young ones, she hunting until she had a piece for each.

It is not probable that vulpine arithmetic comprehends numeration, but it is certain that animals are careful to be just and impartial in giving food and nourishment to their young. Twin lambs and young pigs in a litter always suck together, never one allowed an advantage over the other. Finally a day was appointed for digging out this troublesome family; but impending destruction was again averted. A certain sportsman, who loved the game as William the Norman loved the "tall deer," determined that his winter sport should not be so ingloriously anticipated. Taking with him another interested party in the person of old Zack—a hound named in the enthusiasm of the Taylor campaign, in compliment to statesmanship—he visited the burrow on the evening before the fatal day, and after exciting the hound to make some digging and disturbance, he fired both barrels down into the hole. The old fox took the hint from her friendly enemy, and during the night translated her household. It is well known that when the fox is hunted he does not trust to his speed for safety. The hounds usually progress slowly, and he only cares to keep just out of their way. He stops very often to listen, and will wait on a hill-top with genuine curiosity and enjoyment, and watch the puzzled hounds working out his track in the valley. Of wild animals generally the scent is much better than the sight. Their eye is a microscope,

with short and sharp sight and fitness for night-work; not a telescope for far seeing, which would be of little use in the forest. Birds of prey hunting in the open air are of course exceptions. When an animal hears a noise he does not turn to look, but rather stops to listen. Even when he appears to be looking he is very likely listening, since for sight, scent, or hearing there is the same position of the head. When followed by the hounds the whole aim of the fox is to put the hounds at fault. He will walk fences, dash suddenly in among flocks of sheep, follow beaten paths, double frequently on his own trail, or leap suddenly to one side as far as he can spring, and all in a manner that leaves no doubt of a purpose. Last autumn a neighbor, with two dogs, crossing his farm, came upon two young foxes, two-thirds grown, playing about some haystacks. The dogs saw and pursued one, and were not seen by the other, which, however, heard the running, and taking an opposite direction came just past him, though without noticing, since he was standing still. Just then the bird-dogs, coming in full view of the other fox, gave tongue, when this one suddenly stopped, stealthily retraced his steps, passed through a hole in the fence into a farm road, and then springing sideways with all his strength, made his best speed. This fox had probably never been chased by a hound, and in nature no animal, so far as I know, ever pursues the fox, although nature, doubtless, as in every other case, provides some checks to its increase. The relation of the fox and hound is of very long standing, but unless the former were hunted by some animal in nature this trick is not inherent, but acquired and transmitted.

The devotion of the fox to its young has always been noticed. We once found a snug nest of young foxes in the hollow of an old fallen tree, and one was brought away and tied under the shed like any young puppy. An old one, as is well known, can not be tamed, and this sleek, sprightly little fellow, though the object of the most devoted care, soon became soiled, lean, sickly, and altogether disgusted with life; all his brightness lost, like the stactite taken from its cave. Every night the mother would come upon the hill-tops about the homestead, lamenting her loss like a turtle-dove, passing from one hill to the other so swiftly that the sound seemed to be left behind her. One morning it was discovered that some sharp teeth had cut the cord. The bark or howl of the fox is for some reason wonderfully strange and startling. First, it is not often heard; then it is seldom given unless in darkness and perfect stillness; but the sound of itself is very wild and unnatural. It is not, indeed, the horrid hunger-cry of the wolf, pouring out his savage grief to the thicker darkness at the very rim of the narrow camp-light; nor the cry of the wild-cat, as if extorted by the sharp force of pain; but of all the sounds nature yet leaves us no other so deepens the loneliness of the

night-hour about some remote farm-house. On that occasion the master of that homestead—who, learned in no class-books of natural history, was yet the best naturalist we have ever met; who knew every bird or beast of the valley by its running or flight, seen or in most cases even heard, by any vestige of fur, dung, or feathers, by tracks, by marks of teeth or scratch of claw; who had a descriptive Saxon name for every plant from the cedar to the hyssop, and all without knowing how in his farmer life he had gained the knowledge, or, indeed, that he had acquired it at all—gave us many a scene in fox-hunting, suggested by the sound that so startled the young ears drowsy from the exceeding comfort of the evening autumn hearth.

