WAYS OF WOOD FOLK

BY WM J. LONG.

Cornell University Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

<http://www.archive.org/details/cu31924000105092>

Cornell University Library
QL 791.L89

Ways of wood folk,

3 1924 000 105 092

mann

WAYS OF WOOD FOLK

BY

WILLIAM J. LONG

FIRST SERIES

GINN & COMPANY

BOSTON • NEW YORK • CHICAGO • LONDON

COPYRIGHT, 1899
BY WILLIAM J. LONG

ALL RIGHTS RESERVED

513.8

The Athenæum Press
GINN & COMPANY • PROPRIETORS • BOSTON • U.S.A.

TO PLATO, the owl, who looks
over my shoulder as I write, and
who knows all about the woods.

PREFACE.

“ALL crows are alike,” said a wise man, speaking of politicians. That is quite true—in the dark. By daylight, however, there is as much difference, within and without, in the first two crows one meets as in the first two men or women. I asked a little child once, who was telling me all about her chicken, how she knew her chicken from twenty others just like him in the flock. “How do I know my chicken? I know him by his little face,” she said. And sure enough, the face, when you looked at it closely, was different from all other faces.

This is undoubtedly true of all birds and all animals. They recognize each other instantly amid multitudes of their kind; and one who watches them patiently sees quite as many odd ways and individualities among Wood Folk as among other people. No matter, therefore, how well you know the habits of crows or the habits of caribou in general, watch the first one that crosses your path as if he were an entire stranger; open eyes to see and heart to interpret, and you will surely find some new thing, some curious unrecorded way, to give delight to your tramp and bring you home with a new interest.

This individuality of the wild creatures will account, perhaps, for many of these Ways, which can seem no more curious or startling to the reader than to the writer when he first discovered them. They are, almost entirely, the records of personal observation in the woods and fields. Occasionally, when I know my hunter or woodsman well, I have taken his testimony, but never without weighing it carefully, and proving it whenever possible by watching the animal in question for days or weeks till I found for myself that it was all true.

The sketches are taken almost at random from old notebooks and summer journals. About them gather a host of associations, of living-over-agains, that have made it a delight to write them; associations of the winter woods, of apple blossoms and nest-building, of New England uplands and wilderness rivers, of camps and canoes, of snowshoes and trout rods, of sunrise on the hills, when one climbed for the eagle's nest, and twilight on the yellow wind-swept beaches, where the surf sobbed far away, and wings twanged like reeds in the wind swooping down to decoys, — all thronging about one, eager to be remembered if not recorded. Among them, most eager, most intense, most frequent of all associations, there is a boy with nerves all a-tingle at the vast sweet mystery that rustled in every wood, following the call of the winds and the birds, or wandering alone where the spirit moved him, who never studied nature consciously, but only loved it, and who found out many of these Ways long ago, guided solely by a boy's instinct.

If they speak to other boys, as to fellow explorers in the always new world, if they bring back to older children happy memories of a golden age when nature and man were not quite so far apart, then there will be another pleasure in having written them.

My thanks are due, and are given heartily, to the editors of *The Youth's Companion* for permission to use several sketches that have already appeared, and to Mr. Charles Copeland, the artist, for his care and interest in preparing the illustrations.

WM. J. LONG.

ANDOVER, MASS., June, 1899.

CONTENTS.

	PAGE
I. FOX-WAYS	1
II. MERGANSER	27
III. QUEER WAYS OF BR'ER RABBIT	41
IV. A WILD DUCK	55
V. AN ORIOLE'S NEST	69
VI. THE BUILDERS	77
VII. CROW-WAYS	101
VIII. ONE TOUCH OF NATURE	117
IX. MOOSE CALLING	121
X. CH'GEEGEE-LOKH-SIS	135
XI. A FELLOW OF EXPEDIENTS	152
XII. A TEMPERANCE LESSON FOR THE HORNETS	161
XIII. SNOWY VISITORS	167
XIV. A CHRISTMAS CAROL	181
XV. MOOWEEN THE BEAR	187

WAYS OF WOOD FOLK.

I. FOX-WAYS.

DID you ever meet a fox face to face, surprising him quite as much as yourself? If so, you were deeply impressed, no doubt, by his perfect dignity and self-possession. Here is how the meeting generally comes about.

It is a late winter afternoon. You are swinging rapidly over the upland pastures, or loitering along the winding old road through the woods. The color deepens in the west; the pines grow black against it; the rich brown of the oak leaves seems to glow everywhere in the last soft light; and the mystery that never sleeps long in the woods begins to rustle again in the thickets. You are busy with your own thoughts, seeing nothing, till a flash of yellow passes before your eyes, and a fox stands in the path before you, one foot uplifted, the fluffy brush swept aside in graceful curve, the bright eyes looking straight into

yours — nay, looking through them to read the intent which gives the eyes their expression. That is always the way with a fox; he seems to be looking at your thoughts.

Surprise, eagerness, a lively curiosity are all in your face on the instant; but the beautiful creature before you only draws himself together with quiet self-possession. He lifts his head slightly; a superior look creeps into his eyes; he seems to be speaking. Listen —

“You are surprised?” — this with an almost imperceptible lift of his eyebrows, which reminds you somehow that it is really none of your affair. “O, I frequently use this road in attending to some matters over in the West Parish. To be sure, we are socially incompatible; we may even regard each other as enemies, unfortunately. I did take your chickens last week; but yesterday your unmannerly dogs hunted me. At least we may meet and pass as gentlemen. You are the older; allow me to give you the path.”

Dropping his head again, he turns to the left, English fashion, and trots slowly past you. There is no hurry; not the shadow of suspicion or uneasiness. His eyes are cast down; his brow wrinkled, as if in deep thought; already he seems to have forgotten your existence. You watch him curiously as he re-

enters the path behind you and disappears over the hill. Somehow a queer feeling, half wonder, half rebuke, steals over you, as if you had been outdone in courtesy, or had passed a gentleman without sufficiently recognizing him.

Ah, but you did n't watch sharply enough! You did n't see, as he circled past, that cunning side gleam of his yellow eyes, which understood your attitude perfectly. Had you stirred, he would have vanished like a flash. You did n't run to the top of the hill where he disappeared, to see that burst of speed the instant he was out of your sight. You did n't see the capers, the tail-chasing, the high jumps, the quick turns and plays; and then the straight, nervous gallop, which told more plainly than words his exultation that he had outwitted you and shown his superiority.

Reynard, wherever you meet him, whether on the old road at twilight, or on the runway before the hounds, impresses you as an animal of dignity and calculation. He never seems surprised, much less frightened; never loses his head; never does things hurriedly, or on the spur of the moment, as a scatter-brained rabbit or meddling squirrel might do. You meet him, perhaps as he leaves the warm rock on the south slope of the old oak woods, where he has been curled up asleep all the sunny afternoon. (It is easy to find him there in winter.) Now he is off on his

nightly hunt; he is trotting along, head down, brows deep-wrinkled, planning it all out.

"Let me see," he is thinking, "last night I hunted the Draper woods. To-night I'll cross the brook just this side the old bars, and take a look into that pasture-corner among the junipers. There's a rabbit which plays round there on moonlight nights; I'll have him presently. Then I'll go down to the big South meadow after mice. I haven't been there for a week; and last time I got six. If I don't find mice, there's that chicken coop of old Jenkins. Only" — He stops, with his foot up, and listens a minute — "only he locks the coop and leaves the dog loose ever since I took the big rooster. Anyway I'll take a look round there. Sometimes Deacon Jones's hens get to roosting in the next orchard. If I can find them up an apple tree, I'll bring a couple down with a good trick I know. On the way — Hi, there!"

In the midst of his planning he gives a grasshopper-jump aside, and brings down both paws hard on a bit of green moss that quivered as he passed. He spreads his paws apart carefully; thrusts his nose down between them; drags a young wood-mouse from under the moss; eats him; licks his chops twice, and goes on planning as if nothing had happened.

"On the way back, I'll swing round by the Fales place, and take a sniff under the wall by the old hickory, to see if those sleepy skunks are still there for the winter. I'll have that whole family before spring, if I'm hungry and can't find anything else. They come out on sunny days; all you have to do is just hide behind the hickory and watch."

So off he goes on his well-planned hunt; and if you follow his track to-morrow in the snow, you will see how he has gone from one hunting ground directly to the next. You will find the depression where he lay in a clump of tall dead grass and watched a while for the rabbit; reckon the number of mice he caught in the meadow; see his sly tracks about the chicken coop, and in the orchard; and pause a moment at the spot where he cast a knowing look behind the hickory by the wall,—all just as he planned it on his way to the brook.

If, on the other hand, you stand by one of his runways while the dogs are driving him, expecting, of course, to see him come tearing along in a desperate hurry, frightened out of half his wits by the savage uproar behind him, you can only rub your eyes in wonder when a fluffy yellow ball comes drifting through the woods towards you, as if the breeze were blowing it along. There he is, trotting down the runway in the same leisurely, self-possessed way,

wrapped in his own thoughts apparently, the same deep wrinkles over his eyes. He played a trick or two on a brook, down between the ponds, by jumping about on a lot of stones from which the snow had melted, without wetting his feet (which he dislikes), and without leaving a track anywhere. While the dogs are puzzling that out, he has plenty of time to plan more devices on his way to the big hill, with its brook, and old walls, and rail fences, and dry places under the pines, and twenty other helps to an active brain.

First he will run round the hill half a dozen times, crisscrossing his trail. That of itself will drive the young dogs crazy. Then along the top rail of a fence, and a long jump into the junipers, which hold no scent, and another jump to the wall where there is no snow, and then —

“Oh, plenty of time, no hurry!” he says to himself, turning to listen a moment. “That dog with the big voice must be old Roby. He thinks he knows all about foxes, just because he broke his leg last year, trying to walk a sheep-fence where I’d been. I’ll give him another chance; and oh, yes! I’ll creep up the other side of the hill, and curl up on a warm rock on the tiptop, and watch them all break their heads over the crisscross, and have a good nap or two, and think of more tricks.”

So he trots past you, still planning; crosses the wall by a certain stone that he has used ever since he was a cub fox; seems to float across an old pasture, stopping only to run about a bit among some cow tracks, to kill the scent; and so on towards his big hill. Before he gets there he will have a skilful retreat planned, back to the ponds, in case old Roby untangles his crisscross, or some young fool-hound blunders too near the rock whereon he sits, watching the game.

If you meet him now, face to face, you will see no quiet assumption of superiority; unless perchance he is a young fox, that has not learned what it means to be met on a runway by a man with a gun when the dogs are driving. With your first slightest movement there is a flash of yellow fur, and he has vanished into the thickest bit of underbrush at hand.—Don't run; you will not see him again here. He knows the old roads and paths far better than you do, and can reach his big hill by any one of a dozen routes where you would never dream of looking. But if you want another glimpse of him, take the shortest cut to the hill. He may take a nap, or sit and listen a while to the dogs, or run round a swamp before he gets there. Sit on the wall in plain sight; make a post of yourself; keep still, and keep your eyes open.

Once, in just such a place, I had a rare chance to watch him. It was on the summit of a great bare hill. Down in the woods by a swamp, five or six hounds were waking the winter echoes merrily on a fresh trail. I was hoping for a sight of Reynard when he appeared from nowhere, on a rock not fifty yards away. There he lay, his nose between his paws, listening with quiet interest to the uproar below. Occasionally he raised his head as some young dog scurried near, yelping maledictions upon a perfect tangle of fox tracks, none of which went anywhere. Suddenly he sat up straight, twisted his head sideways, as a dog does when he sees the most interesting thing of his life, dropped his tongue out a bit, and looked intently. I looked too, and there, just below, was old Roby, the best foxhound in a dozen counties, creeping like a cat along the top rail of a sheep-fence, now putting his nose down to the wood, now throwing his head back for a great howl of exultation. — It was all immensely entertaining; and nobody seemed to be enjoying it more than the fox.

One of the most fascinating bits of animal study is to begin at the very beginning of fox education, *i.e.*, to find a fox den, and go there some afternoon in early June, and hide at a distance, where you can watch the entrance through your field-glass. Every

afternoon the young foxes come out to play in the sunshine like so many kittens. Bright little bundles of yellow fur they seem, full of tricks and whims, with pointed faces that change only from exclamation to interrogation points, and back again. For hours at a stretch they roll about, and chase tails, and pounce upon the quiet old mother with fierce little barks. One climbs laboriously up the rock behind the den, and sits on his tail, gravely surveying the great landscape with a comical little air of importance, as if he owned it all. When called to come down he is afraid, and makes a great to-do about it. Another has been crouching for five minutes behind a tuft of grass, watching like a cat at a rat-hole for some one to come by and be pounced upon. Another is worrying something on the ground, a cricket perhaps, or a doodle-bug; and the fourth never ceases to worry the patient old mother, till she moves away and lies down by herself in the shadow of a ground cedar.

As the afternoon wears away, and long shadows come creeping up the hillside, the mother rises suddenly and goes back to the den; the little ones stop their play, and gather about her. You strain your ears for the slightest sound, but hear nothing; yet there she is, plainly talking to them; and they are listening. She turns her head, and the cubs scamper

into the den's mouth. A moment she stands listening, looking; while just within the dark entrance you get glimpses of four pointed black noses, and a cluster of bright little eyes, wide open for a last look. Then she trots away, planning her hunt, till she disappears down by the brook. When she is gone, eyes and noses draw back; only a dark silent hole in the bank is left. You will not see them again—not unless you stay to watch by moonlight till mother-fox comes back, with a fringe of field-mice hanging from her lips, or a young turkey thrown across her shoulders.

One shrewd thing frequently noticed in the conduct of an old fox with young is that she never troubles the poultry of the farms nearest her den. She will forage for miles in every direction; will harass the chickens of distant farms till scarcely a handful remains of those that wander into the woods, or sleep in the open yards; yet she will pass by and through nearer farms without turning aside to hunt, except for mice and frogs; and, even when hungry, will note a flock of chickens within sight of her den, and leave them undisturbed. She seems to know perfectly that a few missing chickens will lead to a search; that boys' eyes will speedily find her den, and boys' hands dig eagerly for a litter of young foxes.

Last summer I found a den, beautifully hidden, within a few hundred yards of an old farmhouse. The farmer assured me he had never missed a chicken; he had no idea that there was a fox within miles of his large flock. Three miles away was another farmer who frequently sat up nights, and set his boys to watching afternoons, to shoot a fox that, early and late, had taken nearly thirty young chickens. Driven to exasperation at last, he borrowed a hound from a hunter; and the dog ran the trail straight to the den I had discovered.

Curiously enough, the cubs, for whose peaceful bringing up the mother so cunningly provides, do not imitate her caution. They begin their hunting by lying in ambush about the nearest farm; the first stray chicken they see is game. Once they begin to plunder in this way, and feed full on their own hunting, parental authority is gone; the mother deserts the den immediately, leading the cubs far away. But some of them go back, contrary to all advice, and pay the penalty. She knows now that sooner or later some cub will be caught stealing chickens in broad daylight, and be chased by dogs. The foolish youngster takes to earth, instead of trusting to his legs; so the long-concealed den is discovered and dug open at last.

When an old fox, foraging for her young some

night, discovers by her keen nose that a flock of hens has been straying near the woods, she goes next day and hides herself there, lying motionless for hours at a stretch in a clump of dead grass or berry bushes, till the flock comes near enough for a rush. Then she hurls herself among them, and in the confusion seizes one by the neck, throws it by a quick twist across her shoulders, and is gone before the stupid hens find out what it is all about.

But when a fox finds an old hen or turkey straying about with a brood of chicks, then the tactics are altogether different. Creeping up like a cat, the fox watches an opportunity to seize a chick out of sight of the mother bird. That done, he withdraws, silent as a shadow, his grip on the chick's neck preventing any outcry. Hiding his game at a distance, he creeps back to capture another in the same way; and so on till he has enough, or till he is discovered, or some half-strangled chick finds breath enough for a squawk. A hen or turkey knows the danger by instinct, and hurries her brood into the open at the first suspicion that a fox is watching.

A farmer, whom I know well, first told me how a fox manages to carry a number of chicks at once. He heard a clamor from a hen-turkey and her brood one day, and ran to a wood path in time to see a vixen make off with a turkey chick scarcely larger

than a robin. Several were missing from the brood. He hunted about, and presently found five more just killed. They were beautifully laid out, the bodies at a broad angle, the necks crossing each other, like the corner of a corn-cob house, in such a way that, by gripping the necks at the angle, all the chicks could be carried at once, half hanging at either side of the fox's mouth. Since then I have seen an old fox with what looked like a dozen or more field-mice carried in this way; only, of course, the tails were crossed corn-cob fashion instead of the necks.

The stealthiness with which a fox stalks his game is one of the most remarkable things about him. Stupid chickens are not the only birds captured. Once I read in the snow the story of his hunt after a crow—wary game to be caught napping! The tracks showed that quite a flock of crows had been walking about an old field, bordered by pine and birch thickets. From the rock where he was sleeping away the afternoon the fox saw or heard them, and crept down. How cautious he was about it! Following the tracks, one could almost see him stealing along from stone to bush, from bush to grass clump, so low that his body pushed a deep trail in the snow, till he reached the cover of a low pine on the very edge of the field. There he crouched with all four feet close together under him. Then a crow

came by within ten feet of the ambush. The tracks showed that the bird was a bit suspicious; he stopped often to look and listen. When his head was turned aside for an instant the fox launched himself; just two jumps, and he had him. Quick as he was, the wing marks showed that the crow had started, and was pulled down out of the air. Reynard carried him into the densest thicket of scrub pines he could find, and ate him there, doubtless to avoid the attacks of the rest of the flock, which followed him screaming vengeance.

A strong enmity exists between crows and foxes. Wherever a crow finds a fox, he sets up a clatter that draws a flock about him in no time, in great excitement. They chase the fox as long as he is in sight, cawing vociferously, till he creeps into a thicket of scrub pines, into which no crow will ever venture, and lies down till he tires out their patience. In hunting, one may frequently trace the exact course of a fox which the dogs are driving, by the crows clamoring over him. Here in the snow was a record that may help explain one side of the feud.

From the same white page one may read many other stories of Reynard's ways and doings. Indeed I know of no more interesting winter walk than an afternoon spent on his last night's trail through the soft snow. There is always something new, either in

the track or the woods through which it leads: always a fresh hunting story; always a disappointment or two, a long cold wait for a rabbit that did n't come, or a miscalculation over the length of the snow tunnel where a partridge burrowed for the night. Generally, if you follow far enough, there is also a story of good hunting which leaves you wavering between congratulation over a successful stalk after nights of hungry, patient wandering, and pity for the little tragedy told so vividly by converging trails, a few red drops in the snow, a bit of fur blown about by the wind, or a feather clinging listlessly to the underbrush. In such a tramp one learns much of fox-ways and other ways that can never be learned elsewhere.

The fox whose life has been spent on the hillsides surrounding a New England village seems to have profited by generations of experience. He is much more cunning every way than the fox of the wilderness. If, for instance, a fox has been stealing your chickens, your trap must be very cunningly set if you are to catch him. It will not do to set it near the chickens; no inducement will be great enough to bring him within yards of it. It must be set well back in the woods, near one of his regular hunting grounds. Before that, however, you must bait the

fox with choice bits scattered over a pile of dry leaves or chaff, sometimes for a week, sometimes for a month, till he comes regularly. Then smoke your trap, or scent it; handle it only with gloves; set it in the chaff; scatter bait as usual; and you have one chance of getting him, while he has still a dozen of getting away. In the wilderness, on the other hand, he may be caught with half the precaution. I know a little fellow, whose home is far back from the settlements, who catches five or six foxes every winter by ordinary wire snares set in the rabbit paths, where foxes love to hunt.

In the wilderness one often finds tracks in the snow, telling how a fox tried to catch a partridge and only succeeded in frightening it into a tree. After watching a while hungrily,—one can almost see him licking his chops under the tree,—he trots off to other hunting grounds. If he were an educated fox he would know better than that.

When an old New England fox in some of his nightly prowlings discovers a flock of chickens roosting in the orchard, he generally gets one or two. His plan is to come by moonlight, or else just at dusk, and, running about under the tree, bark sharply to attract the chickens' attention. If near the house, he does this by jumping, lest the dog or the farmer hear his barking. Once they have begun to flutter

and cackle, as they always do when disturbed, he begins to circle the tree slowly, still jumping and clacking his teeth. The chickens crane their necks down to follow him. Faster and faster he goes, racing in small circles, till some foolish fowl grows dizzy with twisting her head, or loses her balance and tumbles down, only to be snapped up and carried off across his shoulders in a twinkling.

But there is one way in which fox of the wilderness and fox of the town are alike easily deceived. Both are very fond of mice, and respond quickly to the squeak, which can be imitated perfectly by drawing the breath in sharply between closed lips. The next thing, after that is learned, is to find a spot in which to try the effect.

Two or three miles back from almost all New England towns are certain old pastures and clearings, long since run wild, in which the young foxes love to meet and play on moonlight nights, much as rabbits do, though in a less harum-scarum way. When well fed, and therefore in no hurry to hunt, the heart of a young fox turns naturally to such a spot, and to fun and capers. The playground may easily be found by following the tracks after the first snowfall. (The knowledge will not profit you probably till next season; but it is worth finding and remembering.) If one goes to the place on some still, bright night in

autumn, and hides on the edge of the open, he stands a good chance of seeing two or three foxes playing there. Only he must himself be still as the night; else, should twenty foxes come that way, he will never see one.

It is always a pretty scene, the quiet opening in the woods flecked with soft gray shadows in the moonlight, the dark sentinel evergreens keeping silent watch about the place, the wild little creatures playing about among the junipers, flitting through light and shadow, jumping over each other and tumbling about in mimic warfare, all unconscious of a spectator as the foxes that played there before the white man came, and before the Indians. Such scenes do not crowd themselves upon one. He must wait long, and love the woods, and be often disappointed; but when they come at last, they are worth all the love and the watching. And when the foxes are not there, there is always something else that is beautiful.—

Now squeak like a mouse, in the midst of the play. Instantly the fox nearest you stands, with one foot up, listening. Another squeak, and he makes three or four swift bounds in your direction, only to stand listening again; he has n't quite located you. Careful now! don't hurry; the longer you keep him waiting, the more certainly he is deceived. Another

Copeland

squeak; some more swift jumps that bring him within ten feet; and now he smells or sees you, sitting motionless on your boulder in the shadow of the pines.

He is n't surprised; at least he pretends he is n't; but looks you over indifferently, as if he were used to finding people sitting on that particular rock. Then he trots off with an air of having forgotten something. With all his cunning he never suspects you of being the mouse. That little creature he believes to be hiding under the rock; and to-morrow night he will very likely take a look there, or respond to your squeak in the same way.

It is only early in the season, generally before the snow blows, that one can see them playing; and it is probably the young foxes that are so eager for this kind of fun. Later in the season — either because the cubs have lost their playfulness, or because they must hunt so diligently for enough to eat that there is no time for play — they seldom do more than take a gallop together, with a playful jump or two, before going their separate ways. At all times, however, they have a strong tendency to fun and mischief-making. More than once, in winter, I have surprised a fox flying round after his own bushy tail so rapidly that tail and fox together looked like a great yellow pin-wheel on the snow.

When a fox meets a toad or frog, and is not hungry,

he worries the poor thing for an hour at a time ; and when he finds a turtle he turns the creature over with his paw, sitting down gravely to watch its awkward struggle to get back onto its feet. At such times he has a most humorous expression, brows wrinkled and tongue out, as if he were enjoying himself hugely.

Later in the season he would be glad enough to make a meal of toad or turtle. One day last March the sun shone out bright and warm ; in the afternoon the first frogs began to tune up, *cr-r-r-runk, cr-r-runk-a-runk-runk*, like a flock of brant in the distance. I was watching them at a marshy spot in the woods, where they had come out of the mud by dozens into a bit of open water, when the bushes parted cautiously and the sharp nose of a fox appeared. The hungry fellow had heard them from the hill above, where he was asleep, and had come down to see if he could catch a few. He was creeping out onto the ice when he smelled me, and trotted back into the woods.

Once I saw him catch a frog. He crept down to where Chigwooltz, a fat green bullfrog, was sunning himself by a lily pad, and very cautiously stretched out one paw under water. Then with a quick fling he tossed his game to land, and was after him like a flash before he could scramble back.

On the seacoast Reynard depends largely on the tides for a living. An old fisherman assures me that

he has seen him catching crabs there in a very novel way. Finding a quiet bit of water where the crabs are swimming about, he trails his brush over the surface till one rises and seizes it with his claw (a most natural thing for a crab to do), whereupon the fox springs away, jerking the crab to land. Though a fox ordinarily is careful as a cat about wetting his tail or feet, I shall not be surprised to find some day for myself that the fisherman was right. Reynard is very ingenious, and never lets his little prejudices stand in the way when he is after a dinner.

His way of beguiling a duck is more remarkable than his fishing. Late one afternoon, while following the shore of a pond, I noticed a commotion among some tame ducks, and stopped to see what it was about. They were swimming in circles, quacking and stretching their wings, evidently in great excitement. A few minutes' watching convinced me that something on the shore excited them. Their heads were straight up from the water, looking fixedly at something that I could not see; every circle brought them nearer the bank. I walked towards them, not very cautiously, I am sorry to say; for the farmhouse where the ducks belonged was in plain sight, and I was not expecting anything unusual. As I glanced over the bank something slipped out of sight into the tall grass. I followed the waving tops intently, and

caught one sure glimpse of a fox as he disappeared into the woods.

The thing puzzled me for years, though I suspected some foxy trick, till a duck-hunter explained to me what Reynard was doing. He had seen it tried successfully once on a flock of wild ducks. —

When a fox finds a flock of ducks feeding near shore, he trots down and begins to play on the beach in plain sight, watching the birds the while out of the “tail o’ his ee,” as a Scotchman would say. Ducks are full of curiosity, especially about unusual colors and objects too small to frighten them; so the playing animal speedily excites a lively interest. They stop feeding, gather close together, spread, circle, come together again, stretching their necks as straight as strings to look and listen.

Then the fox really begins his performance. He jumps high to snap at imaginary flies; he chases his bushy tail; he rolls over and over in clouds of flying sand; he gallops up the shore, and back like a whirlwind; he plays peekaboo with every bush. The foolish birds grow excited; they swim in smaller circles, quacking nervously, drawing nearer and nearer to get a better look at the strange performance. They are long in coming, but curiosity always gets the better of them; those in the rear crowd the front rank forward. All the while the show goes on, the performer

paying not the slightest attention apparently to his excited audience; only he draws slowly back from the water's edge, as if to give them room as they crowd nearer.

They are on shore at last; then, while they are lost in the most astonishing caper of all, the fox dashes among them, throwing them into the wildest confusion. His first snap never fails to throw a duck back onto the sand with a broken neck; and he has generally time for a second, often for a third, before the flock escapes into deep water. Then he buries all his birds but one, throws that across his shoulders, and trots off, wagging his head, to some quiet spot where he can eat his dinner and take a good nap undisturbed.

When with all his cunning Reynard is caught napping, he makes use of another good trick he knows. One winter morning some years ago, my friend, the old fox-hunter, rose at daylight for a run with the dogs over the new-fallen snow. Just before calling his hounds, he went to his hen-house, some distance away, to throw the chickens some corn for the day. As he reached the roost, his steps making no sound in the snow, he noticed the trail of a fox crossing the yard and entering the coop through a low opening sometimes used by the chickens. No trail came out; it flashed upon him that the fox must be inside at that moment.

Hardly had he reached this conclusion when a wild cackle arose that left no doubt about it. On the instant he whirled an empty box against the opening, at the same time pounding lustily to frighten the thief from killing more chickens. Reynard was trapped sure enough. The fox-hunter listened at the door, but save for an occasional surprised *cut-aa-cut*, not a sound was heard within.

Very cautiously he opened the door and squeezed through. There lay a fine pullet stone dead; just beyond lay the fox, dead too.

"Well, of all things," said the fox-hunter, open-mouthed, "if he has n't gone and climbed the roost after that pullet, and then tumbled down and broken his own neck!"

Highly elated with this unusual beginning of his hunt, he picked up the fox and the pullet and laid them down together on the box outside, while he fed his chickens.

When he came out, a minute later, there was the box and a feather or two, but no fox and no pullet. Deep tracks led out of the yard and up over the hill in flying jumps. Then it dawned upon our hunter that Reynard had played the possum-game on him, getting away with a whole skin and a good dinner.

There was no need to look farther for a good fox track. Soon the music of the hounds went ringing

over the hill and down the hollow; but though the dogs ran true, and the hunter watched the runways all day with something more than his usual interest, he got no glimpse of the wily old fox. Late at night the dogs came limping home, weary and footsore, but with never a long yellow hair clinging to their chops to tell a story.

The fox saved his pullet, of course. Finding himself pursued, he buried it hastily, and came back the next night undoubtedly to get it.

Several times since then I have known of his playing possum in the same way. The little fellow whom I mentioned as living near the wilderness, and snaring foxes, once caught a black fox — a rare, beautiful animal with a very valuable skin — in a trap which he had baited for weeks in a wild pasture. It was the first black fox he had ever seen, and, boylike, he took it only as a matter of mild wonder to find the beautiful creature frozen stiff, apparently, on his pile of chaff with one hind leg fast in the trap.

He carried the prize home, trap and all, over his shoulder. At his whoop of exultation the whole family came out to admire and congratulate. At last he took the trap from the fox's leg, and stretched him out on the doorstep to gloat over the treasure and stroke the glossy fur to his heart's content. His attention was taken away for a moment; then he had

a dazed vision of a flying black animal that seemed to perch an instant on the log fence and vanish among the spruces.

Poor Johnnie ! There were tears in his eyes when he told me about it, three years afterwards.

These are but the beginning of fox-ways. I have not spoken of his occasional tree climbing ; nor of his grasshopper hunting ; nor of his planning to catch three quails at once when he finds a whole covey gathered into a dinner-plate circle, tails in, heads out, asleep on the ground ; nor of some perfectly astonishing things he does when hard pressed by dogs. But these are enough to begin the study and still leave plenty of things to find out for one's self. Reynard is rarely seen, even in places where he abounds ; we know almost nothing of his private life ; and there are undoubtedly many of his most interesting ways yet to be discovered. He has somehow acquired a bad name, especially among farmers ; but, on the whole, there is scarcely a wild thing in the woods that better repays one for the long hours spent in catching a glimpse of him.

II. MERGANSER.

HELDRAKE, or shellbird, is the name by which this duck is generally known, though how he came to be called so would be hard to tell. Probably the name was given by gunners, who see him only in winter when hunger drives him to eat mussels — but even then he likes mud-snails much better.

The name fish-duck, which one hears occasionally, is much more appropriate. The long slender bill, with its serrated edges fitting into each other like the teeth of a bear trap, just calculated to seize and hold a slimy wriggling fish, is quite enough evidence as to the nature of the bird's food, even if one had not seen him fishing on the lakes and rivers which are his summer home.

That same bill, by the way, is sometimes a source of danger. Once, on the coast, I saw a shelldrake trying in vain to fly against the wind, which flung him rudely among some tall reeds near me. The

next moment Don, my old dog, had him. In a hungry moment he had driven his bill through both shells of a scallop, which slipped or worked its way up to his nostrils, muzzling the bird perfectly with a hard shell ring. The poor fellow by desperate trying could open his mouth barely wide enough to drink or to swallow the tiniest morsel. He must have been in this condition a long time, for the bill was half worn through, and he was so light that the wind blew him about like a great feather when he attempted to fly.

Fortunately Don was a good retriever and had brought the duck in with scarcely a quill ruffled; so I had the satisfaction of breaking his bands and letting him go free with a splendid rush. But the wind was too much for him; he dropped back into the water and went skittering down the harbor like a lady with too much skirt and too big a hat in boisterous weather. Meanwhile Don lay on the sand, head up, ears up, whining eagerly for the word to fetch. Then he dropped his head, and drew a long breath, and tried to puzzle it out why a man should go out on a freezing day in February, and tramp, and row, and get wet to find a bird, only to let him go after he had been fairly caught.

Kwaseekho the shelldrake leads a double life. In winter he may be found almost anywhere along the Massachusetts coast and southward, where he leads a

dog's life of it, notwithstanding his gay appearance. An hundred guns are roaring at him wherever he goes. From daylight to dark he has never a minute to eat his bit of fish, or to take a wink of sleep in peace. He flies to the ocean, and beds with his fellows on the broad open shoals for safety. But the east winds blow; and the shoals are a yeasty mass of tumbling breakers. They buffet him about; they twist his gay feathers; they dampen his pinions, spite of his skill in swimming. Then he goes to the creeks and harbors.

Along the shore a flock of his own kind, apparently, are feeding in quiet water. Straight in he comes with unsuspecting soul, the morning light shining full on his white breast and bright red feet as he steadies himself to take the water. But *bang, bang!* go the guns; and *splash, splash!* fall his companions; and out of a heap of seaweed come a man and a dog; and away he goes, sadly puzzled at the painted things in the water, to think it all over in hunger and sorrow.

Then the weather grows cold, and a freeze-up covers all his feeding grounds. Under his beautiful feathers the bones project to spoil the contour of his round plump body. He is famished now; he watches the gulls to see what they eat. When he finds out, he forgets his caution, and roams about after stray mus-

sels on the beach. In the spring hunger drives him into the ponds where food is plenty — but such food! In a week his flesh is so strong that a crow would hardly eat it. Altogether, it is small wonder that as soon as his instinct tells him the streams of the North are open and the trout running up, he is off to a land of happier memories.

In summer he forgets his hardships. His life is peaceful as a meadow brook. His home is the wilderness — on a lonely lake, it may be, shimmering under the summer sun, or kissed into a thousand smiling ripples by the south wind. Or perhaps it is a forest river, winding on by wooded hills and grassy points and lonely cedar swamps. In secret shallow bays the young broods are plashing about, learning to swim and dive and hide in safety. The plunge of the fish-hawk comes up from the pools. A noisy kingfisher rattles about from tree to stump, like a restless busy-body. The hum of insects fills the air with a drowsy murmur. Now a deer steps daintily down the point, and looks, and listens, and drinks. A great moose wades awkwardly out to plunge his head under and pull away at the lily roots. But the young brood mind not these harmless things. Sometimes indeed, as the afternoon wears away, they turn their little heads apprehensively as the alders crash and sway on the bank above; a low cluck from the mother bird

sends them all off into the grass to hide. How quickly they have disappeared, leaving never a trace ! But it is only a bear come down from the ridge where he has been sleeping, to find a dead fish perchance for his supper ; and the little brood seem to laugh as another low cluck brings them scurrying back from their hiding places.

Once, perhaps, comes a real fright. when all their summer's practice is put to the test. An unusual noise is heard ; and round the bend glides a bark canoe with sound of human voices. Away go the brood together, the river behind them foaming like the wake of a tiny steamer as the swift-moving feet lift them almost out of water. Visions of ocean, the guns, falling birds, and the hard winter distract the poor mother. She flutters wildly about the brood, now leading, now bravely facing the monster ; now pushing along some weak little loiterer, now floundering near the canoe as if wounded, to attract attention from the young. But they double the point at last, and hide away under the alders. The canoe glides by and makes no effort to find them. Silence is again over the forest. The little brood come back to the shallows, with mother bird fluttering round them to count again and again lest any be missing. The kingfisher comes out of his hole in the bank. The river flows on as before, and peace returns ; and over all is

the mystic charm of the wilderness and the quiet of a summer day.

This is the way it all looks and seems to me, sitting over under the big hemlock, out of sight, and watching the birds through my field-glass.

Day after day I have attended such little schools, unseen and unsuspected by the mother bird. Sometimes it was the a-b-c class, wee little downy fellows, learning to hide on a lily pad, and never getting a reward of merit in the shape of a young trout till they hid so well that the teacher (somewhat over-critical, I thought) was satisfied. Sometimes it was the bacca-laureates that displayed their talents to the unbidden visitor, flashing out of sight, cutting through the water like a ray of light, striking a young trout on the bottom with the rapidity and certainty almost of the teacher. It was marvelous, the diving and swimming; and mother bird looked on and quacked her approval of the young graduates.—That is another peculiarity: the birds are dumb in winter; they find their voice only for the young.

While all this careful training is going on at home, the drake is off on the lakes somewhere with his boon companions, having a good time, and utterly neglectful of parental responsibility. Sometimes I have found clubs of five or six, gay fellows all, living by themselves at one end of a big lake where the fish-

ing was good. All summer long they roam and gad about, free from care, and happy as summer campers, leaving mother birds meanwhile to feed and educate their offspring. Once only have I seen a drake sharing in the responsibilities of his family. I watched three days to find the cause of his devotion; but he disappeared the third evening, and I never saw him again. Whether the drakes are lazy and run away, or whether they have the atrocious habit of many male birds and animals of destroying their young, and so are driven away by the females, I have not been able to find out.

These birds are very destructive on the trout streams; if a summer camper spare them, it is because of his interest in the young, and especially because of the mother bird's devotion. When the recreant drake is met with, however, he goes promptly onto the bill of fare, with other good things.

Occasionally one overtakes a brood on a rapid river. Then the poor birds are distressed indeed. At the first glimpse of the canoe they are off, churning the water into foam in their flight. Not till they are out of sight round the bend do they hear the cluck that tells them to hide. Some are slow in finding a hiding place on the strange waters. The mother bird hurries them. They are hunting in frantic haste when round the bend comes the swift-gliding canoe.

With a note of alarm they are all off again, for she will not leave even the weakest alone. Again they double the bend and try to hide; again the canoe overtakes them; and so on, mile after mile, till a stream or bogan flowing into the river offers a road to escape. Then, like a flash, the little ones run in under shelter of the banks, and glide up stream noiselessly, while mother bird flutters on down the river just ahead of the canoe. Having lured it away to a safe distance, as she thinks, she takes wing and returns to the young.

Their powers of endurance are remarkable. Once, on the Restigouche, we started a brood of little ones late in the afternoon. We were moving along in a good current, looking for a camping ground, and had little thought for the birds, which could never get far enough ahead to hide securely. For five miles they kept ahead of us, rushing out at each successive stretch of water, and fairly distancing us in a straight run. When we camped they were still below us. At dusk I was sitting motionless near the river when a slight movement over near the opposite bank attracted me. There was the mother bird, stealing along up stream under the fringe of bushes. The young followed in single file. There was no splashing of water now. Shadows were not more noiseless.

Twice since then I have seen them do the same

thing. I have no doubt they returned that evening all the way up to the feeding grounds where we first started them; for like the kingfishers every bird seems to have his own piece of the stream. He never fishes in his neighbor's pools, nor will he suffer any poaching in his own. On the Restigouche we found a brood every few miles; on other rivers less plentifully stocked with trout they are less numerous. On lakes there is often a brood at either end; but though I have watched them carefully, I have never seen them cross to each other's fishing grounds.

Once, up on the Big Toledi, I saw a curious bit of their education. I was paddling across the lake one day, when I saw a shellbird lead her brood into a little bay where I knew the water was shallow; and immediately they began dipping, though very awkwardly. They were evidently taking their first lessons in diving. The next afternoon I was near the same place. I had done fishing — or rather, frogging — and had pushed the canoe into some tall grass out of sight, and was sitting there just doing nothing.

A musquash came by, and rubbed his nose against the canoe, and nibbled a lily root before he noticed me. A shoal of minnows were playing among the grasses near by. A dragon-fly stood on his head against a reed — a most difficult feat, I should think. He was trying some contortion that I could n't make out,

when a deer stepped down the bank and never saw me. Doing nothing pays one under such circumstances, if only by the glimpses it gives of animal life. It is so rare to see a wild thing unconscious.

Then Kwaseekho came into the shallow bay again with her brood, and immediately they began dipping as before. I wondered how the mother made them dive, till I looked through the field-glass and saw that the little fellows occasionally brought up something to eat. But there certainly were no fish to be caught in that warm, shallow water. An idea struck me, and I pushed the canoe out of the grass, sending the brood across the lake in wild confusion. There on the black bottom were a dozen young trout, all freshly caught, and all with the air-bladder punctured by the mother bird's sharp bill. She had provided their dinner, but she brought it to a good place and made them dive to get it.

As I paddled back to camp, I thought of the way the Indians taught their boys to shoot. They hung their dinner from the trees, out of reach, and made them cut the cord that held it, with an arrow. Did the Indians originate this, I wonder, in their direct way of looking at things, almost as simple as the birds'? Or was the idea whispered to some Indian hunter long ago, as he watched Merganser teach her young to dive?

Of all the broods I have met in the wilderness, only one, I think, ever grew to recognize me and my canoe a bit, so as to fear me less than another. It was on a little lake in the heart of the woods, where we lingered long on our journey, influenced partly by the beauty of the place, and partly by the fact that two or three bears roamed about there, which I sometimes met at twilight on the lake shore. The brood were as wild as other broods; but I met them often, and they sometimes found the canoe lying motionless and harmless near them, without quite knowing how it came there. So after a few days they looked at me with curiosity and uneasiness only, unless I came too near.

There were six in the brood. Five were hardy little fellows that made the water boil behind them as they scurried across the lake. But the sixth was a weakling. He had been hurt, by a hawk perhaps, or a big trout, or a mink; or he had swallowed a bone; or maybe he was just a weak little fellow with no accounting for it. Whenever the brood were startled, he struggled bravely a little while to keep up; then he always fell behind. The mother would come back, and urge, and help him; but it was of little use. He was not strong enough; and the last glimpse I always had of them was a foamy wake disappearing round a distant point, while far in the rear was a ripple where

the little fellow still paddled away, doing his best pathetically.

One afternoon the canoe glided round a point and ran almost up to the brood before they saw it, giving them a terrible fright. Away they went on the instant,

putter, putter, putter, lifting themselves almost out of water with the swift-moving feet and tiny wings. The mother bird took wing, returned and crossed the bow of the canoe, back and forth, with loud quackings. The weakling was behind as usual; and in a sudden spirit of curiosity or perversity—for I really had a good deal of sympathy for the little

fellow — I shot the canoe forward, almost up to him. He tried to dive; got tangled in a lily stem in his fright; came up, flashed under again; and I saw him come up ten feet away in some grass, where he sat motionless and almost invisible amid the pads and yellow stems.

How frightened he was! Yet how still he sat! Whenever I took my eyes from him a moment I had to hunt again, sometimes two or three minutes, before I could see him there.

Meanwhile the brood went almost to the opposite shore before they stopped, and the mother, satisfied at last by my quietness, flew over and lit among them. She had not seen the little one. Through the glass I saw her flutter round and round them to be quite sure they were all there. Then she missed him. I could see it all in her movements. She must have clucked, I think, for the young suddenly disappeared, and she came swimming rapidly back over the way they had come, looking, looking everywhere. Round the canoe she went at a safe distance, searching among the grass and lily pads, calling him softly to come out. But he was very near the canoe, and very much frightened; the only effect of her calls was to make him crouch closer against the grass stems, while the bright little eyes, grown large with fear, were fastened on me.

Slowly I backed the canoe away till it was out of sight around the point, though I could still see the mother bird through the bushes. She swam rapidly about where the canoe had been, calling more loudly; but the little fellow had lost confidence in her, or was too frightened, and refused to show himself. At last she discovered him, and with quacks and flutters that looked to me a bit hysteric pulled him out of his hiding place. How she fussed over him! How she hurried and helped and praised and scolded him all the way over; and fluttered on ahead, and clucked the brood out of their hiding places to meet him! Then, with all her young about her, she swept round the point into the quiet bay that was their training school.

And I, drifting slowly up the lake into the sunset over the glassy water, was thinking how human it all was. "Doth he not leave the ninety and nine in the wilderness, and go after that which is lost, until he find it?"

III. QUEER WAYS OF BR'ER RABBIT.

BR'ER RABBIT is a funny fellow. No wonder that Uncle Remus makes him the hero of so many adventures! Uncle Remus had watched him, no doubt, on some moonlight night when he gathered his boon companions together for a frolic. In the heart of the woods it was, in a little opening where the moonlight came streaming in through the pines, making soft gray shadows for hide-and-seek, and where no prowling fox ever dreamed of looking.

With most of us, I fear, the acquaintance with Bunny is too limited for us to appreciate his frolicsome ways and his happy, fun-loving disposition. The tame things which we sometimes see about country yards are often stupid, like a playful kitten spoiled by too much handling; and the flying glimpse we sometimes get of a bundle of brown fur, scurrying helter-skelter through and over the huckleberry bushes, generally leaves us staring in astonishment at the swaying leaves where it disappeared, and wondering curiously what it was all about. It was

only a brown rabbit that you almost stepped upon in your autumn walk through the woods.

Look under the crimson sumach yonder, there in the bit of brown grass, with the purple asters hanging over, and you will find his form, where he has been sitting all the morning and where he watched you all the way up the hill. But you need not follow; you will not find him again. He never runs straight; the swaying leaves there where he disappeared mark the beginning of his turn, whether to right or left you will never know. Now he has come around his circle and is near you again—watching you this minute, out of his bit of brown grass. As you move slowly away in the direction he took, peering here and there among the bushes, Bunny behind you sits up straight in his old form again, with his little paws held very prim, his long ears pointed after you, and his deep brown eyes shining like the waters of a hidden spring among the asters. And he chuckles to himself, and thinks how he fooled you that time, sure.

To see Br'er Rabbit at his best, that is, at his own playful comical self, one must turn hunter, and learn how to sit still, and be patient. Only you must not hunt in the usual way; not by day, for then Bunny is stowed away in his form on the sunny slope of a southern hillside, where one's eyes will never

find him; not with gun and dog, for then the keen interest and quick sympathy needed to appreciate any phase of animal life gives place to the coarser excitement of the hunt; and not by going about after Bunny, for your heavy footsteps and the rustle of leaves will only send him scurrying away into safer solitudes. Find where he loves to meet with his fellows, in quiet little openings in the woods. There is no mistaking his playground when once you have found it. Go there by moonlight and, sitting still in the shadow, let your game find you, or pass by without suspicion; for this is the best way to hunt, whether one is after game or only a better knowledge of the ways of bird and beast.

The very best spot I ever found for watching Bunny's ways was on the shore of a lonely lake in the heart of a New Brunswick forest. I hardly think that he was any different there, for I have seen some of his pranks repeated within sight of a busy New England town; but he was certainly more natural. He had never seen a man before, and he was as curious about it as a blue jay. No dog's voice had ever wakened the echoes within fifty miles; but every sound of the wilderness he seemed to know a thousand times better than I. The snapping of the smallest stick under the stealthy tread of fox or wildcat would send him scurrying out of sight in wild alarm; yet I watched a

dozen of them at play one night when a frightened moose went crashing through the underbrush and plunged into the lake near by, and they did not seem to mind it in the least.

The spot referred to was the only camping ground on the lake; so Simmo, my Indian guide, assured me; and he knew very well. I discovered afterward that it was the only cleared bit of land for miles around; and this the rabbits knew very well. Right in the midst of their best playground I pitched my tent, while Simmo built his lean-to near by, in another little opening. We were tired that night, after a long day's paddle in the sunshine on the river. The after-supper chat before the camp fire—generally the most delightful bit of the whole day, and prolonged as far as possible—was short and sleepy; and we left the lonely woods to the bats and owls and creeping things, and turned in for the night.

I was just asleep when I was startled by a loud thump twice repeated, as if a man stamped on the ground, or, as I thought at the time, just like the thump a bear gives an old log with his paw, to see if it is hollow and contains any insects. I was wide awake in a moment, sitting up straight to listen. A few minutes passed by in intense stillness; then, *thump! thump! thump!* just outside the tent among the ferns.

I crept slowly out; but beyond a slight rustle as my head appeared outside the tent I heard nothing, though I waited several minutes and searched about among the underbrush. But no sooner was I back in the tent and quiet than there it was again, and repeated three or four times, now here, now there, within the next ten minutes. I crept out again, with no better success than before.

This time, however, I would find out about that mysterious noise before going back. It is n't so pleasant to go to sleep until one knows what things are prowling about, especially things that make a noise like that. A new moon was shining down into the little clearing, giving hardly enough light to make out the outlines of the great evergreens. Down among the ferns things were all black and uniform. For ten minutes I stood there in the shadow of a big spruce and waited. Then the silence was broken by a sudden heavy thump in the bushes just behind me. I was startled, and wheeled on the instant; as I did so, some small animal scurried away into the underbrush.

For a moment I was puzzled. Then it flashed upon me that I was camped upon the rabbits' playground. With the thought came a strong suspicion that Bunny was fooling me.

Going back to the fire, I raked the coals together

and threw on some fresh fuel. Next I fastened a large piece of birch bark on two split sticks behind the fireplace; then I sat down on an old log to wait. The rude reflector did very well as the fire burned up. Out in front the fern tops were dimly lighted to the edge of the clearing. As I watched, a dark form shot suddenly above the ferns and dropped back again. Three heavy thumps followed; then the form shot up and down once more. This time there was no mistake. In the firelight I saw plainly the dangle of Br'er Rabbit's long legs, and the flap of his big ears, and the quick flash of his dark eyes in the reflected light,—got an instantaneous photograph of him, as it were, at the top of his comical jump.

I sat there nearly an hour before the why and the how of the little joker's actions became quite clear. This is what happens in such a case. Bunny comes down from the ridge for his nightly frolic in the little clearing. While still in the ferns the big white object, standing motionless in the middle of his playground, catches his attention; and very much surprised, and very much frightened, but still very curious, he crouches down close to wait and listen. But the strange thing does not move nor see him. To get a better view he leaps up high above the ferns two or three times. Still the big thing remains quite still and harmless. "Now," thinks Bunny, "I'll

frighten him, and find out what he is." Leaping high, he strikes the ground sharply two or three times with his padded hind foot; then jumps up quickly again to see the effect of his scare. Once he succeeded very well, when he crept up close behind me, so close that he did n't have to spring up to see the effect. I fancy him chuckling to himself as he scurried off after my sudden start.