An old shooting crony and himself once started two foxes in the pines above Barnegat. These dodged about for a time, but being pressed by a lively pair of hounds, finally went off in a tangent across the river. The field of jammed and broken ice was not yet thoroughly cemented by the cold; but the hounds were far out before they were discovered. They too became aware of the danger, hugging up close to each other, and cringing down to the very ice, feeling their way with distended paws and outstretched necks, the skin of the face tight with frightened eagerness, whining rather than yelping, yet sticking to the track like Theseus to the thread. But when they struck the firm ground of the west bank they again burst out into full cry, that came ringing from the Ulster peaks across on clear west wind, or was muffled as the trail led down into the deep passes. By-and-by the foxes again came down upon the ice, recrossing on the back track; and, half the Hudson's width behind, now better assured and making livelier work and music, came the hounds. The hunters chose their ambush, and each picked his game. One was killed; the other went on, badly wounded. The hounds still kept the track; but a heavy snow-flurry, and night now near, forbade further pursuit. Soon the dogs came back rolling, by which it was known they had been in at the death. Another time they were beating a hill-side of brush-wood in the valley of the Falkill, when Old Search, a favorite hound, good at the track, but with a dash of some breed that would often prompt his genius to such irregularities as running by sight, scurried away through the thicket with such a burst of nervous, crowded yelps as told plainly that this time the game was in his eye, not in his nose. They crashed and blundered through after him—he running by sight, they by hearing; while another old orthodox fox-hound, who illustrated faith, not sight, kept the sure scent of the track. The race was over in an instant, and coming up they found Search at work, tooth and nail, at a large hollow button-wood, open near the ground. A coon, of course—and smoke him out! Friction matches in that early day were more feared than glycerine now. They were wont to obtain the element in its purity, drawn from the veins of flint, and

not befouled with brimstone and phosphorus. Some tow was sprinkled with powder and put in the pan of the gun-lock; a flame; and down came—not a raccoon, but Reynard, his brush all ablaze.

The savageness of the dog family is nothing to the mad fierceness of the cat kind. That which subdues and cows the one only makes the other wild and furious. The wolf is sometimes taken in a log pen with a trap-door, which he is induced to enter by tying a sheep within. When the trap falls he struggles desperately; but when once thoroughly baffled he is so broken in spirit that he dare not touch the sheep, though hunger is the wolf's normal condition. I have known of a prairie-wolf, brought into a village for the bounty, dragging and hanging from the trap, making no effort to bite, though scarcely injured. Every member of the Felidæ from Tabby to the tiger would have struggled steadily with the wildest fury so long as there was a spark of its tenacious life. There is the same nature to them all. It is easy to kindle in the eyes of the house-cat all the fierceness of the glow that lights up the jungles of Bengal.

A BROKER'S LOVE AFFAIR.

I HAVE been enjoined to give you, my dear Laura, the accompanying document on the day of our marriage, and as that delightful occasion transpires to-morrow, I have thought it best, and wisest, and most loving that I should employ this evening in relating how it came into my hands, and in giving you some idea of the true character of the man from whom it comes.

Mr. John Moneyppenny has the misfortune to be a money-broker in Wall Street, and, as you know, I have the good luck to be his clerk. I do not want you to understand that he either calls himself a "broker," or dignifies me, his only assistant besides the messenger, by the title of "clerk," though I am at once book-keeper, paying and receiving teller, cashier, and occasionally assistant messenger. On the contrary, he insists on declaring himself a plain "note-shaver," and my "boss." He has a sort of grim humor in his composition, and an affected gruffness in his manner when occasionally making these assertions, which indicate he does not seriously mean to offend; and as, with all his faults, he has been uniformly just, if not indeed a little kind to me, I sink my American pride and independence, and only smile good-naturedly when I hear him make the assertion that he is my master and I am his servant, and that all these nonsensical distinctions of clerk, cashier, secretary, teller, and book-keeper are "confounded modern innovations" that reflect no credit on the age.

In fact, Mr. Moneyppenny affects the plain, unvarnished in all appearances; and hence the plain, large-lettered sign-board which hangs prominently before the door of his small counting-room, and which bears the singular name