That was the first time that I ever heard Bunny's challenge. It impressed me at the time as one of his most curious pranks; the sound was so big and heavy for such a little fellow. Since then I have heard it frequently; and now sometimes when I stand at night in the forest and hear a sudden heavy thump in the underbrush, as if a big moose were striking the ground and shaking his antlers at me, it does n't startle me in the least. It is only Br'er Rabbit trying to frighten me.

The next night Bunny played us another trick. Before Simmo went to sleep he always took off his blue overalls and put them under his head for a pillow. That was only one of Simmo's queer ways. While he was asleep the rabbits came into his little *commoosie*, dragged the overalls out from under his head, and nibbled them full of holes. Not content with this, they played with them all night; pulled them around the clearing, as threads here and there

plainly showed; then dragged them away into the underbrush and left them.

Simmo's wrath when he at last found the precious garments was comical to behold; when he wore them with their new polka-dot pattern, it was still more comical. Why the rabbits did it I could never quite make out. The overalls were very dirty, very much stained with everything from a clean trout to tobacco crumbs; and, as there was nothing about them for a rabbit to eat, we concluded that it was just one of Br'er Rabbit's pranks. That night Simmo, to avenge his overalls, set a deadfall supported by a piece of cord, which he had soaked in molasses and salt. Which meant that Bunny would nibble the cord for the salt that was in it, and bring the log down hard on his own back. So I had to spring it, while Simmo slept, to save the little fellow's life and learn more about him.

Up on the ridge above our tent was a third tiny clearing, where some trappers had once made their winter camp. It was there that I watched the rabbits one moonlight night from my seat on an old log, just within the shadow at the edge of the opening. The first arrival came in with a rush. There was a sudden scurry behind me, and over the log he came with a flying leap that landed him on the smooth bit of ground in the middle, where he whirled around and

around with grotesque jumps, like a kitten after its tail. Only Br'er Rabbit's tail was too short for him ever to catch it; he seemed rather to be trying to get a good look at it. Then he went off helter-skelter in a headlong rush through the ferns. Before I knew what had become of him, over the log he came again in a marvelous jump, and went tearing around the clearing like a circus horse, varying his performance now by a high leap, now by two or three awkward hops on his hind legs, like a dancing bear. It was immensely entertaining.

The third time around he discovered me in the midst of one of his antics. He was so surprised that he fell down. In a second he was up again, sitting up very straight on his haunches just in front of me, paws crossed, ears erect, eyes shining in fear and curiosity. "Who are you?" he was saying, as plainly as ever rabbit said it. Without moving a muscle I tried to tell him, and also that he need not be afraid. Perhaps he began to understand, for he turned his head on one side, just as a dog does when you talk to him. But he was n't quite satisfied. "I'll try my scare on him," he thought; and *thump! thump! thump!* sounded his padded hind foot on the soft ground. It almost made me start again, it sounded so big in the dead stillness. This last test quite convinced him that I was harmless, and, after a moment's

watching, away he went in some astonishing jumps into the forest.

A few minutes passed by in quiet waiting before he was back again, this time with two or three companions. I have no doubt that he had been watching me all the time, for I heard his challenge in the brush just behind my log. The fun now began to grow lively. Around and around they went, here, there, everywhere, — the woods seemed full of rabbits, they scurried around so. Every few minutes the number increased, as some new arrival came flying in and gyrated around like a brown fur pinwheel. They leaped over everything in the clearing; they leaped over each other as if playing leap-frog; they vied with each other in the high jump. Sometimes they gathered together in the middle of the open space and crept about close to the ground, in and out and roundabout, like a game of fox and geese. Then they rose on their hind legs and hopped slowly about in all the dignity of a minuet. Right in the midst of the solemn affair some mischievous fellow gave a squeak and a big jump; and away they all went hurry-scurry, for all the world like a lot of boys turned loose for recess. In a minute they were back again, quiet and sedate, and solemn as bullfrogs. Were they chasing and chastising the mischief-maker, or was it only the overflow of abundant

spirits, as the top of a kettle blows off when the pressure below becomes resistless?

Many of the rabbits saw me, I am sure, for they sometimes gave a high jump over my foot; and one came close up beside it, and sat up straight with his head on one side, to look me over. Perhaps it was the first comer, for he did not try his scare again. Like most wild creatures, they have very little fear of an object that remains motionless at their first approach and challenge.

Once there was a curious performance over across the clearing. I could not see it very plainly, but it looked very much like a boxing match. A queer sound, *put-a-put-a-put-a-put*, first drew my attention to it. Two rabbits were at the edge of the ferns, standing up on their hind legs, face to face, and apparently cuffing each other soundly, while they hopped slowly around and around in a circle. I could not see the blows but only the boxing attitude, and hear the sounds as they landed on each other's ribs. The other rabbits did not seem to mind it, as they would have done had it been a fight, but stopped occasionally to watch the two, and then went on with their fun-making. Since then I have read of tame hares that did the same thing, but I have never seen it.

At another time the rabbits were gathered together

in the very midst of some quiet fun, when they leaped aside suddenly and disappeared among the ferns as if by magic. The next instant a dark shadow swept across the opening, almost into my face, and wheeled out of sight among the evergreens. It was Kookoo-skoos, the big brown owl, coursing the woods on his nightly hunt after the very rabbits that were crouched motionless beneath him as he passed. But how did they learn, all at once, of the coming of an enemy whose march is noiseless as the sweep of a shadow? And did they all hide so well that he never suspected that they were about, or did he see the ferns wave as the last one disappeared, but was afraid to come back after seeing me? Perhaps Br'er Rabbit was well repaid that time for his confidence.

They soon came back again, as I think they would not have done had it been a natural opening. Had it been one of Nature's own sunny spots, the owl would have swept back and forth across it; for he knows the rabbits' ways as well as they know his. But hawks and owls avoid a spot like this, that men have cleared. If they cross it once in search of prey, they seldom return. Wherever man camps, he leaves something of himself behind; and the fierce birds and beasts of the woods fear it, and shun it. It is only the innocent things, singing birds, and fun-loving rabbits, and harmless little wood-mice — shy,

defenseless creatures all—that take possession of man's abandoned quarters, and enjoy his protection. Bunny knows this, I think; and so there is no other place in the woods that he loves so well as an old camping ground.

The play was soon over; for it is only in the early part of the evening, when Br'er Rabbit first comes out after sitting still in his form all day, that he gives himself up to fun, like a boy out of school. If one may judge, however, from the looks of Simmo's overalls, and from the number of times he woke me by scurrying around my tent, I suspect that he is never too serious and never too busy for a joke. It is a way he has of brightening the more sober times of getting his own living, and keeping a sharp lookout for cats and owls and prowling foxes.

Gradually the playground was deserted, as the rabbits slipped off one by one to hunt their supper. Now and then there was a scamper among the underbrush, and a high jump or two, with which some playful bunny enlivened his search for tender twigs; and at times one, more curious than the rest, came hopping along to sit erect a moment before the old log, and look to see if the strange animal were still there. But soon the old log was vacant too. Out in the swamp a disappointed owl sat on his lonely stub that lightning had blasted, and hooted that he

was hungry. The moon looked down into the little clearing with its waving ferns and soft gray shadows, and saw nothing there to suggest that it was the rabbits' nursery.

Down at the camp a new surprise was awaiting me. Br'er Rabbit was under the tent fly, tugging away at the salt bag which I had left there carelessly after curing a bearskin. While he was absorbed in getting it out from under the rubber blanket, I crept up on hands and knees, and stroked him once from ears to tail. He jumped straight up with a startled squeak, whirled in the air, and came down facing me. So we remained for a full moment, our faces scarcely two feet apart, looking into each other's eyes. Then he thumped the earth soundly with his left hind foot, to show that he was not afraid, and scurried under the fly and through the brakes in a half circle to a bush at my heels, where he sat up straight in the shadow to watch me.

But I had seen enough for one night. I left a generous pinch of salt where he could find it easily, and crept in to sleep, leaving him to his own ample devices.

IV. A WILD DUCK.

THE title will suggest to most boys a line across the autumn sky at sunset, with a bit of mystery about it; or else a dark triangle moving southward, high and swift, at Thanksgiving time.

To a few, who know well the woods and fields about their homes, it may suggest a lonely little pond, with a dark bird rising swiftly, far out of reach, leaving the ripples playing among the sedges. To those accustomed to look sharply it will suggest five or six more birds, downy little fellows, hiding safe among roots and grasses, so still that one seldom suspects their presence. But the duck, like most game birds, loves solitude; the details of his life he keeps very closely to himself; and boys must be content with occasional glimpses.

This is especially true of the dusky duck, more generally known by the name black duck among hunters. He is indeed a wild duck, so wild that one must study him with a gun, and study him long before he knows much about him. An ordinary

tramp with a field-glass and eyes wide open may give a rare, distant view of him; but only as one follows him as a sportsman winter after winter, meeting with much less of success than of discouragement, does he pick up many details of his personal life; for wildness is born in him, and no experience with man is needed to develop it. On the lonely lakes in the midst of a Canada forest, where he meets man perhaps for the first time, he is the same as when he builds at the head of some mill pond within sight of a busy New England town. Other ducks may in time be tamed and used as decoys; but not so he. Several times I have tried it with wing-tipped birds; but the result was always the same. They worked night and day to escape, refusing all food and even water till they broke through their pen, or were dying of hunger, when I let them go.

One spring a farmer, with whom I sometimes go shooting, determined to try with young birds. He found a black duck's nest in a dense swamp near a salt creek, and hatched the eggs with some others under a tame duck. Every time he approached the pen the little things skulked away and hid; nor could they be induced to show themselves, although their tame companions were feeding and running about, quite contented. After two weeks, when he thought them somewhat accustomed to their surroundings, he

let the whole brood go down to the shore just below his house. The moment they were free the wild birds scurried away into the water-grass out of sight, and no amount of anxious quacking on the part of the mother duck could bring them back into captivity. He never saw them again.

This habit which the young birds have of skulking away out of sight is a measure of protection that they constantly practise. A brood may be seen on almost any secluded pond or lake in New England, where the birds come in the early spring to build their nests. Watching from some hidden spot on the shore, one sees them diving and swimming about, hunting for food everywhere in the greatest freedom. The next moment they scatter and disappear so suddenly that one almost rubs his eyes to make sure that the birds are really gone. If he is near enough, which is not likely unless he is very careful, he has heard a low cluck from the old bird, which now sits with neck standing straight up out of the water, so still as to be easily mistaken for one of the old stumps or bogs among which they are feeding. She is looking about to see if the ducklings are all well hidden. After a moment there is another cluck, very much like the other, and downy little fellows come bobbing out of the grass, or from close beside the stumps where you looked a moment before and saw nothing. This is

repeated at frequent intervals, the object being, apparently, to accustom the young birds to hide instantly when danger approaches.

So watchful is the old bird, however, that trouble rarely threatens without her knowledge. When the young are well hidden at the first sign of the enemy, she takes wing and leaves them, returning when danger is over to find them still crouching motionless in their hiding places. When surprised she acts like other game birds, — flutters along with a great splashing, trailing one wing as if wounded, till she has led you away from the young, or occupied your attention long enough for them to be safely hidden; then she takes wing and leaves you.

The habit of hiding becomes so fixed with the young birds that they trust to it long after the wings have grown and they are able to escape by flight. Sometimes in the early autumn I have run the bow of my canoe almost over a full-grown bird, lying hidden in a clump of grass, before he sprang into the air and away. A month later, in the same place, the canoe could hardly approach within a quarter of a mile without his taking alarm.

Once they have learned to trust their wings, they give up hiding for swift flight. But they never forget their early training, and when wounded hide with a cunning that is remarkable. Unless one has a good

dog it is almost useless to look for a wounded duck, if there is any cover to be reached. Hiding under a bank, crawling into a muskrat hole, worming a way under a bunch of dead grass or pile of leaves, swimming around and around a clump of bushes just out of sight of his pursuer, diving and coming up behind a tuft of grass,—these are some of the ways by which I have known a black duck try to escape. Twice I have heard from old hunters of their finding a bird clinging to a bunch of grass under water, though I have never seen it. Once, from a blind, I saw a black duck swim ashore and disappear into a small clump of berry bushes. Karl, who was with me, ran over to get him, but after a half-hour's search gave it up. Then I tried, and gave it up also. An hour later we saw the bird come out of the very place where we had been searching, and enter the water. Karl ran out, shouting, and the bird hid in the bushes again. Again we hunted the clump over and over, but no duck could be seen. We were turning away a second time when Karl cried: "Look!"—and there, in plain sight, by the very white stone where I had seen him disappear, was the duck, or rather the red leg of a duck, sticking out of a tangle of black roots.

With the first sharp frost that threatens to ice over the ponds in which they have passed the summer, the inland birds betake themselves to the seacoast, where

there is more or less migration all winter. The great body of ducks moves slowly southward as the winter grows severe; but if food is plenty they winter all along the coast. It is then that they may be studied to the best advantage.

During the daytime they are stowed away in quiet little ponds and hiding places, or resting in large flocks on the shoals well out of reach of land and danger. When possible, they choose the former, because it gives them an abundance of fresh water, which is a daily necessity; and because, unlike the coots which are often found in great numbers on the same shoals, they dislike tossing about on the waves for any length of time. But late in the autumn they desert the ponds and are seldom seen there again until spring, even though the ponds are open. They are very shy about being frozen in or getting ice on their feathers, and prefer to get their fresh water at the mouths of creeks and springs.

With all their caution,—and they are very good weather prophets, knowing the times of tides and the approach of storms, as well as the days when fresh water freezes,—they sometimes get caught. Once I found a flock of five in great distress, frozen into the thin ice while sleeping, no doubt, with heads tucked under their wings. At another time I found a single bird floundering about with a big lump of

ice and mud attached to his tail. He had probably found the insects plentiful in some bit of soft mud at low tide, and stayed there too long with the thermometer at zero.

Night is their feeding time; on the seacoast they fly in to the feeding grounds just at dusk. Fog bewilders them, and no bird likes to fly in rain, because it makes the feathers heavy; so on foggy or rainy afternoons they come in early, or not at all. The favorite feeding ground is a salt marsh, with springs and creeks of brackish water. Seeds, roots, tender grasses, and snails and insects in the mud left by the low tide are their usual winter food. When these grow scarce they betake themselves to the mussel beds with the coots; their flesh in consequence becomes strong and fishy.

When the first birds come in to the feeding grounds before dark, they do it with the greatest caution, examining not only the little pond or creek, but the whole neighborhood before lighting. The birds that follow trust to the inspection of these first comers, and generally fly straight in. For this reason it is well for one who attempts to see them at this time to have live decoys and, if possible, to have his blind built several days in advance, in order that the birds which may have been feeding in the place shall see no unusual object when they come in. If the blind

be newly built, only the stranger birds will fly straight in to his decoys. Those that have been there before will either turn away in alarm, or else examine the blind very cautiously on all sides. If you know now how to wait and sit perfectly still, the birds will at last fly directly over the stand to look in. That is your only chance; and you must take it quickly if you expect to eat duck for dinner.

By moonlight one may sit on the bank in plain sight of his decoys, and watch the wild birds as long as he will. It is necessary only to sit perfectly still. But this is unsatisfactory; you can never see just what they are doing. Once I had thirty or forty close about me in this way. A sudden turn of my head, when a bat struck my cheek, sent them all off in a panic to the open ocean.

A curious thing frequently noticed about these birds as they come in at night is their power to make their wings noisy or almost silent at will. Sometimes the rustle is so slight that, unless the air is perfectly still, it is scarcely audible; at other times it is a strong *wish-wish* that can be heard two hundred yards away. The only theory I can suggest is that it is done as a kind of signal. In the daytime and on bright evenings one seldom hears it; on dark nights it is very frequent, and is always answered by the quacking of birds already on the feeding grounds, probably

to guide the incomers. How they do it is uncertain; it is probably in some such way as the night-hawk makes his curious booming sound,—not by means of his open mouth, as is generally supposed, but by slightly turning the wing quills so that the air sets them vibrating. One can test this, if he will, by blowing on any stiff feather.

On stormy days the birds, instead of resting on the shoals, light near some lonely part of the beach and, after watching carefully for an hour or two, to be sure that no danger is near, swim ashore and collect in great bunches in some sheltered spot under a bank. It is indeed a tempting sight to see perhaps a hundred of the splendid birds gathered close together on the shore, the greater part with heads tucked under their wings, fast asleep; but if you are to surprise them, you must turn snake and crawl, and learn patience. Scattered along the beach on either side are single birds or small bunches evidently acting as sentinels. The crows and gulls are flying continually along the tide line after food; and invariably as they pass over one of these bunches of ducks they rise in the air to look around over all the bank. You must be well hidden to escape those bright eyes. The ducks understand crow and gull talk perfectly, and trust largely to these friendly sentinels. The gulls scream and the crows caw all day

long, and not a duck takes his head from under his wing; but the instant either crow or gull utters his danger note every duck is in the air and headed straight off shore.

The constant watchfulness of black ducks is perhaps the most remarkable thing about them. When feeding at night in some lonely marsh, or hidden away by day deep in the heart of the swamps, they never for a moment seem to lay aside their alertness, nor trust to their hiding places alone for protection. Even when lying fast asleep among the grasses with heads tucked under their wings, there is a nervous vigilance in their very attitudes which suggests a sense of danger. Generally one has to content himself with studying them through a glass; but once I had a very good opportunity of watching them close at hand, of outwitting them, as it were, at their own game of hide-and-seek. It was in a grassy little pond, shut in by high hills, on the open moors of Nantucket. The pond was in the middle of a plain, perhaps a hundred yards from the nearest hill. No tree or rock or bush offered any concealment to an enemy; the ducks could sleep there as sure of detecting the approach of danger as if on the open ocean.

One autumn day I passed the place and, looking cautiously over the top of a hill, saw a single black duck swim out of the water-grass at the edge of the

pond. The fresh breeze in my face induced me to try to creep down close to the edge of the pond, to see if it were possible to surprise birds there, should I find any on my next hunting trip. Just below me, at the foot of the hill, was a swampy run leading toward the pond, with grass nearly a foot high growing along its edge. I must reach that if possible.

After a few minutes of watching, the duck went into the grass again, and I started to creep down the hill, keeping my eyes intently on the pond. Halfway down, another duck appeared, and I dropped flat on the hillside in plain sight. Of course the duck noticed the unusual object. There was a commotion in the grass; heads came up here and there. The next moment, to my great astonishment, fully fifty black ducks were swimming about in the greatest uneasiness.

I lay very still and watched. Five minutes passed; then quite suddenly all motion ceased in the pond; every duck sat with neck standing straight up from the water, looking directly at me. So still were they that one could easily have mistaken them for stumps or peat bogs. After a few minutes of this kind of watching they seemed satisfied, and glided back, a few at a time, into the grass.

When all were gone I rolled down the hill and gained the run, getting soaking wet as I splashed into it. Then it was easier to advance without being dis-

covered ; for whenever a duck came out to look round—which happened almost every minute at first—I could drop into the grass and be out of sight.

In half an hour I had gained the edge of a low bank, well covered by coarse water-grass. Carefully pushing this aside, I looked through, and almost held my breath, they were so near. Just below me, within six feet, was a big drake, with head drawn down so close to his body that I wondered what he had done with his neck. His eyes were closed ; he was fast asleep. In front of him were eight or ten more ducks close together, all with heads under their wings. Scattered about in the grass everywhere were small groups, sleeping, or pluming their glossy dark feathers.

Beside the pleasure of watching them, the first black ducks that I had ever seen unconscious, there was the satisfaction of thinking how completely they had been outwitted at their own game of sharp watching. How they would have jumped had they only known what was lying there in the grass so near their hiding place ! At first, every time I saw a pair of little black eyes wink, or a head come from under a wing, I felt myself shrinking close together in the thought that I was discovered ; but that wore off after a time, when I found that the eyes winked rather sleepily, and the necks were taken out just to stretch them, much as one would take a comfortable yawn.

Once I was caught squarely, but the grass and my being so near saved me. I had raised my head and lay with chin in my hands, deeply interested in watching a young duck making a most elaborate toilet, when from the other side an old bird shot

suddenly into the open water and saw me as I dropped out of sight. There was a low, sharp quack which brought every duck out of his hiding, wide awake on the instant. At first they all bunched together at the farther side, looking straight at the bank where I lay. Probably they saw my feet, which were outside the covert as I lay full length. Then they drew gradually nearer till they were again within the fringe

of water-grass. Some of them sat quite up on their tails by a vigorous use of their wings, and stretched their necks to look over the low bank. Just keeping still saved me. In five minutes they were quiet again; even the young duck seemed to have forgotten her vanity and gone to sleep with the others.

Two or three hours I lay thus and watched them through the grass, spying very rudely, no doubt, into the seclusion of their home life. As the long shadow of the western hill stretched across the pool till it darkened the eastern bank, the ducks awoke one by one from their nap, and began to stir about in preparation for departure. Soon they were collected at the center of the open water, where they sat for a moment very still, heads up, and ready. If there was any signal given I did not hear it. At the same moment each pair of wings struck the water with a sharp splash, and they shot straight up in that remarkable way of theirs, as if thrown by a strong spring. An instant they seemed to hang motionless in the air high above the water, then they turned and disappeared swiftly over the eastern hill toward the marshes.

V. AN ORIOLE'S NEST.

HOW suggestive it is, swinging there through sunlight and shadow from the long drooping tips of the old elm boughs! And what a delightful cradle for the young orioles, swayed all day long by every breath of the summer breeze, peeping through chinks as the world sweeps by, watching with bright eyes the boy below who looks up in vain, or the mountain of hay that brushes them in passing, and whistling cheerily, blow high or low, with never a fear of falling! The mother bird must feel very comfortable about it as she goes off caterpillar hunting, for no bird enemy can trouble the little ones while she is gone. The black snake, that horror of all low-nesting birds, will never climb so high. The red squirrel — little wretch that he is, to eat young birds when he has still a bushel of corn and nuts in his old wall — cannot find a footing on those delicate branches. Neither can the crow find a resting place from which to steal the young; and the hawk's legs are not long enough to reach down

and grasp them, should he perchance venture near the house and hover an instant over the nest.

Besides all this, the oriole is a neighborly little body; and that helps her. Though the young are kept from harm anywhere by the cunning instinct which builds a hanging nest, she still prefers to build near the house, where hawks and crows and owls rarely come. She knows her friends and takes advantage of their protection, returning year after year to the same old elm, and, like a thrifty little housewife, carefully saving and sorting the good threads of her storm-wrecked old house to be used in building the new.

Of late years, however, it has seemed to me that the pretty nests on the secluded streets of New England towns are growing scarcer. The orioles are peace-loving birds, and dislike the society of those noisy, pugnacious little rascals, the English sparrows, which have of late taken possession of our streets. Often now I find the nests far away from any house, on lonely roads where a few years ago they were rarely seen. Sometimes also a solitary farmhouse, too far from the town to be much visited by sparrows, has two or three nests swinging about it in its old elms, where formerly there was but one.

It is an interesting evidence of the bird's keen instinct that where nests are built on lonely roads

and away from houses they are noticeably deeper, and so better protected from bird enemies. The same thing is sometimes noticed of nests built in maple or apple trees, which are without the protection of drooping branches, upon which birds of prey can find no footing. Some wise birds secure the same protection by simply contracting the neck of the nest, instead of building a deep one. Young birds building their first nests seem afraid to trust in the strength of their own weaving. Their nests are invariably shallow, and so suffer most from birds of prey.

In the choice of building material the birds are very careful. They know well that no branch supports the nest from beneath; that the safety of the young orioles depends on good, strong material well woven together. In some wise way they seem to know at a glance whether a thread is strong enough to be trusted; but sometimes, in selecting the first threads that are to bear the whole weight of the nest, they are unwilling to trust to appearances. At such times a pair of birds may be seen holding a little tug-of-war, with feet braced, shaking and pulling the thread like a pair of terriers, till it is well tested.

It is in gathering and testing the materials for a nest that the orioles display no little ingenuity. One day, a few years ago, I was lying under some shrubs, watching a pair of the birds that were building close

to the house. It was a typical nest-making day, the sun pouring his bright rays through delicate green leaves and a glory of white apple blossoms, the air filled with warmth and fragrance, birds and bees busy everywhere. Orioles seem always happy; to-day they quite overflowed in the midst of all the brightness, though materials were scarce and they must needs be diligent.

The female was very industrious, never returning to the nest without some contribution, while the male frolicked about the trees in his brilliant orange and black, whistling his warm rich notes, and seeming like a dash of southern sunshine amidst the blossoms. Sometimes he stopped in his frolic to find a bit of string, over which he raised an impromptu *jubilate*, or to fly with his mate to the nest, uttering that soft rich twitter of his in a mixture of blarney and congratulation whenever she found some particularly choice material. But his chief part seemed to be to furnish the celebration, while she took care of the nest-making.

Out in front of me, under the lee of the old wall whither some line-stripping gale had blown it, was a torn fragment of cloth with loose threads showing everywhere. I was wondering why the birds did not utilize it, when the male, in one of his lively flights, discovered it and flew down. First he hopped all

around it; next he tried some threads; but, as the cloth was lying loose on the grass, the whole piece came whenever he pulled. For a few moments he worked diligently, trying a pull on each side in succession. Once he tumbled end over end in a comical scramble, as the fragment caught on a grass stub but gave way when he had braced himself and was pulling hardest. Quite abruptly he flew off, and I thought he had given up the attempt.

In a minute he was back with his mate, thinking, no doubt, that she, as a capable little manager, would know all about such things. If birds do not talk, they have at least some very ingenious ways of letting one another know what they think, which amounts to the same thing.

The two worked together for some minutes, getting an occasional thread, but not enough to pay for the labor. The trouble was that both pulled together on the same side; and so they merely dragged the bit of cloth all over the lawn, instead of pulling out the threads they wanted. Once they unraveled a long thread by pulling at right angles, but the next moment they were together on the same side again. The male seemed to do, not as he was told, but exactly what he saw his mate do. Whenever she pulled at a thread, he hopped around, as close to her as he could get, and pulled too.

Twice they had given up the attempt, only to return after hunting diligently elsewhere. Good material was

scarce that season. I was wondering how long their patience would last, when the female suddenly seized the cloth by a corner and flew along close to the

ground, dragging it after her, chirping loudly the while. She disappeared into a crab-apple tree in a corner of the garden, whither the male followed her a moment later.

Curious as to what they were doing, yet fearing to disturb them, I waited where I was till I saw both birds fly to the nest, each with some long threads. This was repeated; and then curiosity got the better of consideration. While the orioles were weaving the last threads into their nest, I ran round the house, crept a long way behind the old wall, and so to a safe hiding place near the crab-apple.

The orioles had solved their problem; the bit of cloth was fastened there securely among the thorns. Soon the birds came back and, seizing some threads by the ends, raveled them out without difficulty. It was the work of but a moment to gather as much material as they could use at one weaving. For an hour or more I watched them working industriously between the crab-apple and the old elm, where the nest was growing rapidly to a beautiful depth. Several times the bit of cloth slipped from the thorns as the birds pulled upon it; but as often as it did they carried it back and fastened it more securely, till at last it grew so snarled that they could get no more long threads, when they left it for good.

That same day I carried out some bright-colored

bits of worsted and ribbon, and scattered them on the grass. The birds soon found them and used them in completing their nest. For a while a gayer little dwelling was never seen in a tree. The bright bits of color in the soft gray of the walls gave the nest always a holiday appearance, in good keeping with the high spirits of the orioles. But by the time the young had chipped the shell, and the joyousness of nest-building had given place to the constant duties of filling hungry little mouths, the rains and the sun of summer had bleached the bright colors to a uniform sober gray.

That was a happy family from beginning to end. No accident ever befell it; no enemy disturbed its peace. And when the young birds had flown away to the South, I took down the nest which I had helped to build, and hung it in my study as a souvenir of my bright little neighbors.

VI. THE BUILDERS.

CURIOUS bit of wild life came to me at dusk one day in the wilderness. It was midwinter, and the snow lay deep.

I was sitting alone on a fallen tree, waiting for the moon to rise so that I could follow the faint snowshoe track across a barren, three miles, then through a mile of forest to another trail that led to camp. I had followed a caribou too far that day, and this was the result—feeling along my own track by moonlight, with the thermometer sinking rapidly to the twenty-below-zero point.

There is scarcely any twilight in the woods; in ten minutes it would be quite dark; and I was wishing that I had blankets and an axe, so that I could camp where I was, when a big gray shadow came stealing towards me through the trees. It was a Canada lynx. My fingers gripped the rifle hard, and the right mitten seemed to slip off of itself as I caught the glare of his fierce yellow eyes.

But the eyes were not looking at me at all. Indeed, he had not noticed me. He was stealing along, crouched low in the snow, his ears back, his stub tail twitching nervously, his whole attention fixed tensely on something beyond me out on the barren. I wanted his beautiful skin; but I wanted more to find out what he was after; so I kept still and watched.

At the edge of the barren he crouched under a dwarf spruce, settled himself deeper in the snow by a wriggle or two till his feet were well under him and his balance perfect, and the red fire blazed in his eyes and his big muscles quivered. Then he hurled himself forward—one, two, a dozen mighty bounds through flying snow, and he landed with a screech on the dome of a beaver house. There he jumped about, shaking an imaginary beaver like a fury, and gave another screech that made one's spine tingle. That over, he stood very still, looking off over the beaver roofs that dotted the shore of a little pond there. The blaze died out of his eyes; a different look crept into them. He put his nose down to a tiny hole in the mound, the beavers' ventilator, and took a long sniff, while his whole body seemed to distend with the warm rich odor that poured up into his hungry nostrils. Then he rolled his head sadly, and went away.

Now all that was pure acting. A lynx likes beaver meat better than anything else; and this fellow had

caught some of the colony, no doubt, in the well-fed autumn days, as they worked on their dam and houses. Sharp hunger made him remember them as he came through the wood on his nightly hunt after hares. He knew well that the beavers were safe; that months of intense cold had made their two-foot mud walls like granite. But he came, nevertheless, just to pretend he had caught one, and to remember how good his last full meal smelled when he ate it in October.

It was all so boylike, so unexpected there in the heart of the wilderness, that I quite forgot that I wanted the lynx's skin. I was hungry too, and went out for a sniff at the ventilator; and it smelled good. I remembered the time once when I had eaten beaver, and was glad to get it. I walked about among the houses. On every dome there were lynx tracks, old and new, and the prints of a blunt nose in the snow. Evidently he came often to dine on the smell of good dinners. I looked the way he had gone, and began to be sorry for him. But there were the beavers, safe and warm and fearless within two feet of me, listening undoubtedly to the strange steps without. And that was good; for they are the most interesting creatures in all the wilderness.

Most of us know the beaver chiefly in a simile. "Working like a beaver," or "busy as a beaver," is

one of those proverbial expressions that people accept without comment or curiosity. It is about one-third true, which is a generous proportion of truth for a proverb. In winter, for five long months at least, he does nothing but sleep and eat and keep warm. "Lazy as a beaver" is then a good figure. And summer time—ah! that's just one long holiday, and the beavers are jolly as grigs, with never a thought of work from morning till night. When the snow is gone, and the streams are clear, and the twitter of bird songs meets the beaver's ear as he rises from the dark passage under water that leads to his house, then he forgets all settled habits and joins in the general heyday of nature. The well built house that sheltered him from storm and cold, and defied even the wolverine to dig its owner out, is deserted for any otter's den or chance hole in the bank where he may sleep away the sunlight in peace. The great dam, upon which he toiled so many nights, is left to the mercy of the freshet or the canoeman's axe; and no plash of falling water through a break—that sound which in autumn or winter brings the beaver like a flash—will trouble his wise little head for a moment.

All the long summer he belongs to the tribe of Ishmael, wandering through lakes and streams wherever fancy leads him. It is as if he were bound to see the world after being cooped up in his narrow

quarters all winter. Even the strong family ties, one of the most characteristic and interesting things in beaver life, are for the time loosened. Every family group when it breaks up housekeeping in the spring represents five generations. First, there are the two old beavers, heads of the family and absolute rulers, who first engineered the big dam and houses, and have directed repairs for nobody knows how long. Next in importance are the baby beavers, no bigger than musquashes, with fur like silk velvet, and eyes always wide open at the wonders of the first season out; then the one- and two-year-olds, frisky as boys let loose from school, always in mischief and having to be looked after, and occasionally nipped; then the three-year-olds, who presently leave the group and go their separate happy ways in search of mates. So the long days go by in a kind of careless summer excursion; and when one sometimes finds their camping ground in his own summer roving through the wilderness, he looks upon it with curious sympathy. Fellow campers are they, pitching their tents by sunny lakes and alder-fringed, trout-haunted brooks, always close to Nature's heart, and loving the wild, free life much as he does himself.

But when the days grow short and chill, and the twitter of warblers gives place to the *honk* of passing geese, and wild ducks gather in the lakes, then the

heart of the beaver goes back to his home; and presently he follows his heart. September finds them gathered about the old dam again, the older heads filled with plans of repair and new houses and winter food and many other things. The grown-up males have brought their mates back to the old home; the females have found their places in other family groups. It is then that the beaver begins to be busy.

His first concern is for a stout dam across the stream that will give him a good-sized pond and plenty of deep water. To understand this, one must remember that the beaver intends to shut himself in a kind of prison all winter. He knows well that he is not safe on land a moment after the snow falls; that some prowling lucivee or wolverine would find his tracks and follow him, and that his escape to water would be cut off by thick ice. So he plans a big claw-proof house with no entrance save a tunnel in the middle, which leads through the bank to the bottom of his artificial pond. Once this is frozen over, he cannot get out till the spring sun sets him free. But he likes a big pond, that he may exercise a bit under water when he comes down for his dinner; and a deep pond, that he may feel sure the hardest winter will never freeze down to his doorway and shut him in. Still more important, the beaver's food is stored on the bottom; and it would never do to trust

it to shallow water, else some severe winter it would get frozen into the ice, and the beavers starve in their prison. Ten to fifteen feet usually satisfies their instinct for safety; but to get that depth of water, especially on shallow streams, requires a huge dam and an enormous amount of work, to say nothing of planning.

Beaver dams are solid structures always, built up of logs, brush, stones, and driftwood, well knit together by alder poles. One summer, in canoeing a wild, unknown stream, I met fourteen dams within a space of five miles. Through two of these my Indian and I broke a passage with our axes; the others were so solid that it was easier to unload our canoe and make a portage than to break through. Dams are found close together like that when a beaver colony has occupied a stream for years unmolested. The food-wood above the first dam being cut off, they move down stream; for the beaver always cuts on the banks above his dam, and lets the current work for him in transportation. Sometimes, when the banks are such that a pond cannot be made, three or four dams will be built close together, the back-water of one reaching up to the one above, like a series of locks on a canal. This is to keep the colony together, and yet give room for play and storage.

There is the greatest difference of opinion as to the

intelligence displayed by the beavers in choosing a site for their dam, one observer claiming skill, ingenuity, even reason for the beavers; another claiming a mere instinctive haphazard piling together of materials anywhere in the stream. I have seen perhaps a hundred different dams in the wilderness, nearly all of which were well placed. Occasionally I have found one that looked like a stupid piece of work — two or three hundred feet of alder brush and gravel across the widest part of a stream, when, by building just above or below, a dam one-fourth the length might have given them better water. This must be said, however, for the builders, that perhaps they found a better soil for digging their tunnels, or a more convenient spot for their houses near their own dam; or that they knew what they wanted better than their critic did. I think undoubtedly the young beavers often make mistakes, but I think also, from studying a good many dams, that they profit by disaster, and build better; and that on the whole their mistakes are not proportionally greater than those of human builders.

Sometimes a dam proves a very white elephant on their hands. The site is not well chosen, or the stream difficult, and the restrained water pours round the ends of their dam, cutting them away. They build the dam longer at once; but again the water pours

round on its work of destruction. So they keep on building, an interminable structure, till the frosts come, and they must cut their wood and tumble their houses together in a desperate hurry to be ready when the ice closes over them.

But on alder streams, where the current is sluggish and the soil soft, one sometimes finds a wonderfully ingenious device for remedying the above difficulty. When the dam is built, and the water deep enough for safety, the beavers dig a canal around one end of the dam to carry off the surplus water. I know of nothing in all the woods and fields that brings one closer in thought and sympathy to the little wild folk than to come across one of these canals, the water pouring safely through it past the beaver's handiwork, the dam stretching straight and solid across the stream, and the domed houses rising beyond.

Once I found where the beavers had utilized man's work. A huge log dam had been built on a wilderness stream to secure a head of water for driving logs from the lumber woods. When the pines and fourteen-inch spruce were all gone, the works were abandoned, and the dam left—with the gates open, of course. A pair of young beavers, prospecting for a winter home, found the place and were suited exactly. They rolled a sunken log across the gates for a foundation, filled them up with alder bushes and stones,

and the work was done. When I found the place they had a pond a mile wide to play in. Their house was in a beautiful spot, under a big hemlock; and their doorway slanted off into twenty feet of water. That site was certainly well chosen.

Another dam that I found one winter when caribou-hunting was wonderfully well placed. No engineer could have chosen better. It was made by the same colony the lynx was after, and just below where he went through his pantomime for my benefit; his tracks were there too. The barrens of which I spoke are treeless plains in the northern forest, the beds of ancient shallow lakes. The beavers found one with a stream running through it; followed the stream down to the foot of the barren, where two wooded points came out from either side and almost met. Here was formerly the outlet; and here the beavers built their dam, and so made the old lake over again. It must be a wonderfully fine place in summer—two or three thousand acres of playground, full of cranberries and luscious roots. In winter it is too shallow to be of much use, save for a few acres about the beavers' doorways.

There are three ways of dam-building in general use among the beavers. The first is for use on sluggish, alder-fringed streams, where they can build up from the bottom. Two or three sunken logs form

the foundation, which is from three to five feet broad. Sticks, driftwood, and stout poles, which the beavers cut on the banks, are piled on this and weighted with stones and mud. The stones are rolled in from the bank or moved considerable distances under water. The mud is carried in the beaver's paws, which he holds up against his chin so as to carry a big handful without spilling. Beavers love such streams, with their alder shade and sweet grasses and fringe of wild meadow, better than all other places. And, by the way, most of the natural meadows and half the ponds of New England were made by beavers. If you go to the foot of any little meadow in the woods and dig at the lower end, where the stream goes out, you will find, sometimes ten feet under the surface, the remains of the first dam that formed the meadow when the water flowed back and killed the trees.

The second kind of dam is for swift streams. Stout, ten-foot brush is the chief material. The brush is floated down to the spot selected; the tops are weighted down with stones, and the butts left free, pointing down stream. Such dams must be built out from the sides, of course. They are generally arched, the convex side being up stream so as to make a stronger structure. When the arch closes in the middle, the lower side of the dam is banked heavily with earth and stones. That is shrewd policy on the bea-

ver's part; for once the arch is closed by brush, the current can no longer sweep away the earth and stones used for the embankment.

The third kind is the strongest and easiest to build. It is for places where big trees lean out over the stream. Three or four beavers gather about a tree and begin to cut, sitting up on their broad tails. One stands above them on the bank, apparently directing the work. In a short time the tree is nearly cut through from the under side. Then the beaver above begins to cut down carefully. With the first warning crack he jumps aside, and the tree falls straight across where it is wanted. All the beavers then disappear and begin cutting the branches that rest on the bottom. Slowly the tree settles till its trunk is at the right height to make the top of the dam. The upper branches are then trimmed close to the trunk, and are woven with alders among the long stubs sticking down from the trunk into the river bed. Stones, mud, and brush are used liberally to fill the chinks, and in a remarkably short time the dam is complete.

When you meet such a dam on the stream you are canoeing don't attempt to break through. You will find it shorter by several hours to unload and make a carry.

All the beaver's cutting is done by chisel-edged front teeth. There are two of these in each jaw, extending a good inch and a half outside the gums,

and meeting at a sharp bevel. The inner sides of the teeth are softer and wear away faster than the outer, so that the bevel remains the same; and the action of the upper and lower teeth over each other keeps them always sharp. They grow so rapidly that a beaver must be constantly wood cutting to keep them worn down to comfortable size.

Often on wild streams you find a stick floating down to meet you showing a fresh cut. You grab it, of course, and say: "Somebody is camped above here. That stick has just been cut with a sharp knife." But look closer; see that faint ridge the whole length of the cut, as if the knife had a tiny gap in its edge. That is where the beaver's two upper teeth meet, and the edge is not quite perfect. He cut that stick, thicker than a man's thumb, at a single bite. To cut an alder having the diameter of a teacup is the work of a minute for the same tools; and a towering birch tree falls in a remarkably short time when attacked by three or four beavers. Around the stump of such a tree you find a pile of two-inch chips, thick, white, clean cut, and arched to the curve of the beaver's teeth. Judge the workman by his chips, and this is a good workman.

When the dam is built the beaver cuts his winter food-wood. A colony of the creatures will often fell a whole grove of young birch or poplar on the bank

above the dam. The branches with the best bark are then cut into short lengths, which are rolled down the bank and floated to the pool at the dam.

Considerable discussion has taken place as to how the beaver sinks his wood—for of course he must sink it, else it would freeze into the ice and be useless. One theory is that the beavers suck the air from each stick. Two witnesses declare to me they have seen them doing it; and in a natural history book of my childhood there is a picture of a beaver with the end of a three-foot stick in his mouth, sucking the air out. Just as if the beavers did n't know better, even if the absurd thing were possible! The simplest way is to cut the wood early and leave it in the water a while, when it sinks of itself; for green birch and poplar are almost as heavy as water. They soon get waterlogged and go to the bottom. It is almost impossible for lumbermen to drive spool wood (birch) for this reason. If the nights grow suddenly cold before the wood sinks, the beavers take it down to the bottom and press it slightly into the mud; or else they push sticks under those that float against the dam, and more under these; and so on till the stream is full to the bottom, the weight of those above keeping the others down. Much of the wood is lost in this way by being frozen into the ice; but the beaver knows that, and cuts plenty.

When a beaver is hungry in winter he comes down under the ice, selects a stick, carries it up into his house, and eats the bark. Then he carries the peeled stick back under the ice and puts it aside out of the way.

Once, in winter, it occurred to me that soaking spoiled the flavor of bark, and that the beavers might like a fresh bite. So I cut a hole in the ice on the pool above their dam. Of course the chopping scared the beavers; it was vain to experiment that day. I spread a blanket and some thick boughs over the hole to keep it from freezing over too thickly, and went away.

Next day I pushed the end of a freshly cut birch pole down among the beavers' store, lay down with my face to the hole after carefully cutting out the thin ice, drew a big blanket round my head and the projecting end of the pole to shut out the light, and watched. For a while it was all dark as a pocket; then I began to see things dimly. Presently a darker shadow shot along the bottom and grabbed the pole. It was a beaver, with a twenty dollar coat on. He tugged; I held on tight—which surprised him so that he went back into his house to catch breath.

But the taste of fresh bark was in his mouth, and soon he was back with another beaver. Both took hold this time and pulled together. No use! They

began to swim round, examining the queer pole on every side. "What kind of a stick are you, anyway?" one was thinking. "You did n't grow here, because I would have found you long ago." "And you're not frozen into the ice," said the other, "because you wriggle." Then they both took hold again, and I began to haul up carefully. I wanted to see them nearer. That surprised them immensely; but I think they would have held on only for an accident. The blanket slipped away; a stream of light shot in; there were two great whirls in the water; and that was the end of the experiment. They did not come back, though I waited till I was almost frozen. But I cut some fresh birch and pushed it under the ice to pay for my share in the entertainment.

The beaver's house is generally the last thing attended to. He likes to build this when the nights grow cold enough to freeze his mortar soon after it is laid. Two or three tunnels are dug from the bottom of the beaver pond up through the bank, coming to the surface together at the point where the center of the house is to be. Around this he lays solid foundations of log and stone in a circle from six to fifteen feet in diameter, according to the number of beavers to occupy the house. On these foundations he rears a thick mass of sticks and grass, which are held together by plenty of mud. The top

is roofed by stout sticks arranged as in an Indian wigwam, and the whole domed over with grass, stones, sticks, and mud. Once this is solidly frozen, the beaver sleeps in peace; his house is burglar proof.

If on a lake shore, where the rise of water is never great, the beaver's house is four or five feet high. On streams subject to freshets they may be two or three times that height. As in the case of the musquash (or muskrat), a strange instinct guides the beaver as to the height of his dwelling. He builds high or low, according to his expectations of high or low water; and he is rarely drowned out of his dry nest.

Sometimes two or three families unite to build a single large house, but always in such cases each family has its separate apartment. When a house is dug open it is evident from the different impressions that each member of the family has his own bed, which he always occupies. Beavers are exemplary in their neatness; the house after five months' use is as neat as when first made.

All their building is primarily a matter of instinct, for a tame beaver builds miniature dams and houses on the floor of his cage. Still it is not an uncontrollable instinct like that of most birds; nor blind, like that of rats and squirrels at times. I have found beaver houses on lake shores where no dam was

built, simply because the water was deep enough, and none was needed. In vacation time the young beavers build for fun, just as boys build a dam wherever they can find running water. I am persuaded also (and this may explain some of the dams that

seem stupidly placed) that at times the old beavers set the young to work in summer, in order that they may know how to build when it becomes necessary. This is a hard theory to prove, for the beavers work by night, preferably on dark, rainy nights, when they are safest on land to gather materials. But while building is instinctive, skilful building is the result

of practice and experience. And some of the beaver dams show wonderful skill.

There is one beaver that never builds, that never troubles himself about house, or dam, or winter's store. I am not sure whether we ought to call him the genius or the lazy man of the family. The bank beaver is a solitary old bachelor living in a den, like a mink, in the bank of a stream. He does not build a house, because a den under a cedar's roots is as safe and warm. He never builds a dam, because there are deep places in the river where the current is too swift to freeze. He finds tender twigs much juicier, even in winter, than stale bark stored under water. As for his telltale tracks in the snow, his wits must guard him against enemies; and there is the open stretch of river to flee to.

There are two theories among Indians and trappers to account for the bank beaver's eccentricities. The first is that he has failed to find a mate and leaves the colony, or is driven out, to lead a lonely bachelor life. His conduct during the mating season certainly favors this theory, for never was anybody more diligent in his search for a wife than he. Up and down the streams and alder brooks of a whole wild countryside he wanders without rest, stopping here and there on a grassy point to gather a little handful of mud, like a child's mud pie, all patted smooth, in the midst

of which is a little strong smelling musk. When you find that sign, in a circle of carefully trimmed grass under the alders, you know that there is a young beaver on that stream looking for a wife. And when the young beaver finds his pie opened and closed again, he knows that there is a mate there somewhere waiting for him. But the poor bank beaver never finds his mate, and the next winter must go back to his solitary den. He is much more easily caught than other beavers, and the trappers say it is because he is lonely and tired of life.

The second theory is that generally held by Indians. They say the bank beaver is lazy and refuses to work with the others; so they drive him out. When beavers are busy they are very busy, and tolerate no loafing. Perhaps he even tries to persuade them that all their work is unnecessary, and so shares the fate of reformers in general.

While examining the den of a bank beaver last summer another theory suggested itself. Is not this one of the rare animals in which all the instincts of his kind are lacking? He does not build because he has no impulse to build; he does not know how. So he represents what the beaver was, thousands of years ago, before he learned how to construct his dam and house, reappearing now by some strange freak of heredity, and finding himself wofully out of

place and time. The other beavers drive him away because all gregarious animals and birds have a strong fear and dislike of any irregularity in their kind. Even when the peculiarity is slight — a wound, or a deformity — they drive the poor victim from their midst remorselessly. It is a cruel instinct, but part of one of the oldest in creation, the instinct which preserves the species. This explains why the bank beaver never finds a mate; none of the beavers will have anything to do with him.

This occasional lack of instinct is not peculiar to the beavers. Now and then a bird is hatched here in the North that has no impulse to migrate. He cries after his departing comrades, but never follows. So he remains and is lost in the storms of winter.

There are few creatures in the wilderness more difficult to observe than the beavers, both on account of their extreme shyness and because they work only by night. The best way to get a glimpse of them at work is to make a break in their dam and pull the top from one of their houses some autumn afternoon, at the time of full moon. Just before twilight you must steal back and hide some distance from the dam. Even then the chances are against you, for the beavers are suspicious, keen of ear and nose, and generally refuse to show themselves till after the moon sets or you have gone away. You may have

to break their dam half a dozen times, and freeze as often, before you see it repaired.

It is a most interesting sight when it comes at last, and well repays the watching. The water is pouring through a five-foot break in the dam; the roof of a house is in ruins. You have rubbed yourself all over with fir boughs, to destroy some of the scent in your clothes, and hidden yourself in the top of a fallen tree. The twilight goes; the moon wheels over the eastern spruces, flooding the river with silver light. Still no sign of life. You are beginning to think of another disappointment; to think your toes cannot stand the cold another minute without stamping, which would spoil everything, when a ripple shoots swiftly across the pool, and a big beaver comes out on the bank. He sits up a moment, looking, listening; then goes to the broken house and sits up again, looking it all over, estimating damages, making plans. There is a commotion in the water; three others join him—you are warm now.

Meanwhile three or four more are swimming about the dam, surveying the damage there. One dives to the bottom, but comes up in a moment to report all safe below. Another is tugging at a thick pole just below you. Slowly he tows it out in front, balances a moment and lets it go—*good!*—squarely across the break. Two others are cutting alders above;

and here come the bushes floating down. Over at the damaged house two beavers are up on the walls, raising the rafters into place; a third appears to be laying on the outer covering and plastering it with mud. Now and then one sits up straight like a rabbit, listens, stretches his back to get the kinks out, then drops to his work again.

It is brighter now; moon and stars are glimmering in the pool. At the dam the sound of falling water grows faint as the break is rapidly closed. The houses loom larger. Over the dome of the one broken, the dark outline of a beaver passes triumphantly. Quick work that. You grow more interested; you stretch your neck to see—*splash!* A beaver gliding past has seen you. As he dives he gives the water a sharp blow with his broad tail, the danger signal of the beavers, and a startling one in the dead stillness. There is a sound as of a stick being plunged end first into the water; a few eddies go running about the pool, breaking up the moon's reflection; then silence again, and the lap of ripples on the shore.

You can go home now; you will see nothing more to-night. There's a beaver over under the other bank, in the shadow where you cannot see him, just his eyes and ears above water, watching you. He will not stir; nor will another beaver come out till you

go away. As you find your canoe and paddle back to camp, a ripple made by a beaver's nose follows silently in the shadow of the alders. At the bend of the river where you disappear, the ripple halts a while, like a projecting stub in the current, then turns and goes swiftly back. There is another splash; the builders come out again; a dozen ripples are scattering star reflections all over the pool; while the little wood folk pause a moment to look at the new works curiously, then go their ways, shy, silent, industrious, through the wilderness night.

VII. CROW-WAYS.

THE crow is very much of a rascal—that is, if any creature can be called a rascal for following out natural and rascally inclinations. I first came to this conclusion one early morning, several years ago, as I watched an old crow diligently exploring a fringe of bushes that grew along the wall of a deserted pasture. He had eaten a clutch of thrush's eggs, and carried off three young sparrows to feed his own young, before I found out what he was about. Since then I have surprised him often at the same depredations.

An old farmer has assured me that he has also caught him tormenting his sheep, lighting on their backs and pulling the wool out by the roots to get fleece for lining his nest. This is a much more serious charge than that of pulling up corn, though the latter makes almost every farmer his enemy.

Yet with all his rascality he has many curious and interesting ways. In fact, I hardly know another bird that so well repays a season's study; only one must

be very patient, and put up with frequent disappointments if he would learn much of a crow's peculiarities by personal observation. How shy he is ! How cunning and quick to learn wisdom ! Yet he is very easily fooled ; and some experiences that ought to teach him wisdom he seems to forget within an hour. Almost every time I went shooting, in the old barbarian days before I learned better, I used to get one or two crows from a flock that ranged over my hunting ground by simply hiding among the pines and calling like a young crow. If the flock was within hearing, it was astonishing to hear the loud chorus of *haw-haws*, and to see them come rushing over the same grove where a week before they had been fooled in the same way. Sometimes, indeed, they seemed to remember ; and when the pseudo young crow began his racket at the bottom of some thick grove they would collect on a distant pine tree and *haw-haw* in vigorous answer. But curiosity always got the better of them, and they generally compromised by sending over some swift, long-winged old flier, only to see him go tumbling down at the report of a gun ; and away they would go, screaming at the top of their voices, and never stopping till they were miles away. Next week they would do exactly the same thing.

Crows, more than any other birds, are fond of excitement and great crowds ; the slightest unusual object

furnishes an occasion for an assembly. A wounded bird will create as much stir in a flock of crows as a railroad accident does in a village. But when some prowling old crow discovers an owl sleeping away the sunlight in the top of a great hemlock, his delight and excitement know no bounds. There is a suppressed frenzy in his very call that every crow in the neighborhood understands. *Come! come! everybody come!* he seems to be screaming as he circles over the tree-top; and within two minutes there are more crows gathered about that old hemlock than one would believe existed within miles of the place. I counted over seventy one day, immediately about a tree in which one of them had found an owl; and I think there must have been as many more flying about the outskirts that I could not count.

At such times one can approach very near with a little caution, and attend, as it were, a crow caucus. Though I have attended a great many, I have never been able to find any real cause for the excitement. Those nearest the owl sit about in the trees cawing vociferously; not a crow is silent. Those on the outskirts are flying rapidly about and making, if possible, more noise than the inner ring. The owl meanwhile sits blinking and staring, out of sight in the green top. Every moment two or three crows leave the ring to fly up close and peep in, and then go

screaming back again, hopping about on their perches, cawing at every breath, nodding their heads, striking the branches, and acting for all the world like excited stump speakers.

The din grows louder and louder; fresh voices are coming in every minute; and the owl, wondering in some vague way if he is the cause of it all, flies off to some other tree where he can be quiet and go to sleep. Then, with a great rush and clatter, the crows follow, some swift old scout keeping close to the owl and screaming all the way to guide the whole cawing rabble. When the owl stops they gather round again and go through the same performance more excitedly than before. So it continues till the owl finds some hollow tree and goes in out of sight, leaving them to caw themselves tired; or else he finds some dense pine grove, and doubles about here and there, with that shadowy noiseless flight of his, till he has thrown them off the track. Then he flies into the thickest tree he can find, generally outside the grove where the crows are looking, and sitting close up against the trunk blinks his great yellow eyes and listens to the racket that goes sweeping through the grove, peering curiously into every thick pine, searching everywhere for the lost excitement.

The crows give him up reluctantly. They circle for a few minutes over the grove, rising and falling

with that beautiful, regular motion that seems like the practice drill of all gregarious birds, and generally end by collecting in some tree at a distance and *hawing* about it for hours, till some new excitement calls them elsewhere.

Just why they grow so excited over an owl is an open question. I have never seen them molest him, nor show any tendency other than to stare at him occasionally and make a great noise about it. That they recognize him as a thief and cannibal I have no doubt. But he thieves by night when other birds are abed, and as they practise their own thieving by open daylight, it may be that they are denouncing him as an impostor. Or it may be that the owl in his nightly prowlings sometimes snatches a young crow off the roost. The great horned owl would hardly hesitate to eat an old crow if he could catch him napping; and so they grow excited, as all birds do in the presence of their natural enemies. They make much the same kind of a fuss over a hawk, though the latter easily escapes the annoyance by flying swiftly away, or by circling slowly upward to a height so dizzy that the crows dare not follow.

In the early spring I have utilized this habit of the crows in my search for owls' nests. The crows are much more apt to discover its whereabouts than the most careful ornithologist, and they gather about it

frequently for a little excitement. Once I utilized the habit for getting a good look at the crows themselves. I carried out an old stuffed owl, and set it up on a pole close against a great pine tree on the edge of a grove. Then I lay down in a thick clump of bushes near by and *cawed* excitedly. The first messenger from the flock flew straight over without making any discoveries. The second one found the owl, and I had no need for further calling. *Haw! haw!* he cried deep down in his throat — *here he is! here's the rascal!* In a moment he had the whole flock there; and for nearly ten minutes they kept coming in from every direction. A more frenzied lot I never saw. The *hawing* was tremendous, and I hoped to settle at last the real cause and outcome of the excitement, when an old crow flying close over my hiding place caught sight of me looking out through the bushes. How he made himself heard or understood in the din I do not know; but the crow is never too excited to heed a danger note. The next moment the whole flock were streaming away across the woods, giving the scatter-cry at every flap.

There is another way in which the crows' love of variety is manifest, though in a much more dignified way. Occasionally a flock may be surprised sitting about in the trees, deeply absorbed in watching a performance — generally operatic — by one of their num-

ber. The crow's chief note is the hoarse *haw, haw* with which everybody is familiar, and which seems capable of expressing everything, from the soft chatter of going to bed in the pine tops to the loud derision with which he detects all ordinary attempts to surprise him. Certain crows, however, have unusual vocal abilities, and at times they seem to use them for the entertainment of the others. Yet I suspect that these vocal gifts are seldom used, or even discovered, until lack of amusement throws them upon their own resources. Certain it is that, whenever a crow makes any unusual sounds, there are always several more about, *hawing* vigorously, yet seeming to listen attentively. I have caught them at this a score of times.

One September afternoon, while walking quietly through the woods, my attention was attracted by an unusual sound coming from an oak grove, a favorite haunt of gray squirrels. The crows were cawing in the same direction; but every few minutes would come a strange cracking sound—*c-r-r-rack-a-rack-rack*, as if some one had a giant nutcracker and were snapping it rapidly. I stole forward through the low woods till I could see perhaps fifty crows perched about in the oaks, all very attentive to something going on below them that I could not see.

Not till I had crawled up to the brush fence, on the

very edge of the grove, and peeked through did I see the performer. Out on the end of a long delicate branch, a few feet above the ground, a small crow was clinging, swaying up and down like a bobolink on a cardinal flower, balancing himself gracefully by spreading his wings, and every few minutes giving the strange cracking sound, accompanied by a flirt of his wings and tail as the branch swayed upward. At every repetition the crows *hawed* in applause. I watched them fully ten minutes before they saw me and flew away.

Several times since, I have been attracted by unusual sounds, and have surprised a flock of crows which were evidently watching a performance by one of their number. Once it was a deep musical whistle, much like the *too-loo-loo* of the blue jay (who is the crow's cousin, for all his bright colors), but deeper and fuller, and without the trill that always marks the blue jay's whistle. Once, in some big woods in Maine, it was a hoarse bark, utterly unlike a bird call, which made me slip heavy shells into my gun and creep forward, expecting some strange beast that I had never before met.

The same love of variety and excitement leads the crow to investigate any unusual sight or sound that catches his attention. Hide anywhere in the woods, and make any queer sound you will—play a jews'-harp,

or pull a devil's fiddle, or just call softly — and first comes a blue jay, all agog to find out all about it. Next a red squirrel steals down and barks just over your head, to make you start if possible. Then, if your eyes are sharp, you will see a crow gliding from thicket to thicket, keeping out of sight as much as possible, but drawing nearer and nearer to investigate the unusual sound. And if he is suspicious or unsatisfied, he will hide and wait patiently for you to come out and show yourself.

Not only is he curious about you, and watches you as you go about the woods, but he watches his neighbors as well. When a fox is started you can often trace his course, far ahead of your dogs, by the crows circling over him and calling *rascal, rascal*, whenever he shows himself. He watches the ducks and plover, the deer and bear; he knows where they are, and what they are doing; and he will go far out of his way to warn them, as well as his own kind, at the approach of danger. When birds nest, or foxes den, or beasts fight in the woods, he is there to see it. When other things fail he will even play jokes, as upon one occasion when I saw a young crow hide in a hole in a pine tree, and for two hours keep a whole flock in a frenzy of excitement by his distressed cawing. He would venture out when they were at a distance, peek all about cautiously to see that no one

saw him, then set up a heart-rending appeal, only to dodge back out of sight when the flock came rushing in with a clamor that was deafening.

Only one of two explanations can account for his action in this case; either he was a young crow who did not appreciate the gravity of crying *wolf, wolf!* when there was no wolf, or else it was a plain game of hide-and-seek. When the crows at length found him they chased him out of sight, either to chastise him, or, as I am inclined now to think, each one sought to catch him for the privilege of being the next to hide.

In fact, whenever one hears a flock of crows *hawing* away in the woods, he may be sure that some excitement is afoot that will well repay his time and patience to investigate.

* * * * *

Since the above article was written, some more curious crow-ways have come to light. Here is one which seems to throw light on the question of their playing games. I found it out one afternoon last September, when a vigorous cawing over in the woods induced me to leave the orchard, where I was picking apples, for the more exciting occupation of spying on my dark neighbors.

The clamor came from an old deserted pasture,

bounded on three sides by pine woods, and on the fourth by half wild fields that straggled away to the dusty road beyond. Once, long ago, there was a farm there; but even the cellars have disappeared, and the crows no longer fear the place.

It was an easy task to creep unobserved through the nearest pine grove, and gain a safe hiding place under some junipers on the edge of the old pasture. The cawing meanwhile was intermittent; at times it broke out in a perfect babel, as if every crow were doing his best to outcaw all the others; again there was silence save for an occasional short note, the *all's well* of the sentinel on guard. The crows are never so busy or so interested that they neglect this precaution.

When I reached the junipers, the crows—half a hundred of them—were ranged in the pine tops along one edge of the open. They were quiet enough, save for an occasional scramble for position, evidently waiting for something to happen. Down on my right, on the fourth or open side of the pasture, a solitary old crow was perched in the top of a tall hickory. I might have taken him for a sentry but for a bright object which he held in his beak. It was too far to make out what the object was; but whenever he turned his head it flashed in the sunlight like a bit of glass.

As I watched him curiously he launched himself into the air and came speeding down the center of the field, making for the pines at the opposite end. Instantly every crow was on the wing; they shot out from both sides, many that I had not seen before, all cawing like mad. They rushed upon the old fellow from the hickory, and for a few moments it was impossible to make out anything except a whirling, diving rush of black wings. The din meanwhile was deafening.

Something bright dropped from the excited flock, and a single crow swooped after it; but I was too much interested in the rush to note what became of him. The clamor ceased abruptly. The crows, after a short practice in rising, falling, and wheeling to command, settled in the pines on both sides of the field, where they had been before. And there in the hickory was another crow with the same bright, flashing thing in his beak.

There was a long wait this time, as if for a breathing spell. Then the solitary crow came skimming down the field again without warning. The flock surrounded him on the moment, with the evident intention of hindering his flight as much as possible. They flapped their wings in his face; they zig-zagged in front of him; they attempted to light on his back. In vain he twisted and dodged and dropped like

a stone. Wherever he turned he found fluttering wings to oppose his flight. The first object of the game was apparent: he was trying to reach the goal of pines opposite the hickory, and the others were trying to prevent it. Again and again the leader was lost to

sight; but whenever the sunlight flashed from the bright thing he carried, he was certain to be found in the very midst of a clamoring crowd. Then the second object was clear: the crows were trying to confuse him and make him drop the talisman.

They circled rapidly down the field and back again, near the watcher. Suddenly the bright thing dropped, reaching the ground before it was discovered. Three or four crows swooped upon it, and a lively scrimmage began for its possession. In the midst of the struggle a small crow shot under the contestants, and before they knew what was up he was scurrying away to the hickory with the coveted trinket held as high as he could carry it, as if in triumph at his sharp trick.

The flock settled slowly into the pines again with much *hawing*. There was evidently a question whether the play ought to be allowed or not. Everybody had something to say about it; and there was no end of objection. At last it was settled good-naturedly, and they took places to watch till the new leader should give them opportunity for another chase.

There was no doubt left in the watcher's mind by this time as to what the crows were doing. They were just playing a game, like so many schoolboys, enjoying to the full the long bright hours of the September afternoon. Did they find the bright object as they crossed the pasture on the way from Farmer B's corn-field, and the game so suggest itself? Or was the game first suggested, and the talisman brought afterwards? Every crow has a secret storehouse, where he hides every bright thing he finds. Sometimes it

is a crevice in the rocks under moss and ferns; sometimes the splintered end of a broken branch; sometimes a deserted owl's nest in a hollow tree; often a crotch in a big pine, covered carefully by brown needles; but wherever it is, it is full of bright things—glass, and china, and beads, and tin, and an old spoon, and a silvered buckle—and nobody but the crow himself knows how to find it. Did some crow fetch his best trinket for the occasion, or was this a special thing for games, and kept by the flock where any crow could get it?

These were some of the interesting things that were puzzling the watcher when he noticed that the hickory was empty. A flash over against the dark green revealed the leader. There he was, stealing along in the shadow, trying to reach the goal before they saw him. A derisive *haw* announced his discovery. Then the fun began again, as noisy, as confusing, as thoroughly enjoyable as ever.

When the bright object dropped this time, curiosity to get possession of it was stronger than my interest in the game. Besides, the apples were waiting. I jumped up, scattering the crows in wild confusion; but as they streamed away I fancied that there was still more of the excitement of play than of alarm in their flight and clamor.

The bright object which the leader carried proved

to be the handle of a glass cup or pitcher. A fragment of the vessel itself had broken off with the handle, so that the ring was complete. Altogether it was just the thing for the purpose—bright, and not too heavy, and most convenient for a crow to seize and carry. Once well gripped, it would take a good deal of worrying to make him drop it.

Who first was "it," as children say in games? Was it a special privilege of the crow who first found the talisman, or do the crows have some way of counting out for the first leader? There is a school-house down that same old dusty road. Sometimes, when at play there, I used to notice the crows stealing silently from tree to tree in the woods beyond, watching our play, I have no doubt, as I now had watched theirs. Only we have grown older, and forgotten how to play; and they are as much boys as ever. Did they learn their game from watching us at tag, I wonder? And do they know coram, and leave-stocks, and prisoners' base, and bull-in-the-ring as well? One could easily believe their wise little black heads to be capable of any imitation, especially if one had watched them a few times, at work and play, when they had no idea they were being spied upon.

VIII. ONE TOUCH OF NATURE.

THE cheery whistle of a quail recalls to most New England people a vision of breezy upland pastures and a mottled brown bird calling melodiously from the topmost slanting rail of an old sheep-fence. Farmers say he foretells the weather, calling, *Morc-wet* — *much-morc-wet* ! Boys say he only proclaims his name, *Bob White* ! *I'm Bob White* ! But whether he prognosticates or introduces himself, his voice is always a welcome one. Those who know the call listen with pleasure, and speedily come to love the bird that makes it.

Bob White has another call, more beautiful than his boyish whistle, which comparatively few have heard. It is a soft liquid yodeling, which the male bird uses to call the scattered flock together. One who walks

in the woods at sunset sometimes hears it from a tangle of grapevine and bullbrier. If he has the patience to push his way carefully through the underbrush, he may see the beautiful Bob on a rock or stump, uttering the softest and most musical of whistles. He is telling his flock that here is a nice place he has found, where they can spend the night and be safe from owls and prowling foxes.

If the visitor be very patient, and lie still, he will presently hear the pattering of tiny feet on the leaves, and see the brown birds come running in from every direction. Once in a lifetime, perhaps, he may see them gather in a close circle—tails together, heads out, like the spokes of a wheel, and so go to sleep for the night. Their soft whistlings and chirpings at such times form the most delightful sound one ever hears in the woods.

This call of the male bird is not difficult to imitate. Hunters who know the birds will occasionally use it to call a scattered covey together, or to locate the male birds, which generally answer the leader's call. I have frequently called a flock of the birds into a thicket at sunset, and caught running glimpses of them as they hurried about, looking for the bugler who called taps.

All this occurred to me late one afternoon in the great Zoölogical Gardens at Antwerp. I was watching a yard of birds—three or four hundred represent-

atives of the pheasant family from all over the earth that were running about among the rocks and artificial copses. Some were almost as wild as if in their native woods, especially the smaller birds in the trees ; others had grown tame from being constantly fed by visitors.

It was rather confusing to a bird lover, familiar only with home birds, to see all the strange forms and colors in the grass, and to hear a chorus of unknown notes from trees and underbrush. But suddenly there was a touch of naturalness. That beautiful brown bird with the shapely body and the quick, nervous run ! No one could mistake him ; it was Bob White. And with him came a flash of the dear New England landscape three thousand miles away. Another and another showed himself and was gone. Then I thought of the woods at sunset, and began to call softly.

The carnivora were being fed not far away ; a frightful uproar came from the cages. The coughing roar of a male lion made the air shiver. Cockatoos screamed ; noisy parrots squawked hideously. Children were playing and shouting near by. In the yard itself fifty birds were singing or crying strange notes. Besides all this, the quail I had seen had been hatched far from home, under a strange mother. So I had little hope of success.

But as the call grew louder and louder, a liquid yodel came like an electric shock from a clump of

bushes on the left. There he was, looking, listening. Another call, and he came running toward me. Others appeared from every direction, and soon a score of quail were running about, just inside the screen, with soft gurglings like a hidden brook, doubly delightful to an ear that had longed to hear them.

City, gardens, beasts, strangers, — all vanished in an instant. I was a boy in the fields again. The rough New England hillside grew tender and beautiful in sunset light; the hollows were rich in autumn glory. The pasture brook sang on its way to the river; a robin called from a crimson maple; and all around was the dear low, thrilling whistle, and the patter of welcome feet on leaves, as Bob White came running again to meet his countryman.

IX. MOOSE CALLING.

MIDNIGHT in the wilderness. The belated moon wheels slowly above the eastern ridge, where for a few minutes past a mighty pine and hundreds of pointed spruce tops have been standing out in inky blackness against the gray and brightening background. The silver light steals swiftly down the evergreen tops, sending long black shadows creeping before it, and falls glistening and shimmering across the sleeping waters of a forest lake. No ripple breaks its polished surface; no splash of musquash or leaping trout sends its vibrations up into the still, frosty air; no sound of beast or bird awakens the echoes of the silent forest. Nature seems dying, her life frozen out of her by the chill of the October night; and no voice tells of her suffering.

A moment ago the little lake lay all black and uniform, like a great well among the hills, with only glimmering star-points to reveal its surface. Now,

down in a bay below a grassy point, where the dark shadows of the eastern shore reach almost across, a dark object is lying silent and motionless on the lake. Its side seems gray and uncertain above the water; at either end is a dark mass, that in the increasing light takes the form of human head and shoulders. A bark canoe with two occupants is before us; but so still, so lifeless apparently, that till now we thought it part of the shore beyond.

There is a movement in the stern; the profound stillness is suddenly broken by a frightful roar: *M-wah-úh! M-waah-úh! M-w-wā-ā-ā-ā!* The echoes rouse themselves swiftly, and rush away confused and broken, to and fro across the lake. As they die away among the hills there is a sound from the canoe as if an animal were walking in shallow water, *splash, splash, splash, klop!* then silence again, that is not dead, but listening.

A half-hour passes; but not for an instant does the listening tension of the lake relax. Then the loud bellow rings out again, startling us and the echoes, though we were listening for it. This time the tension increases an hundredfold; every nerve is strained; every muscle ready. Hardly have the echoes been lost when from far up the ridges comes a deep, sudden, ugly roar that penetrates the woods like a rifle-shot. Again it comes, and nearer! Down

in the canoe a paddle blade touches the water noiselessly from the stern; and over the bow there is the glint of moonlight on a rifle barrel. The roar is now continuous on the summit of the last low ridge. Twigs crackle, and branches snap. There is the thrashing of mighty antlers among the underbrush, the pounding of heavy hoofs upon the earth; and straight down the great bull rushes like a tempest, nearer, nearer, till he bursts with tremendous crash through the last fringe of alders out onto the grassy point.—And then the heavy boom of a rifle rolling across the startled lake.

Such is moose calling, in one of its phases—the most exciting, the most disappointing, the most trying way of hunting this noble game.

The call of the cow moose, which the hunter always uses at first, is a low, sudden bellow, quite impossible to describe accurately. Before ever hearing it, I had frequently asked Indians and hunters what it was like. The answers were rather unsatisfactory. “Like a tree falling,” said one. “Like the sudden swell of a cataract or the rapids at night,” said another. “Like a rifle-shot, or a man shouting hoarsely,” said a third; and so on till like a menagerie at feeding time was my idea of it.

One night as I sat with my friend at the door of our bark tent, eating our belated supper in tired

silence, while the rush of the salmon pool near and the sigh of the night wind in the spruces were lulling us to sleep as we ate, a sound suddenly filled the forest, and was gone. Strangely enough, we pronounced the word *moose* together, though neither of us had ever heard the sound before. 'Like a gun in a fog' would describe the sound to me better than anything else, though after hearing it many times the simile is not at all accurate. This first indefinite sound is heard early in the season. Later it is prolonged and more definite, and often repeated as I have given it.

The answer of the bull varies but little. It is a short, hoarse, grunting roar, frightfully ugly when close at hand, and leaving no doubt as to the mood he is in. Sometimes when a bull is shy, and the hunter thinks he is near and listening, though no sound gives any idea of his whereabouts, he follows the bellow of the cow by the short roar of the bull, at the same time snapping the sticks under his feet, and thrashing the bushes with a club. Then, if the bull answers, look out. Jealous, and fighting mad, he hurls himself out of his concealment and rushes straight in to meet his rival. Once aroused in this way he heeds no danger, and the eye must be clear and the muscles steady to stop him surely ere he reaches the thicket where the hunter is concealed. Moon-

light is poor stuff to shoot by at best, and an enraged bull moose is a very big and a very ugly customer. It is a poor thicket, therefore, that does not have at least one good tree with conveniently low branches. As a rule, however, you may trust your Indian, who is an arrant coward, to look out for this very carefully.

The trumpet with which the calling is done is simply a piece of birch bark, rolled up cone-shaped with the smooth side within. It is fifteen or sixteen inches long, about four inches in diameter at the larger, and one inch at the smaller end. The right hand is folded round the smaller end for a mouth-piece; into this the caller grunts and roars and bellows, at the same time swinging the trumpet's mouth in sweeping curves to imitate the peculiar quaver of the cow's call. If the bull is near and suspicious, the sound is deadened by holding the mouth of the trumpet close to the ground. This, to me, imitates the real sound more accurately than any other attempt.

So many conditions must be met at once for successful calling, and so warily does a bull approach, that the chances are always strongly against the hunter's seeing his game. The old bulls are shy from much hunting; the younger ones fear the wrath of an older rival. It is only once in a lifetime, and far back from civilization, where the moose have not

been hunted, that one's call is swiftly answered by a savage old bull that knows no fear. Here one is never sure what response his call will bring; and the spice of excitement, and perhaps danger, is added to the sport.

In illustration of the uncertainty of calling, the writer recalls with considerable pride his first attempt, which was somewhat startling in its success. It was on a lake, far back from the settlements, in northern New Brunswick. One evening, late in August, while returning from fishing, I heard the bellow of a cow moose on a hardwood ridge above me. Along the base of the ridge stretched a bay with grassy shores, very narrow where it entered the lake, but broadening out to fifty yards across, and reaching back half a mile to meet a stream that came down from a smaller lake among the hills. All this I noted carefully while gliding past; for it struck me as an ideal place for moose calling, if one were hunting.

The next evening, while fishing alone in the cold stream referred to, I heard the moose again on the same ridge; and in a sudden spirit of curiosity determined to try the effect of a roar or two on her, in imitation of an old bull. I had never heard of a cow answering the call; and I had no suspicion then that the bull was anywhere near. I was not an expert

caller. Under tuition of my Indian (who was himself a rather poor hand at it) I had practised two or three times till he told me, with charming frankness, that possibly a *man* might mistake me for a moose, if he had n't heard one very often. So here was a chance for more practice and a bit of variety. If it frightened her it would do no harm, as we were not hunting.

Running the canoe quietly ashore below where the moose had called, I peeled the bark from a young birch, rolled it into a trumpet, and, standing on the grassy bank, uttered the deep grunt of a bull two or three times in quick succession. The effect was tremendous. From the summit of the ridge, not two hundred yards above where I stood, the angry challenge of a bull was hurled down upon me out of the woods. Then it seemed as if a steam engine were crashing full speed through the underbrush. In fewer seconds than it takes to write it the canoe was well out into deep water, lying motionless with the bow inshore. A moment later a huge bull plunged through the fringe of alders onto the open bank, gritting his teeth, grunting, stamping the earth savagely, and thrashing the bushes with his great antlers—as ugly a picture as one would care to meet in the woods.

He seemed bewildered at not seeing his rival, ran

swiftly along the bank, turned and came swinging back again, all the while uttering his hoarse challenge. Then the canoe swung in the slight current; in getting control of it again the movement attracted his attention, and he saw me for the first time. In a moment he was down the bank into shallow water, striking with his hoofs and tossing his huge head up and down like an angry bull. Fortunately the water was deep, and he did not try to swim out; for there was not a weapon of any kind in the canoe.

When I started down towards the lake, after baiting the bull's fury awhile by shaking the paddle and splashing water at him, he followed me along the bank, keeping up his threatening demonstrations. Down near the lake he plunged suddenly ahead before I realized the danger, splashed out into the narrow opening in front of the canoe—and there I was, trapped.

It was dark when I at last got out of it. To get by the ugly beast in that narrow opening was out of the question, as I found out after a half-hour's trying. Just at dusk I turned the canoe and paddled slowly back; and the moose, leaving his post, followed as before along the bank. At the upper side of a little bay I paddled close up to shore, and waited till he ran round, almost up to me, before backing out into deep water. Splashing seemed to madden the brute,

so I splashed him, till in his fury he waded out deeper and deeper, to strike the exasperating canoe with his antlers. When he would follow no further, I swung the canoe suddenly, and headed for the opening at a racing stroke. I had a fair start before he understood the trick; but I never turned to see how he made the bank and circled the little bay. The splash and plunge of hoofs was fearfully close behind me as the canoe shot through the opening; and as the little bark swung round on the open waters of the lake, for a final splash and flourish of the paddle, and a yell or two of derision, there stood the bull in the inlet, still thrashing his antlers and gritting his teeth; and there I left him.

The season of calling is a short one, beginning early in September and lasting till the middle of October. Occasionally a bull will answer as late as November, but this is unusual. In this season a perfectly still night is perhaps the first requisite. The bull, when he hears the call, will often approach to within a hundred yards without making a sound. It is simply wonderful how still the great brute can be as he moves slowly through the woods. Then he makes a wide circuit till he has gone completely round the spot where he heard the call; and if there is the slightest breeze blowing he scents the danger, and is off on the instant. On a still night his big

trumpet-shaped ears are marvelously acute. Only absolute silence on the hunter's part can insure success.

Another condition quite as essential is moonlight. The moose sometimes calls just before dusk and just before sunrise; but the bull is more wary at such times, and very loth to show himself in the open. Night diminishes his extreme caution, and unless he has been hunted he responds more readily. Only a bright moonlight can give any accuracy to a rifle-shot. To attempt it by starlight would result simply in frightening the game, or possibly running into danger.

By far the best place for calling, if one is in a moose country, is from a canoe on some quiet lake or river. A spot is selected midway between two open shores, near together if possible. On whichever side the bull answers, the canoe is backed silently away into the shadow against the opposite bank; and there the hunters crouch motionless till their game shows himself clearly in the moonlight on the open shore.

If there is no water in the immediate vicinity of the hunting ground, then a thicket in the midst of an open spot is the place to call. Such spots are found only about the barrens, which are treeless plains scattered here and there throughout the great northern

wilderness. The scattered thickets on such plains are, without doubt, the islands of the ancient lakes that once covered them. Here the hunter collects a thick nest of dry moss and fir tips at sundown, and spreads the thick blanket that he has brought on his back all the weary way from camp; for without it the cold of the autumn night would be unendurable to one who can neither light a fire nor move about to get warm. When a bull answers a call from such a spot he will generally circle the barren, just within the edge of the surrounding forest, and unless enraged by jealousy will seldom venture far out into the open. This fearfulness of the open characterizes the moose in all places and seasons. He is a creature of the forest, never at ease unless within quick reach of its protection.

An exciting incident happened to Mitchell, my Indian guide, one autumn, while hunting on one of these barrens with a sportsman whom he was guiding. He was moose calling one night from a thicket near the middle of a narrow barren. No answer came to his repeated calling, though for an hour or more he had felt quite sure that a bull was within hearing, somewhere within the dark fringe of forest. He was about to try the roar of the bull, when it suddenly burst out of the woods behind them, in exactly the opposite quarter from that in which they believed

their game was concealed. Mitchell started to creep across the thicket, but scarcely had the echoes answered when, in front of them, a second challenge sounded sharp and fierce; and they saw, directly across the open, the underbrush at the forest's edge sway violently, as the bull they had long suspected broke out in a towering rage. He was slow in advancing, however, and Mitchell glided rapidly across the thicket, where a moment later his excited hiss called his companion. From the opposite fringe of forest the second bull had hurled himself out, and was plunging with savage grunts straight towards them.

Crouching low among the firs they awaited his headlong rush; not without many a startled glance backward, and a very uncomfortable sense of being trapped and frightened, as Mitchell confessed to me afterward. He had left his gun in camp; his employer had insisted upon it, in his eagerness to kill the moose himself.

The bull came rapidly within rifle-shot. In a minute more he would be within their hiding place; and the rifle sight was trying to cover a vital spot, when right behind them—at the thicket's edge, it seemed—a frightful roar and a furious pounding of hoofs brought them to their feet with a bound. A second later the rifle was lying among the bushes,

and a panic-stricken hunter was scratching and smashing in a desperate hurry up among the branches of a low spruce, as if only the tiptop were half high enough. Mitchell was nowhere to be seen; unless one had the eyes of an owl to find him down among the roots of a fallen pine.

But the first moose smashed straight through the thicket without looking up or down; and out on the open barren a tremendous struggle began. There was a minute's confused uproar, of savage grunts and clashing antlers and pounding hoofs and hoarse, labored breathing; then the excitement of the fight was too strong to be resisted, and a dark form wriggled out from among the roots, only to stretch itself flat under a bush and peer cautiously at the struggling brutes not thirty feet away. Twice Mitchell hissed for his employer to come down; but that worthy was safe astride the highest branch that would bear his weight, with no desire evidently for a better view of the fight. Then Mitchell found the rifle among the bushes and, waiting till the bulls backed away for one of their furious charges, killed the larger one in his tracks. The second stood startled an instant, with raised head and muscles quivering, then dashed away across the barren and into the forest.

Such encounters are often numbered among the tragedies of the great wilderness. In tramping

through the forest one sometimes comes upon two sets of huge antlers locked firmly together, and white bones, picked clean by hungry prowlers. It needs no written record to tell their story.

Once I saw a duel that resulted differently. I heard a terrific uproar, and crept through the woods, thinking to have a savage wilderness spectacle all to myself. Two young bulls were fighting desperately in an open glade, just because they were strong and proud of their first big horns.

But I was not alone, as I expected. A great flock of crossbills swooped down into the spruces, and stopped whistling in their astonishment. A dozen red squirrels snickered and barked their approval, as the bulls butted each other. Meeko is always glad when mischief is afoot. High overhead floated a rare woods' raven, his head bent sharply downward to see. Moose-birds flitted in restless excitement from tree to bush. Kagax the weasel postponed his bloodthirsty errand to the young rabbits. And just beside me, under the fir tips, Tookhees the wood-mouse forgot his fear of the owl and the fox and his hundred enemies, and sat by his den in broad daylight, rubbing his whiskers nervously.

So we watched, till the bull that was getting the worst of it backed near me, and got my wind, and the fight was over.

X. CH'GEEGEE-LOKH-SIS.

THAT is the name which the northern Indians give to the black-capped titmouse, or chickadee. "Little friend Ch'geegee" is what it means; for the Indians, like everybody else who knows Chickadee, are fond of this cheery little brightener of the northern woods. The first time I asked Simmo what his people called the bird, he answered with a smile. Since then I have asked other Indians, and always a smile, a pleased look lit up the dark grim

faces as they told me. It is another tribute to the bright little bird's influence.

Chickadee wears well. He is not in the least a creature of moods. You step out of your door some bright morning, and there he is among the shrubs, flitting from twig to twig; now hanging head down from the very tip to look into a terminal bud; now winding upward about a branch, looking industriously into every bud and crevice. An insect must hide well to escape those bright eyes. He is helping you raise your plants. He looks up brightly as you approach, hops fearlessly down and looks at you with frank, innocent eyes. *Chick a dee dee dee dee!* *Tsic a de-e-e?* — this last with a rising inflection, as if he were asking how you were, after he had said good-morning. Then he turns to his insect hunting again, for he never wastes more than a moment talking. But he twitters sociably as he works.

You meet him again in the depths of the wilderness. The smoke of your camp fire has hardly risen to the spruce tops when close beside you sounds the same cheerful greeting and inquiry for your health. There he is on the birch twig, bright and happy and fearless! He comes down by the fire to see if anything has boiled over which he may dispose of. He picks up gratefully the crumbs you scatter at your feet. He trusts you. — See! he rests a moment on

the finger you extend, looks curiously at the nail, and sounds it with his bill to see if it shelters any harmful insect. Then he goes back to his birch twigs.

On summer days he never overflows with the rollicksomeness of bobolink and oriole, but takes his abundance in quiet contentment. I suspect it is because he works harder winters, and his enjoyment is more deep than theirs. In winter when the snow lies deep, he is the life of the forest. He calls to you from the edges of the bleak caribou barrens, and his greeting somehow suggests the May. He comes into your rude bark camp, and eats of your simple fare, and leaves a bit of sunshine behind him. He goes with you, as you force your way heavily through the fir thickets on snowshoes. He is hungry, perhaps, like you, but his note is none the less cheery and hopeful.

When the sun shines hot in August, he finds you lying under the alders, with the lake breeze in your face, and he opens his eyes very wide and says: "*Tsic a de-c-c-c?* I saw you last winter. Those were hard times. But it's good to be here now." And when the rain pours down, and the woods are drenched, and camp life seems beastly altogether, he appears suddenly with greeting cheery as the sunshine. "*Tsic a de-c-c-c?* Don't you remember yesterday? It rains, to be sure,

but the insects are plenty, and to-morrow the sun will shine." His cheerfulness is contagious. Your thoughts are better than before he came.

Really, he is a wonderful little fellow; there is no end to the good he does. Again and again I have seen a man grow better tempered or more cheerful, without knowing why he did so, just because Chickadee stopped a moment to be cheery and sociable. I remember once when a party of four made camp after a driving rain-storm. Everybody was wet; everything soaking. The lazy man had upset a canoe, and all the dry clothes and blankets had just been fished out of the river. Now the lazy man stood before the fire, looking after his own comfort. The other three worked like beavers, making camp. They were in ill humor, cold, wet, hungry, irritated. They said nothing.

A flock of chickadees came down with sunny greetings, fearless, trustful, never obtrusive. They looked innocently into human faces and pretended that they did not see the irritation there. "*Tsic a dec*. I wish I could help. Perhaps I can. *Tic a dee-e-e?*" — with that gentle, sweetly insinuating up slide at the end. Somebody spoke, for the first time in half an hour, and it was n't a growl. Presently somebody whistled — a wee little whistle; but the tide had turned. Then somebody laughed. "'Pon my word," he said,

hanging up his wet clothes, "I believe those chickadees make me feel good-natured. Seem kind of cheery, you know, and the crowd needed it."

And Chickadee, picking up his cracker crumbs, did not act at all as if he had done most to make camp comfortable.

There is another way in which he helps, a more material way. Millions of destructive insects live and multiply in the buds and tender bark of trees. Other birds never see them, but Chickadee and his relations leave never a twig unexplored. His bright eyes find the tiny eggs hidden under the buds; his keen ears hear the larvæ feeding under the bark, and a blow of his little bill uncovers them in their mischief-making. His services of this kind are enormous, though rarely acknowledged.

Chickadee's nest is always neat and comfortable and interesting, just like himself. It is a rare treat to find it. He selects an old knot-hole, generally on the sheltered side of a dry limb, and digs out the rotten wood, making a deep and sometimes winding tunnel downward. In the dry wood at the bottom he makes a little round pocket and lines it with the very softest material. When one finds such a nest, with five or six white eggs delicately touched with pink lying at the bottom, and a pair of chickadees gliding about, half fearful, half trustful, it is altogether

such a beautiful little spot that I know hardly a boy who would be mean enough to disturb it.

One thing about the nests has always puzzled me. The soft lining has generally more or less rabbit fur. Sometimes, indeed, there is nothing else, and a softer nest one could not wish to see. But where does he get it? He would not, I am sure, pull it out of Br'er Rabbit, as the crow sometimes pulls wool from the sheep's backs. Are his eyes bright enough to find it hair by hair where the wind has blown it, down among the leaves? If so, it must be slow work; but Chickadee is very patient. Sometimes in spring you may surprise him on the ground, where he never goes for food; but at such times he is always shy, and flits up among the birch twigs, and twitters, and goes through an astonishing gymnastic performance, as if to distract your attention from his former unusual one. That is only because you are near his nest. If he has a bit of rabbit fur in his bill meanwhile, your eyes are not sharp enough to see it.

Once after such a performance I pretended to go away; but I only hid in a pine thicket. Chickadee listened awhile, then hopped down to the ground, picked up something that I could not see, and flew away. I have no doubt it was the lining for his nest near by. He had dropped it when I surprised him, so that I should not suspect him of nest-building.

Such a bright, helpful little fellow should have never an enemy in the world; and I think he has to contend against fewer than most birds. The shrike is his worst enemy, the swift swoop of his cruel beak being always fatal in a flock of chickadees. Fortunately the shrike is rare with us; one seldom finds his nest, with poor Chickadee impaled on a sharp thorn near by, surrounded by a varied lot of ugly beetles. I suspect the owls sometimes hunt him at night; but he sleeps in the thick pine shrubs, close up against a branch, with the pine needles all about him, making it very dark; and what with the darkness, and the needles to stick in his eyes, the owl generally gives up the search and hunts in more open woods.

Sometimes the hawks try to catch him, but it takes a very quick and a very small pair of wings to follow Chickadee. Once I was watching him hanging head down from an oak twig to which the dead leaves were clinging; for it was winter. Suddenly there was a rush of air, a flash of mottled wings and fierce yellow eyes and cruel claws. Chickadee whisked out of sight under a leaf. The hawk passed on, brushing his pinions. A brown feather floated down among the oak leaves. Then Chickadee was hanging head down, just where he was before. "*Tsic a dee?* Did n't I fool him!" he seemed to say. He had just gone round his twig, and under a leaf, and back again; and

the danger was over. When a hawk misses like that he never strikes again.

Boys generally have a kind of sympathetic liking for Chickadee. They may be cruel or thoughtless to other birds, but seldom so to him. He seems somehow like themselves.

Two barefoot boys with bows and arrows were hunting, one September day, about the half-grown thickets of an old pasture. The older was teaching the younger how to shoot. A robin, a chipmunk, and two or three sparrows were already stowed away in their jacket pockets; a brown rabbit hung from the older boy's shoulder. Suddenly the younger raised his bow and drew the arrow back to its head. Just in front a chickadee hung and twittered among the birch twigs. But the older boy seized his arm.

"Don't shoot — don't shoot him!" he said.

"But why not?"

"'Cause you must n't — you must never kill a chickadee."

And the younger, influenced more by a certain mysterious shake of the head than by the words, slacked his bow cheerfully; and with a last wide-eyed look at the little gray bird that twittered and swung so fearlessly near them, the two boys went on with their hunting.

No one ever taught the older boy to discriminate

between a chickadee and other birds; no one else ever instructed the younger. Yet somehow both felt, and still feel after many years, that there is a difference. It is always so with boys. They are friends of whatever trusts them and is fearless. Chickadee's own personality, his cheery ways and trustful nature had taught them, though they knew it not. And among all the boys of that neighborhood there is still a law, which no man gave, of which no man knows the origin, a law as unalterable as that of the Medes and Persians: *Never kill a chickadee.*

If you ask the boy there who tells you the law, "Why not a chickadee as well as a sparrow?" he shakes his head as of yore, and answers dogmatically: "'Cause you must n't."

CHICKADEE'S SECRET.

If you meet Chickadee in May with a bit of rabbit fur in his mouth, or if he seem preoccupied or absorbed, you may know that he is building a nest, or has a wife and children near by to take care of. If you know him well, you may even feel hurt that the little friend, who shared your camp and fed from your dish last winter, should this spring seem just as

frank, yet never invite you to his camp, or should even lead you away from it. But the soft little nest in the old knot-hole is the one secret of Chickadee's life; and the little deceptions by which he tries to keep it are at times so childlike, so transparent, that they are even more interesting than his frankness.

One afternoon in May I was hunting, without a gun, about an old deserted farm among the hills—one of those sunny places that the birds love, because some sense of the human beings who once lived there still clings about the half wild fields and gives protection. The day was bright and warm. The birds were everywhere, flashing out of the pine thickets into the birches in all the joyfulness of nest-building, and filling the air with life and melody. It is poor hunting to move about at such a time. Either the hunter or his game must be still. Here the birds were moving constantly; one might see more of them and their ways by just keeping quiet and invisible.

I sat down on the outer edge of a pine thicket, and became as much as possible a part of the old stump which was my seat. Just in front an old four-rail fence wandered across the deserted pasture, struggling against the blackberry vines, which grew profusely about it and seemed to be tugging at the lower rail to pull the old fence down to ruin. On either side it disappeared into thickets of birch and oak and pitch

pine, planted, as were the blackberry vines, by birds that stopped to rest a moment on the old fence or to satisfy their curiosity. Stout young trees had crowded it aside and broken it. Here and there a leaning post was overgrown with woodbine. The rails were gray and moss-grown. Nature was trying hard to make it a bit of the landscape; it could not much longer retain its individuality. The wild things of the woods had long accepted it as theirs, though not quite as they accepted the vines and trees.

As I sat there a robin hurled himself upon it from the top of a young cedar where he had been, a moment before, practising his mating song. He did not intend to light, but some idle curiosity, like my own, made him pause a moment on the old gray rail. Then a woodpecker lit on the side of a post, and sounded it softly. But he was too near the ground, too near his enemies to make a noise; so he flew to a higher perch and beat a tattoo that made the woods ring. He was safe there, and could make as much noise as he pleased. A wood-mouse stirred the vines and appeared for an instant on the lower rail, then disappeared as if very much frightened at having shown himself in the sunlight. He always does just so at his first appearance.

Presently a red squirrel rushes out of the thicket

at the left, scurries along the rails and up and down the posts. He goes like a little red whirlwind, though he has nothing whatever to hurry about. Just opposite my stump he stops his rush with marvelous suddenness; chatters, barks, scolds, tries to make me move; then goes on and out of sight at the same breakneck rush. A jay stops a moment in a young hickory above the fence to whistle his curiosity, just as if he had not seen it fifty times before. A curiosity to him never grows old. He does not scream now; it is his nesting time.— And so on through the afternoon. The old fence is becoming a part of the woods; and every wild thing that passes by stops to get acquainted.

I was weaving an idle history of the old fence, when a chickadee twittered in the pine behind me. As I turned, he flew over me and lit on the fence in front. He had something in his beak; so I watched to find his nest; for I wanted very much to see him at work. Chickadee had never seemed afraid of me, and I thought he would trust me now. But he didn't. He would not go near his nest. Instead he began hopping about the old rail, and pretended to be very busy hunting for insects.

Presently his mate appeared, and with a sharp note he called her down beside him. Then both birds hopped and twittered about the rail, with apparently never a care in the world. The male especially

seemed just in the mood for a frolic. He ran up and down the mossy rail; he whirled about it till he looked like a little gray pinwheel; he hung head down by his toes, dropped, and turned like a cat, so

as to light on his feet on the rail below. While watching his performance, I hardly noticed that his mate had gone till she reappeared suddenly on the rail beside him. Then he disappeared, while she kept up the performance on the rail, with more

of a twitter, perhaps, and less of gymnastics. In a few moments both birds were together again and flew into the pines out of sight.

I had almost forgotten them in watching other birds, when they reappeared on the rail, ten or fifteen minutes later, and went through a very similar performance. This was unusual, certainly; and I sat very quiet, very much interested, though a bit puzzled, and a bit disappointed that they had not gone to their nest. They had some material in their beaks both times when they appeared on the rail, and were now probably off hunting for more—for rabbit fur, perhaps, in the old orchard. But what had they done with it? "Perhaps," I thought, "they dropped it to deceive me." Chickadee does that sometimes. "But why did one bird stay on the rail? Perhaps"—Well, I would look and see.

I left my stump as the idea struck me, and began to examine the posts of the old fence very carefully. Chickadee's nest was there somewhere. In the second post on the left I found it, a tiny knot-hole, which Chickadee had hollowed out deep and lined with rabbit fur. It was well hidden by the vines that almost covered the old post, and gray moss grew all about the entrance. A prettier nest I never found.

I went back to my stump and sat down where I could just see the dark little hole that led to the

nest. No other birds interested me now till the chickadees came back. They were soon there, hopping about on the rail as before, with just a wee note of surprise in their soft twitter that I had changed my position. This time I was not to be deceived by a gymnastic performance, however interesting. I kept my eyes fastened on the nest. The male was undoubtedly going through with his most difficult feats, and doing his best to engage my attention, when I saw his mate glide suddenly from behind the post and disappear into her doorway. I could hardly be sure it was a bird. It seemed rather as if the wind had stirred a little bundle of gray moss. Had she moved slowly I might not have seen her, so closely did her soft gray cloak blend with the weather-beaten wood and the moss.

In a few moments she reappeared, waited a moment with her tiny head just peeking out of the knot-hole, flashed round the post out of sight, and when I saw her again it was as she reappeared suddenly beside the male.

Then I watched him. While his mate whisked about the top rail he dropped to the middle one, hopped gradually to one side, then dropped suddenly to the lowest one, half hidden by vines, and disappeared. I turned my eyes to the nest. In a moment there he was — just a little gray flash, appearing for

an instant from behind the post, only to disappear into the dark entrance. When he came out again I had but a glimpse of him till he appeared on the rail near me beside his mate.

Their little ruse was now quite evident. They had come back from gathering rabbit fur, and found me unexpectedly near their nest. Instead of making a fuss and betraying it, as other birds might do, they lit on the rail before me, and were as sociable as only chickadees know how to be. While one entertained me, and kept my attention, the other dropped to the bottom rail and stole along behind it; then up behind the post that held their nest, and back the same way, after leaving his material. Then he held my attention while his mate did the same thing.

Simple as their little device was, it deceived me at first, and would have deceived me permanently had I not known something of chickadees' ways, and found the nest while they were away. Game birds have the trick of decoying one away from their nest. I am not sure that all birds do not have more or less of the same instinct; but certainly none ever before or since used it so well with me as Ch'geegee.

For two hours or more I sat there beside the pine thicket, while the chickadees came and went. Sometimes they approached the nest from the other side, and I did not see them, or perhaps got only a glimpse

as they glided into their doorway. Whenever they approached from my side, they always stopped on the rail before me and went through with their little entertainment. Gradually they grew more confident, and were less careful to conceal their movements than at first. Sometimes only one came, and after a short performance disappeared. Perhaps they thought me harmless, or that they had deceived me so well at first that I did not even suspect them of nest-building. Anyway, I never pretended I knew.

As the afternoon wore away, and the sun dropped into the pine tops, the chickadees grew hungry, and left their work until the morrow. They were calling among the young birch buds as I left them, busy and sociable together, hunting their supper.

XI. A FELLOW OF EXPEDIENTS.

AMONG the birds there is one whose personal appearance is rapidly changing. He illustrates in his present life a process well known historically to all naturalists, *viz.*, the modification of form resulting from changed environment.

I refer to the golden-winged woodpecker, perhaps the most beautifully marked bird of the North, whose names are as varied as his habits and accomplishments.

Nature intended him to get his living, as do the other woodpeckers, by boring into old trees and stumps for the insects that live on the decaying wood. For this purpose she gave him the straight, sharp, wedge-shaped bill, just calculated for cutting out chips; the very long horn-tipped tongue for thrusting into the holes he makes; the peculiar arrangement of toes, two forward and two back; and the stiff, spiny tail-feathers for supporting himself against the side of a tree as he works. But getting his living so means hard work, and he has discovered

for himself a much easier way. One now frequently surprises him on the ground in old pastures and orchards, floundering about rather awkwardly (for his little feet were never intended for walking) after the crickets and grasshoppers that abound there. Still he finds the work of catching them much easier than boring into dry old trees, and the insects themselves much larger and more satisfactory.

A single glance will show how much this new way of living has changed him from the other woodpeckers. The bill is no longer straight, but has a decided curve, like the thrushes; and instead of the chisel-shaped edge there is a rounded point. The red tuft on the head, which marks all the woodpecker family, would be too conspicuous on the ground. In its place we find a red crescent well down on the neck, and partially hidden by the short gray feathers about it. The point of the tongue is less horny, and from the stiff points of the tail-feathers laminæ are beginning to grow, making them more like other birds'. A future generation will undoubtedly wonder where this peculiar kind of thrush got his unusual tongue and tail, just as we wonder at the deformed little feet and strange ways of a cuckoo.

The habits of this bird are a curious compound of his old life in the woods and his new preference for the open fields and farms. Sometimes the nest is in

the very heart of the woods, where the bird glides in and out, silent as a crow in nesting time. His feeding place meanwhile may be an old pasture half a mile away, where he calls loudly, and frolics about as if he had never a care or a fear in the world. But the nest is now more frequently in a wild orchard, where the bird finds an old knot-hole and digs down through the soft wood, making a deep nest with very little trouble. When the knot-hole is not well situated, he finds a large decayed limb and drills through the outer hard shell, then digs down a foot or more through the soft wood, and makes a nest. In this nest the rain never troubles him, for he very providently drills the entrance on the under side of the limb.

Like many other birds, he has discovered that the farmer is his friend. Occasionally, therefore, he neglects to build a deep nest, simply hollowing out an old knot-hole, and depending on the presence of man for protection from hawks and owls. At such times the bird very soon learns to recognize those who belong in the orchard, and loses the extreme shyness that characterizes him at all other times.

Once a farmer, knowing my interest in birds, invited me to come and see a golden-winged woodpecker, which in her confidence had built so shallow a nest that she could be seen sitting on the eggs like a robin.

She was so tame, he said, that in going to his work he sometimes passed under the tree without disturbing her. The moment we crossed the wall within sight of the nest, the bird slipped away out of the orchard. Wishing to test her, we withdrew and waited till she returned. Then the farmer passed within a few feet without disturbing her in the least. Ten minutes later I followed him, and the bird flew away again as I crossed the wall.

The notes of the golden-wing — much more varied and musical than those of other woodpeckers — are probably the results of his new free life, and the modified tongue and bill. In the woods one seldom hears from him anything but the rattling *rat-a-tat-tat*, as he hammers away on a dry old pine stub. As a rule he seems to do this more for the noise it makes, and the exercise of his abilities, than because he expects to find insects inside; except in winter time, when he goes back to his old ways. But out in the fields he has a variety of notes. Sometimes it is a loud *kcc-uk*, like the scream of a blue jay divided into two syllables, with the accent on the last. Again it is a loud cheery whistling call, of very short notes run close together, with accent on every other one. Again he teeters up and down on the end of an old fence rail with a rollicking *ee-koo, ee-koo, ee-koo*, that sounds more like a laugh than anything else among the birds. In most

of his musical efforts the golden-wing, instead of clinging to the side of a tree, sits across the limb, like other birds.

A curious habit which the bird has adopted with advancing civilization is that of providing himself with a sheltered sleeping place from the storms and cold of winter. Late in the fall he finds a deserted building, and after a great deal of shy inspection, to satisfy himself that no one is within, drills a hole through the side. He has then a comfortable place to sleep, and an abundance of decaying wood in which to hunt insects on stormy days. An ice-house is a favorite location for him, the warm sawdust furnishing a good burrowing place for a nest or sleeping room. When a building is used as a nesting place, the bird very cunningly drills the entrance close up under the eaves, where it is sheltered from storms, and at the same time out of sight of all prying eyes.

During the winter several birds often occupy one building together. I know of one old deserted barn where last year five of the birds lived very peaceably; though what they were doing there in the daytime I could never quite make out. At almost any hour of the day, if one approached very cautiously and thumped the side of the barn, some of the birds would dash out in great alarm, never stopping to look behind them. At first there were but three entrances; but after I

had surprised them a few times, two more were added ; whether to get out more quickly when all were inside, or simply for the sake of drilling the holes, I do not know. Sometimes a pair of birds will have five or six holes drilled, generally on the same side of the building.

Two things about my family in the old barn aroused my curiosity—what they were doing there by day, and how they got out so quickly when alarmed. The only way it seemed possible for them to dash out on the instant, as they did, was to fly straight through. But the holes were too small, and no bird but a bank-swallow would have attempted such a thing.

One day I drove the birds out, then crawled in under a sill on the opposite side, and hid in a corner of the loft without disturbing anything inside. It was a long wait in the stuffy old place before one of the birds came back. I heard him light first on the roof ; then his little head appeared at one of the holes as he sat just below, against the side of the barn, looking and listening before coming in. Quite satisfied after a minute or two that nobody was inside, he scrambled in and flew down to a corner in which was a lot of old hay and rubbish. Here he began a great rustle and stirring about, like a squirrel in autumn leaves, probably after insects, though it was too dark to see just what he was doing. It sounded part of the time

as if he were scratching aside the hay, much as a hen would have done. If so, his two little front toes must have made sad work of it, with the two hind ones always getting doubled up in the way. When I thumped suddenly against the side of the barn, he hurled himself like a shot at one of the holes, alighting just below it, and stuck there in a way that reminded me of the chewed-paper balls that boys used to throw against the blackboard in school. I could hear plainly the thump of his little feet as he struck. With the same movement, and without pausing an instant, he dived through headlong, aided by a spring from his tail, much as a jumping jack goes over the head of his stick, only much more rapidly. Hardly had he gone before another appeared, to go through the same program.

Though much shyer than other birds of the farm, he often ventures up close to the house and doorway in the early morning, before any one is stirring. One spring morning I was awakened by a strange little pattering sound, and, opening my eyes, was astonished to see one of these birds on the sash of the open window within five feet of my hand. Half closing my eyes, I kept very still and watched. Just in front of him, on the bureau, was a stuffed golden-wing, with wings and tail spread to show to best advantage the beautiful plumage. He had seen it in flying by, and

now stood hopping back and forth along the window sash, uncertain whether to come in or not. Sometimes he spread his wings as if on the point of flying in; then he would turn his head to look curiously at me and at the strange surroundings, and, afraid to venture in, endeavor to attract the attention of the stuffed bird, whose head was turned away. In the looking-glass he saw his own movements repeated. Twice he began his love call very softly, but cut it short, as if frightened. The echo of the small room made it seem so different from the same call in the open fields that I think he doubted even his own voice.

Almost over his head, on a bracket against the wall, was another bird, a great hawk, pitched forward on his perch, with wings wide spread and fierce eyes glaring downward, in the intense attitude a hawk takes as he strikes his prey from some lofty watch tree. The golden-wing by this time was ready to venture in. He had leaned forward with wings spread, looking down at me to be quite sure I was harmless, when, turning his head for a final look round, he caught sight of the hawk just ready to pounce down on him. With a startled *kcc-uk* he fairly tumbled back off the window sash, and I caught one glimpse of him as he dashed round the corner in full flight.

What were his impressions, I wonder, as he sat on a limb of the old apple tree and thought it all over?

Do birds have romances? How much greater wonders had he seen than those of any romance! And do they have any means of communicating them, as they sing their love songs? What a wonderful story he could tell, a real story, of a magic palace full of strange wonders; of a glittering bit of air that made him see himself; of a giant, all in white, with only his head visible; of an enchanted beauty, stretching her wings in mute supplication for some brave knight to touch her and break the spell, while on high a fierce dragon-hawk kept watch, ready to eat up any one who should dare enter!

And of course none of the birds would believe him. He would have to spend the rest of his life explaining; and the others would only whistle, and call him *Iagoo*, the lying woodpecker. On the whole, it would be better for a bird with such a very unusual experience to keep still about it.

XII. A TEMPERANCE LESSON FOR THE HORNETS.

LAST spring a hornet, one of those long brown double chaps that boys call mud-wasps, crept out of his mud shell at the top of my window casing, and buzzed in the sunshine till I opened the window and let him go. Perhaps he remembered his warm quarters, or told a companion; for when the last sunny days of October were come, there was a hornet, buzzing persistently at the same window till it opened and let him in.

It was a rather rickety old room, though sunny and very pleasant, which had been used as a study by generations of theological students. Moreover, it was considered clean all over, like a boy with his face washed, when the floor was swept; and no storm of general house cleaning ever disturbed its peace. So overhead, where the ceiling sagged from the walls, and in dusty chinks about doors and windows that no broom ever harried, a family of spiders, some mice, a daddy-long-legs, two crickets, and a bluebottle fly,

besides the hornet, found snug quarters in their season, and a welcome.

The hornet stayed about, contentedly enough, for a week or more, crawling over the window panes till they were thoroughly explored, and occasionally taking a look through the scattered papers on the table. Once he sauntered up to the end of the penholder I was using, and stayed there, balancing himself, spreading his wings, and looking interested while the greater part of a letter was finished. Then he crawled down over my fingers till he wet his feet in the ink; whereupon he buzzed off in high dudgeon to dry them in the sun.

At first he was sociable enough, and peaceable as one could wish; but one night, when it was chilly, he stowed himself away to sleep under the pillow. When I laid my head upon it, he objected to the extra weight, and drove me ignominiously from my own bed. Another time he crawled into a handkerchief. When I picked it up to use it, after the light was out, he stung me on the nose, not understanding the situation. In whacking him off I broke one of his legs, and made his wings all awry. After that he would have nothing more to do with me, but kept to his own window as long as the fine weather lasted.

When the November storms came, he went up to a big crack in the window casing, whence he had

emerged in the spring, and crept in, and went to sleep. It was pleasant there, and at noontime, on days when the sun shone, it streamed brightly into his doorway, waking him out of his winter sleep. As late as December he would come out occasionally at

midday to walk about and spread his wings in the sun. Then a snow-storm came, and he disappeared for two weeks.

One day, when a student was sick, a tumbler of medicine had been carelessly left on the broad window sill. It contained a few lumps of sugar, over which a mixture of whiskey and glycerine had been

poured. The sugar melted gradually in the sun, and a strong odor of alcohol rose from the sticky stuff. That and the sunshine must have roused my hornet guest, for when I came back to the room, there he lay by the tumbler, dead drunk.

He was stretched out on his side, one wing doubled under him, a forward leg curled over his head, a sleepy, boozy, perfectly ludicrous expression on his pointed face. I poked him a bit with my finger, to see how the alcohol affected his temper. He rose unsteadily, staggered about, and knocked his head against the tumbler; at which fancied insult he raised his wings in a limp kind of dignity and defiance, buzzing a challenge. But he lost his legs, and fell down; and presently, in spite of pokings, went off into a drunken sleep again.

All the afternoon he lay there. As it grew cooler he stirred about uneasily. At dusk he started up for his nest. It was a hard pull to get there. His head was heavy, and his legs shaky. Half way up, he stopped on top of the lower sash to lie down awhile. He had a terrible headache, evidently; he kept rubbing his head with his fore legs as if to relieve the pain. After a fall or two on the second sash, he reached the top, and tumbled into his warm nest to sleep off the effects of his spree.

One such lesson should have been enough; but it

was n't. Perhaps, also, I should have put temptation out of his way; for I knew that all hornets, especially yellow-jackets, are hopeless toppers when they get a chance; that when a wasp discovers a fermenting apple, it is all up with his steady habits; that when a nest of them discover a cider mill, all work, even the care of the young, is neglected. They take to drinking, and get utterly demoralized. But in the interest of a new experiment I forgot true kindness, and left the tumbler where it was.

The next day, at noon, he was stretched out on the sill, drunk again. For three days he kept up his tippling, coming out when the sun shone warmly, and going straight to the fatal tumbler. On the fourth day he paid the penalty of his intemperance.

The morning was very bright, and the janitor had left the hornet's window slightly open. At noon he was lying on the window sill, drunk as usual. I was in a hurry to take a train, and neglected to close the window. Late at night, when I came back to my room, he was gone. He was not on the sill, nor on the floor, nor under the window cushions. His nest in the casing, where I had so often watched him asleep, was empty. Taking a candle, I went out to search under the window. There I found him in the snow, his legs curled up close to his body, frozen stiff with the drip of the eaves.

I carried him in and warmed him at the fire, but it was too late. He had been drunk once too often. When I saw that he was dead, I stowed him away in the nest he had been seeking when he fell out into the snow. I tried to read; but the book seemed dull. Every little while I got up to look at him, lying there with his little pointed face, still dead. At last I wrapped him up, and pushed him farther in, out of sight.

All the while the empty tumbler seemed to look at me reproachfully from the window sill.

XIII. SNOWY VISITORS.

OVER my table, as I write, is a big snowy owl whose yellow eyes seem to be always watching me, whatever I do. Perhaps he is still wondering at the curious way in which I shot him.

One stormy afternoon, a few winters ago, I was black-duck shooting at sundown, by a lonely salt creek that doubled across the marshes from Mad-

daket Harbor. In the shadow of a low ridge I had built my blind among some bushes, near the freshest water. In front of me a solitary decoy was splashing about in joyous freedom after having been confined all day, quacking loudly at the loneliness of the place and at being separated from her mate. Beside me, crouched in the blind, my old dog Don was trying his best to shiver himself warm without disturbing

the bushes too much. That would have frightened the incoming ducks, as Don knew very well.

It grew dark and bitterly cold. No birds were flying, and I had stood up a moment to let the blood down into half-frozen toes, when a shadow seemed to pass over my head. The next moment there was a splash, followed by loud quacks of alarm from the decoy. All I could make out, in the obscurity under the ridge, was a flutter of wings that rose heavily from the water, taking my duck with them. Only the anchor string prevented the marauder from getting away with his booty. Not wishing to shoot, for the decoy was a valuable one, I shouted vigorously, and sent out the dog. The decoy dropped with a splash, and in the darkness the thief got away — just vanished, like a shadow, without a sound.

Poor ducky died in my hands a few moments later, the marks of sharp claws telling me plainly that the thief was an owl, though I had no suspicion then that it was the rare winter visitor from the north. I supposed, of course, that it was only a great-horned-owl, and so laid plans to get him.

Next night I was at the same spot with a good duck call, and some wooden decoys, over which the skins of wild ducks had been carefully stretched. An hour after dark he came again, attracted, no doubt, by the continued quacking. I had another swift

glimpse of what seemed only a shadow ; saw it poise and shoot downward before I could find it with my gun sight, striking the decoys with a great splash and clatter. Before he discovered his mistake or could get started again, I had him. The next moment Don came ashore, proud as a peacock, bringing a great snowy owl with him—a rare prize, worth ten times the trouble we had taken to get it.

Owls are generally very lean and muscular ; so much so, in severe winters, that they are often unable to fly straight when the wind blows ; and a twenty-knot breeze catches their broad wings and tosses them about helplessly. This one, however, was fat as a plover. When I stuffed him, I found that he had just eaten a big rat and a meadow-lark, hair, bones, feathers and all. It would be interesting to know what he intended to do with the duck. Perhaps, like the crow, he has snug hiding places here and there, where he keeps things against a time of need.

Every severe winter a few of these beautiful owls find their way to the lonely places of the New England coast, driven southward, no doubt, by lack of food in the frozen north. Here in Massachusetts they seem to prefer the southern shores of Cape Cod, and especially the island of Nantucket, where besides the food cast up by the tides, there are larks and

blackbirds and robins, which linger more or less all winter. At home in the far north, the owls feed largely upon hares and grouse; here nothing comes amiss, from a stray cat, roving too far from the house, to stray mussels on the beach that have escaped the sharp eyes of sea-gulls.

Some of his hunting ways are most curious. One winter day, in prowling along the beach, I approached the spot where a day or two before I had been shooting whistlers (golden-eye ducks) over decoys. The blind had been made by digging a hole in the sand. In the bottom was an armful of dry seaweed, to keep one's toes warm, and just behind the stand was the stump of a ship's mainmast, the relic of some old storm and shipwreck, cast up by the tide.

A commotion of some kind was going on in the blind as I drew near. Sand and bunches of seaweed were hurled up at intervals to be swept aside by the wind. Instantly I dropped out of sight into the dead beach grass to watch and listen. Soon a white head and neck bristled up from behind the old mast, every feather standing straight out ferociously. The head was perfectly silent a moment, listening; then it twisted completely round twice so as to look in every direction. A moment later it had disappeared, and the seaweed was flying again.

There was a prize in the old blind evidently. But

what was he doing there? Till then I had supposed that the owl always takes his game from the wing. Farther along the beach was a sand bluff overlooking the proceedings. I gained it after a careful stalk, crept to the edge, and looked over. Down in the blind a big snowy owl was digging away like a Trojan, tearing out sand and seaweed with his great claws, first one foot, then the other, like a hungry hen, and sending it up in showers behind him over the old mast. Every few moments he would stop suddenly, bristle up all his feathers till he looked comically big and fierce, take a look out over the log and along the beach, then fall to digging again furiously.

I suppose that the object of this bristling up before each observation was to strike terror into the heart of any enemy that might be approaching to surprise him at his unusual work. It is an owl trick. Wounded birds always use it when approached.

And the object of the digging? That was perfectly evident. A beach rat had jumped down into the blind, after some fragments of lunch, undoubtedly, and being unable to climb out, had started to tunnel up to the surface. The owl heard him at work, and started a stern chase. He won, too, for right in the midst of a fury of seaweed he shot up with the rat in his claws—so suddenly that he almost escaped me. Had it not been for the storm and his underground digging,

he surely would have heard me long before I could get near enough to see what he was doing; for his eyes and ears are wonderfully keen.

In his southern visits, or perhaps on the ice fields of the Arctic ocean, he has discovered a more novel way of procuring his food than digging for it. He has turned fisherman and learned to fish. Once only have I seen him get his dinner in this way. It was on the north shore of Nantucket, one day in the winter of 1890-91, when the remarkable flight of white owls came down from the north. The chord of the bay was full of floating ice, and swimming about the shoals were thousands of coots. While watching the latter through my field-glass, I noticed a snowy owl standing up still and straight on the edge of a big ice cake. "Now what is that fellow doing there?" I thought.—"I know! He is trying to drift down close to that flock of coots before they see him."

That was interesting; so I sat down on a rock to watch. Whenever I took my eyes from him a moment, it was difficult to find him again, so perfectly did his plumage blend with the white ice upon which he stood motionless.

But he was not after the coots. I saw him lean forward suddenly and plunge a foot into the water. Then, when he hopped back from the edge, and appeared to be eating something, it dawned upon me

that he was fishing — and fishing like a true sportsman, out on the ice alone, with only his own skill to depend upon. In a few minutes he struck again, and this time rose with a fine fish, which he carried to the shore to devour at leisure.

For a long time that fish was to me the most puzzling thing in the whole incident; for at that season no fish are to be found, except in deep water off shore. Some weeks later I learned that, just previous to the incident, several fishermen's dories, with full fares, had been upset on the east side of the island when trying to land through a heavy surf. The dead fish had been carried around by the tides, and the owl had been deceived into showing his method of fishing. Undoubtedly, in his northern home, when the ice breaks up and the salmon are running, he goes fishing from an ice cake as a regular occupation.

The owl lit upon a knoll, not two hundred yards from where I sat motionless, and gave me a good opportunity of watching him at his meal. He treated the fish exactly as he would have treated a rat or duck: stood on it with one foot, gripped the long claws of the other through it, and tore it to pieces savagely, as one would a bit of paper. The beak was not used, except to receive the pieces, which were conveyed up to it by his foot, as a parrot eats. He devoured everything — fins, tail, skin, head, and most of the bones,

in great hungry mouthfuls. Then he hopped to the top of the knoll, sat up straight, puffed out his feathers to look big, and went to sleep. But with the first slight movement I made to creep nearer, he was wide awake and flew to a higher point. Such hearing is simply marvelous.

The stomach of an owl is peculiar, there being no intermediate crop, as in other birds. Every part of his prey small enough (and the mouth and throat of an owl are large out of all proportion) is greedily swallowed. Long after the flesh is digested, feathers, fur, and bones remain in the stomach, softened by acids, till everything is absorbed that can afford nourishment, even to the quill shafts, and the ends and marrow of bones. The dry remains are then rolled into large pellets by the stomach, and disgorged.

This, by the way, suggests the best method of finding an owl's haunts. It is to search, not overhead, but on the ground under large trees, till a pile of these little balls, of dry feathers and hair and bones, reveals the nest or roosting place above.

It seems rather remarkable that my fisherman-owl did not make a try at the coots that were so plenty about him. Rarely, I think, does he attempt to strike a bird of any kind in the daytime. His long training at the north, where the days are several months long, has adapted his eyes to seeing perfectly, both in sun-

shine and in darkness; and with us he spends the greater part of each day hunting along the beaches. The birds at such times are never molested. He seems to know that he is not good at dodging; that they are all quicker than he, and are not to be caught napping. And the birds, even the little birds, have no fear of him in the sunshine; though they shiver themselves to sleep when they think of him at night.

I have seen the snowbirds twittering contentedly near him. Once I saw him fly out to sea in the midst of a score of gulls, which paid no attention to him. At another time I saw him fly over a large flock of wild ducks that were preening themselves in the grass. He kept straight on; and the ducks, so far as I could see, merely stopped their toilet for an instant, and turned up one eye so as to see him better. Had it been dusk, the whole flock would have shot up into the air at the first startled quack — all but one, which would have stayed with the owl.

His favorite time for hunting is the hour after dusk, or just before daylight, when the birds are restless on the roost. No bird is safe from him then. The fierce eyes search through every tree and bush and bunch of grass. The keen ears detect every faintest chirp, or rustle, or scratching of tiny claws on the roost. Nothing that can be called a sound escapes them. The broad, soft wings tell no tale of his presence, and

his swoop is swift and sure. He utters no sound. Like a good Nimrod he hunts silently.

The flight of an owl, noiseless as the sweep of a cloud shadow, is the most remarkable thing about him. The wings are remarkably adapted to the silent movement that is essential to surprising birds at dusk. The feathers are long and soft. The laminae extending from the wing quills, instead of ending in the sharp feather edge of other birds, are all drawn out to fine hair points, through which the air can make no sound as it rushes in the swift wing-beats. The *whish* of a duck's wings can be heard two or three hundred yards on a still night. The wings of an eagle rustle like silk in the wind as he mounts upward. A sparrow's wings flutter or whir as he changes his flight. Every one knows the startled rush of a quail or grouse. But no ear ever heard the passing of a great owl, spreading his five-foot wings in rapid flight.

He knows well, however, when to vary his program. Once I saw him hovering at dusk over some wild land covered with bushes and dead grass, a favorite winter haunt of meadow-larks. His manner showed that he knew his game was near. He kept hovering over a certain spot, swinging off noiselessly to right or left, only to return again. Suddenly he struck his wings twice over his head with a loud flap, and swooped instantly. It was a clever trick. The bird

beneath had been waked by the sound, or startled into turning his head. With the first movement the owl had him.

All owls have the habit of sitting still upon some high point which harmonizes with the general color of their feathers, and swooping upon any sound or movement that indicates game. The long-eared, or eagle-owl invariably selects a dark colored stub, on top of which he appears as a part of the tree itself, and is seldom noticed; while the snowy owl, whose general color is soft gray, will search out a birch or a lightning-blasted stump, and sitting up still and straight, so hide himself in plain sight that it takes a good eye to find him.

The swooping habit leads them into queer mistakes sometimes. Two or three times, when sitting or lying still in the woods watching for birds, my head has been mistaken for a rat or squirrel, or some other furry quadruped, by owls, which swooped and brushed me with their wings, and once left the marks of their claws, before discovering their mistake.

Should any boy reader ever have the good fortune to discover one of these rare birds some winter day in tramping along the beaches, and wish to secure him as a specimen, let him not count on the old idea that an owl cannot see in the daytime. On the contrary, let him proceed exactly as he would in stalking

a deer: get out of sight, and to leeward, if possible; then take every advantage of bush and rock and beach-grass to creep within range, taking care to advance only when his eyes are turned away, and remembering that his ears are keen enough to detect the passing of a mouse in the grass from an incredible distance.

Sometimes the crows find one of these snowy visitors on the beach, and make a great fuss and racket, as they always do when an owl is in sight. At such times he takes his stand under a bank, or in the lee of a rock, where the crows cannot trouble him from behind, and sits watching them fiercely. Woe be to the one that ventures too near. A plunge, a grip of his claw, a weak *caw*, and it's all over. That seems to double the crows' frenzy—and that is the one moment when you can approach rapidly from behind. But you must drop flat when the crows perceive you; for the owl is sure to take a look around for the cause of their sudden alarm. If he sees nothing suspicious he will return to his shelter to eat his crow, or just to rest his sensitive ears after all the pothor. A quarter-mile away the crows sit silent, watching you and him.

And now a curious thing happens. The crows, that a moment ago were clamoring angrily about their enemy, watch with a kind of intense interest as you creep towards him. Half way to the rock behind

which he is hiding, they guess your purpose, and a low rapid chatter begins among them. One would think that they would exult in seeing him surprised and killed; but that is not crow nature. They would gladly worry the owl to death if they could, but they will not stand by and see him slain by a common enemy. The chatter ceases suddenly. Two or three swift fliers leave the flock, circle around you, and speed over the rock, uttering short notes of alarm. With the first sharp note, which all birds seem to understand, the owl springs into the air, turns, sees you, and is off up the beach. The crows rush after him with crazy clamor, and speedily drive him to cover again. But spare yourself more trouble. It is useless to try stalking any game while the crows are watching.

Sometimes you can drive or ride quite near to one of these birds, the horse apparently removing all his suspicion. But if you are on foot, take plenty of time and care and patience, and shoot your prize on the first stalk if possible. Once alarmed, he will lead you a long chase, and most likely escape in the end.

I learned the wisdom of this advice in connection with the first snowy owl I had ever met outside a museum. I surprised him early one winter morning eating a brant, which he had caught asleep on the shore. He saw me, and kept making short flights

from point to point in a great circle — five miles, perhaps, and always in the open — evidently loath to abandon his feast to the crows; while I followed with growing wonder and respect, trying every device of the still hunter to creep within range. That was the same owl which I last saw at dusk, flying straight out to sea among the gulls.

XIV.

THE Christmas carol, sung by a chorus of fresh children's voices, is perhaps the most perfect expression of the spirit of Christmastide. Especially is this true of the old English and German carols, which seem to grow only sweeter, more mellow, more perfectly expressive of the love and good-will that inspired them, as the years go by. Yet always at Christmas time there is with me the memory of one carol sweeter than all, which was sung to me alone by a little minstrel from the far north, with the wind in the pines humming a soft accompaniment.

Doubtless many readers have sometimes seen in winter flocks of stranger birds — fluffy gray visitors, almost as large as a robin — flying about the lawns with soft whistling calls, or feeding on the ground, so tame and fearless that they barely move aside as you

approach. The beak is short and thick; the back of the head and a large patch just above the tail are golden brown; and across the wings are narrow double bars of white. All the rest is soft gray, dark above and light beneath. If you watch them on the ground, you will see that they have a curious way of moving about, like a golden-winged woodpecker in the same position. Sometimes they put one foot before the other, in a funny little attempt at a dignified walk, like the black-birds; again they hop like a robin, but much more awkwardly, as if they were not accustomed to walking, and did not quite know how to use their feet — which is quite true.

The birds are pine-grosbeaks, and are somewhat irregular winter visitors from the far north. Only when the cold is most severe, and the snow lies deep about Hudson Bay, do they leave their nesting places to spend a few weeks in bleak New England as a winter resort. Their stay with us is short and uncertain. Long ere the first bluebird has whistled to us from the old fence rail that, if we please, spring is coming, the grosbeaks are whistling of spring, and singing their love songs in the forests of Labrador.

A curious thing about the flocks we see in winter is that they are composed almost entirely of females. The male bird is very rare with us. You can tell him instantly by his brighter color and his beautiful

crimson breast. Sometimes the flocks contain a few young males, but until the first mating season has tipped their breast feathers with deep crimson they are almost indistinguishable from their sober colored companions.

This crimson breast shield, by the way, is the family mark or coat of arms of the grosbeaks, just as the scarlet crest marks all the woodpeckers. And if you ask a Micmac, deep in the woods, how the grosbeak got his shield, he may tell you a story that will interest you as did the legend of Hiawatha and the woodpecker in your childhood days.

If the old male, with his proud crimson, be rare with us, his beautiful song is still more so. Only in the deep forests, by the lonely rivers of the far north, where no human ear ever hears, does he greet the sunrise from the top of some lofty spruce. There also he pours into the ears of his sober little gray wife the sweetest love song of the birds. It is a flood of soft warbling notes, tinkling like a brook deep under the ice, tumbling over each other in a quiet ecstasy of harmony; mellow as the song of the hermit-thrush, but much softer, as if he feared lest any should hear but her to whom he sang. Those who know the music of the rose-breasted grosbeak (not his robin-like song of spring, but the exquisitely soft warble to his brooding mate) may multiply its sweetness indefinitely,

and so form an idea of what the pine-grosbeak's song is like.

But sometimes he forgets himself in his winter visit, and sings as other birds do, just because his world is bright; and then, once in a lifetime, a New England bird lover hears him, and remembers; and regrets for the rest of his life that the grosbeak's northern country life has made him so shy a visitor.

One Christmas morning, a few years ago, the new-fallen snow lay white and pure over all the woods and fields. It was soft and clinging as it fell on Christmas eve. Now every old wall and fence was a carved bench of gleaming white; every post and stub had a soft white robe and a tall white hat; and every little bush and thicket was a perfect fairyland of white arches and glistening columns, and dark grottoes walled about with delicate frostwork of silver and jewels. And then the glory, dazzling beyond all words, when the sun rose and shone upon it!

Before sunrise I was out. Soon the jumping flight and cheery good-morning of a downy woodpecker led me to an old field with scattered evergreen clumps. There is no better time for a quiet peep at the birds than the morning after a snow-storm, and no better place than the evergreens. If you can find them at all (which is not certain, for they have mysterious

ways of disappearing before a storm), you will find them unusually quiet, and willing to bear your scrutiny indifferently, instead of flying off into deeper coverts.

I had scarcely crossed the wall when I stopped at hearing a new bird song, so amazingly sweet that it could only be a Christmas message, yet so out of place that the listener stood doubting whether his ears were playing him false, wondering whether the music or the landscape would not suddenly vanish as an unreal thing. The song was continuous—a soft melodious warble, full of sweetness and suggestion; but suggestion of June meadows and a summer sunrise, rather than of snow-packed evergreens and Christmastide. To add to the unreality, no ear could tell where the song came from; its own muffled quality disguised the source perfectly. I searched the trees in front; there was no bird there. I looked behind; there was no place for a bird to sing. I remembered the redstart, how he calls sometimes from among the rocks, and refuses to show himself, and runs and hides when you look for him. I searched the wall; but not a bird track marked the snow. All the while the wonderful carol went on, now in the air, now close beside me, growing more and more bewildering as I listened. It took me a good half-hour to locate the sound; then I understood.

Near me was a solitary fir tree with a bushy top. The bird, whoever he was, had gone to sleep up there, close against the trunk, as birds do, for protection. During the night the soft snow gathered thicker and thicker upon the flexible branches. Their tips bent with the weight till they touched the trunk below, forming a green bower, about which the snow packed all night long, till it was completely closed in. The bird was a prisoner inside, and singing as the morning sun shone in through the walls of his prison-house.

As I listened, delighted with the carol and the minstrel's novel situation, a mass of snow, loosened by the sun, slid from the snow bower, and a pine-grosbeak appeared in the doorway. A moment he seemed to look about curiously over the new, white, beautiful world; then he hopped to the topmost twig and, turning his crimson breast to the sunrise, poured out his morning song; no longer muffled, but sweet and clear as a wood-thrush bell ringing the sunset.

Once, long afterward, I heard his softer love song, and found his nest in the heart of a New Brunswick forest. Till then it was not known that he ever built south of Labrador. But even that, and the joy of discovery, lacked the charm of this rare sweet carol, coming all unsought and unexpected, as good things do, while our own birds were spending the Christmas time and singing the sunrise in Florida.

XV. MOOWEEN. THE BEAR.

EVER since nursery times Bruin has been largely a creature of imagination. He dwells there a ferocious beast, prowling about gloomy woods, red eyed and dangerous, ready to rush upon the unwary traveler and eat him on the spot.

Sometimes, indeed, we have seen him out of imagination. There he is a poor, tired, clumsy creature, footsore and dusty, with a halter round his neck, and a swarthy foreigner to make his life miserable. At the word he

risers to his hind legs, hunches his shoulders, and lunges awkwardly round in a circle, while the foreigner sings *Horry, horry, dum-dum*, and his wife passes the hat.

We children pity the bear, as we watch, and forget the other animal that frightens us when near the woods at night. But he passes on at last, with a troop of boys following to the town limits. Next day Bruin comes back, and lives in imagination as ugly and frightful as ever.

But Mooween the Bear, as the northern Indians call him, the animal that lives up in the woods of Maine and Canada, is a very different kind of creature. He is big and glossy black, with long white teeth and sharp black claws, like the imagination bear. Unlike him, however, he is shy and wild, and timid as any rabbit. When you camp in the wilderness at night, the rabbit will come out of his form in the ferns to pull at your shoe, or nibble a hole in the salt bag, while you sleep. He will play twenty pranks under your very eyes. But if you would see Mooween, you must camp many summers, and tramp many a weary mile through the big forests before catching a glimpse of him, or seeing any trace save the deep tracks, like a barefoot boy's, left in some soft bit of earth in his hurried flight.

Mooween's ears are quick, and his nose very keen. The slightest warning from either will generally send him off to the densest cover or the roughest hillside in the neighborhood. Silently as a black shadow he glides away, if he has detected your approach from a

distance. But if surprised and frightened, he dashes headlong through the brush with crash of branches, and bump of fallen logs, and volleys of dirt and dead wood flung out behind him as he digs his toes into the hillside in his frantic haste to be away.

In the first startled instant of such an encounter, one thinks there must be twenty bears scrambling up the hill. And if you should perchance get a glimpse of the game, you will be conscious chiefly of a funny little pair of wrinkled black feet, turned up at you so rapidly that they actually seem to twinkle through a cloud of flying loose stuff.

That was the way in which I first met Mooween. He was feeding peaceably on blueberries, just stuffing himself with the ripe fruit that tinged with blue a burned hillside, when I came round the turn of a deer path. There he was, the mighty, ferocious beast — and my only weapon a trout-rod!

We discovered each other at the same instant. Words can hardly measure the mutual consternation. I felt scared; and in a moment it flashed upon me that he looked so. This last observation was like a breath of inspiration. It led me to make a demonstration before he should regain his wits. I jumped forward with a flourish, and threw my hat at him. —

Boo! said I.

Hoof, woof! said Mooween. And away he went

up the hill in a desperate scramble, with loose stones rattling, and the bottoms of his feet showing constantly through the volley of dirt and chips flung out behind him.

That killed the fierce imagination bear of childhood days deader than any bullet could have done, and convinced me that Mooween is at heart a timid creature. Still, this was a young bear, as was also one other upon whom I tried the same experiment, with the same result. Had he been older and bigger, it might have been different. In that case I have found that a good rule is to go your own way unobtrusively, leaving Mooween to his devices. All animals, whether wild or domestic, respect a man who neither fears nor disturbs them.

Mooween's eyes are his weak point. They are close together, and seem to focus on the ground a few feet in front of his nose. At twenty yards to leeward he can never tell you from a stump or a caribou, should you chance to be standing still.

If fortunate enough to find the ridge where he sleeps away the long summer days, one is almost sure to get a glimpse of him by watching on the lake below. It is necessary only to sit perfectly still in your canoe among the water-grasses near shore. When near a lake, a bear will almost invariably come down about noontime to sniff carefully all about, and

lap the water, and perhaps find a dead fish before going back for his afternoon sleep.

Four or five times I have sat thus in my canoe while Mooween passed close by, and never suspected my presence till a chirp drew his attention. It is curious at such times, when there is no wind to bring the scent to his keen nose, to see him turn his head to one side, and wrinkle his forehead in the vain endeavor to make out the curious object there in the grass. At last he rises on his hind legs, and stares long and intently. It seems as if he must recognize you, with his nose pointing straight at you, his eyes looking straight into yours. But he drops on all fours again, and glides silently into the thick bushes that fringe the shore.

Don't stir now, nor make the least sound. He is in there, just out of sight, sitting on his haunches, using nose and ears to catch your slightest message.

Ten minutes pass by in intense silence. Down on the shore, fifty yards below, a slight swaying of the bilberry bushes catches your eye. That surely is not the bear! There has not been a sound since he disappeared. A squirrel could hardly creep through that underbrush without noise enough to tell where he was. But the bushes sway again, and Mooween reappears suddenly for another long look at the suspicious object. Then he turns and plods his way along

shore, rolling his head from side to side as if completely mystified.

Now swing your canoe well out into the lake, and head him off on the point, a quarter of a mile below. Hold the canoe quiet just outside the lily pads by grasping a few tough stems, and sit low. This time the big object catches Mooween's eye as he rounds the point; and you have only to sit still to see him go through the same maneuvers with greater mystification than before.

Once, however, he varied his program, and gave me a terrible start, letting me know for a moment just how it feels to be hunted, at the same time showing with what marvelous stillness he can glide through the thickest cover when he chooses.

It was early evening on a forest lake. The water lay like a great mirror, with the sunset splendor still upon it. The hush of twilight was over the wilderness. Only the hermit-thrushes sang wild and sweet from a hundred dead spruce tops.

I was drifting about, partly in the hope to meet Mooween, whose tracks were very numerous at the lower end of the lake, when I heard him walking in the shallow water. Through the glass I made him out against the shore, as he plodded along in my direction.

I had long been curious to know how near a bear

would come to a man without discovering him. Here was an opportunity. The wind at sunset had been in my favor; now there was not the faintest breath stirring.

Hiding the canoe, I sat down in the sand on a little point, where dense bushes grew down to within a few feet of the water's edge. Head and shoulders were in plain sight above the water-grass. My intentions were wholly peaceable, notwithstanding the rifle that lay across my knees. It was near the mating season, when Mooween's temper is often dangerous; and one felt much more comfortable with the chill of the cold iron in his hands.

Mooween came rapidly along the shore meanwhile, evidently anxious to reach the other end of the lake. In the mating season bears use the margins of lakes and streams as natural highways. As he drew nearer and nearer I gazed with a kind of fascination at the big unconscious brute. He carried his head low, and dropped his feet with a heavy splash into the shallow water.

At twenty yards he stopped as if struck, with head up and one paw lifted, sniffing suspiciously. Even then he did not see me, though only the open shore lay between us. He did not use his eyes at all, but laid his great head back on his shoulders and sniffed in every direction, rocking his brown muzzle up and

down the while, so as to take in every atom from the tainted air.

A few slow careful steps forward, and he stopped again, looked straight into my eyes, then beyond me towards the lake, all the while sniffing. I was still only part of the shore. Yet he was so near that I caught the gleam of his eyes, and saw the nostrils swell and the muzzle twitch nervously.

Another step or two, and he planted his fore feet firmly. The long hairs began to rise along his spine, and under his wrinkled chops was a flash of white teeth. Still he had no suspicion of the motionless object there in the grass. He looked rather out on the lake. Then he glided into the brush and was lost to sight and hearing.

He was so close that I scarcely dared breathe as I waited, expecting him to come out farther down the shore. Five minutes passed without the slightest sound to indicate his whereabouts, though I was listening intently in the dead hush that was on the lake. All the while I smelled him strongly. One can smell a bear almost as far as he can a deer, though the scent does not cling so long to the underbrush.

A bush swayed slightly below where he had disappeared. I was watching it closely when some sudden warning — I know not what, for I did not hear but only felt it — made me turn my head quickly.

There, not six feet away, a huge head and shoulders were thrust out of the bushes on the bank, and a pair of gleaming eyes were peering intently down upon me in the grass. He had been watching me at arm's length probably two or three minutes. Had a muscle moved in all that time, I have no doubt that he would have sprung upon me. As it was, who can say what was passing behind that curious, half-puzzled, half-savage gleam in his eyes?

He drew quickly back as a sudden movement on my part threw the rifle into position. A few minutes later I heard the snap of a rotten twig some distance away. Not another sound told of his presence till he broke out onto the shore, fifty yards above, and went steadily on his way up the lake.

Mooween is something of a humorist in his own way. When not hungry he will go out of his way to frighten a bullfrog away from his sun-bath on the shore, for no other purpose, evidently, than just to see him jump. Watching him thus amusing himself one afternoon, I was immensely entertained by seeing him turn his head to one side, and wrinkle his eyebrows, as each successive frog said *ke'dunk*, and went splashing away over the lily pads.

A pair of cubs are playful as young foxes, while their extreme awkwardness makes them a dozen times

more comical. Simmo, my Indian guide, tells me that the cubs will sometimes run away and hide when they hear the mother bear returning. No amount of coaxing or of anxious fear on her part will bring them back, till she searches diligently to find them.

Once only have I had opportunity to see the young at play. There were two of them, nearly full-grown, with the mother. The most curious thing was to see them stand up on their hind legs and cuff each other soundly, striking and warding like trained boxers. Then they would lock arms and wrestle desperately till one was thrown, when the other promptly seized him by throat or paw, and pretended to growl frightfully.

They were well fed, evidently, and full of good spirits as two boys. But the mother was cross and out of sorts. She kept moving about uneasily, as if the rough play irritated her nerves. Occasionally, as she sat for a moment with hind legs stretched out flat and fore paws planted between them, one of the cubs would approach and attempt some monkey play. A sound cuff on the ear invariably sent him whimpering back to his companion, who looked droll enough the while, sitting with his tongue out and his head wagging humorously as he watched the experiment. It was getting toward the time of year when she would mate again, and send them off into the world

to shift for themselves. And this was perhaps their first hard discipline.

Once also I caught an old bear enjoying himself in a curious way. It was one intensely hot day, in the heart of a New Brunswick wilderness. Mooween came out onto the lake shore and lumbered along, twisting uneasily and rolling his head as if very much distressed by the heat. I followed silently close behind in my canoe.

Soon he came to a cool spot under the alders, which was probably what he was looking for. A small brook made an eddy there, and a lot of drift-wood had collected over a bed of soft black mud. The stump of a huge cedar leaned out over it, some four or five feet above the water.

First he waded in to try the temperature. Then he came out and climbed the cedar stump, where he sniffed in every direction, as is his wont before lying down. Satisfied at last, he balanced himself carefully and gave a big jump — Oh, so awkwardly! — with legs out flat, and paws up, and mouth open as if he were laughing at himself. Down he came, *sousc*, with a tremendous splash that sent mud and water flying in every direction. And with a deep *uff-guff* of pure delight, he settled himself in his cool bed for a comfortable nap.

In his fondness for fish, Mooween has discovered an

interesting way of catching them. In June and July immense numbers of trout and salmon run up the wilderness rivers on their way to the spawning grounds. Here and there, on small streams, are shallow riffles, where large fish are often half out of water as they struggle up. On one of these riffles Mooween stations himself during the first bright moonlight nights of June, when the run of fish is largest on account of the higher tides at the river mouth. And Mooween knows, as well as any other fisherman, the kind of night on which to go fishing. He knows also the virtue of keeping still. As a big salmon struggles by, Mooween slips a paw under him, tosses him to the shore by a dexterous flip, and springs after him before he can flounder back.

When hungry, Mooween has as many devices as a fox for getting a meal. He tries flipping frogs from among the lily pads in the same way that he catches salmon. That failing, he takes to creeping through the water-grass, like a mink, and striking his game dead with a blow of his paw.

Or he finds a porcupine loafing through the woods, and follows him about to throw dirt and stones at him, carefully refraining from touching him the while, till the porcupine rolls himself into a ball of bristling quills, — his usual method of defense. Mooween slips a paw under him, flips him against a tree to stun

him, and bites him in the belly, where there are no quills. If he spies the porcupine in a tree, he will climb up, if he is a young bear, and try to shake him off. But he soon learns better, and saves his strength for more fruitful exertions.

Mooween goes to the lumber camps regularly after his winter sleep and, breaking in through door or roof, helps himself to what he finds. If there happens to be a barrel of pork there, he will roll it into the open air, if the door is wide enough, before breaking in the head with a blow of his paw.

Should he find a barrel of molasses among the stores, his joy is unbounded. The head is broken in on the instant and Mooween eats till he is surfeited. Then he lies down and rolls in the sticky sweet, to prolong the pleasure; and stays in the neighborhood till every drop has been lapped up.

Lumbermen have long since learned of his strength and cunning in breaking into their strong camps. When valuable stores are left in the woods, they are put into special camps, called bear camps, where doors and roofs are fastened with chains and ingenious log locks to keep Mooween out.

Near the settlements Mooween speedily locates the sweet apple trees among the orchards. These he climbs by night, and shakes off enough apples to last him for several visits. Every kind of domestic animal

is game for him. He will lie at the edge of a clearing for hours, with the patience of a cat, waiting for turkey or sheep or pig to come within range of his swift rush.

His fondness for honey is well known. When he has discovered a rotten tree in which wild bees have hidden their store, he will claw at the bottom till it falls. Curling one paw under the log he sinks the claws deep into the wood. The other paw grips the log opposite the first, and a single wrench lays it open. The clouds of angry insects about his head meanwhile are as little regarded as so many flies. He knows the thickness of his skin, and they know it. When the honey is at last exposed, and begins to disappear in great hungry mouthfuls, the bees also fall upon it, to gorge themselves with the fruit of their hard labor before Mooween shall have eaten it all.

Everything eatable in the woods ministers at times to Mooween's need. Nuts and berries are favorite dishes in their season. When these and other delicacies fail, he knows where to dig for edible roots. A big caribou, wandering near his hiding place, is pulled down and stunned by a blow on the head. Then, when the meat has lost its freshness, he will hunt for an hour after a wood-mouse he has seen run under a stone, or pull a rotten log to pieces for the ants and larvæ concealed within.

These last are favorite dishes with him. In a

burned district, where ants and berries abound, one is continually finding charred logs, in which the ants nest by thousands, split open from end to end. A few strong claw marks, and the lick of a moist tongue here and there, explain the matter. It shows the extremes of Mooween's taste. Next to honey he prefers red ants, which are sour as pickles.

Mooween is even more expert as a boxer than as a fisherman. When the skin is stripped from his fore arms, they are seen to be of great size, with muscles as firm to the touch as so much rubber. Long practice has made him immensely strong, and quick as a flash to ward and strike. Woe be to the luckless dog, however large, that ventures in the excitement of the hunt within reach of his paw. A single swift stroke will generally put the poor brute out of the hunt forever.

Once Simmo caught a bear by the hind leg in a steel trap. It was a young bear, a two-year-old; and Simmo thought to save his precious powder by killing it with a club. He cut a heavy maple stick and, swinging it high above his head, advanced to the trap. Mooween rose to his hind legs, and looked him steadily in the eye, like the trained boxer that he is. Down came the club with a sweep to have felled an ox. There was a flash from Mooween's paw; the club spun away into the woods; and Simmo just escaped

a fearful return blow by dropping to the ground and rolling out of reach, leaving his cap in Mooween's claws. A wink later, and his scalp would have hung there instead.

In the mating season, when three or four bears often roam the woods together in fighting humor, Mooween uses a curious kind of challenge. Rising on his hind legs against a big fir or spruce, he tears the bark with his claws as high as he can reach on either side. Then placing his back against the trunk, he turns his head and bites into the tree with his long canine teeth, tearing out a mouthful of the wood. That is to let all rivals know just how big a bear he is.

The next bear that comes along, seeking perhaps to win the mate of his rival and following her trail, sees the challenge and measures his height and reach in the same way, against the same tree. If he can bite as high, or higher, he keeps on, and a terrible fight is sure to follow. But if, with his best endeavors, his marks fall short of the deep scars above, he prudently withdraws, and leaves it to a bigger bear to risk an encounter.

In the wilderness one occasionally finds a tree on which three or four bears have thus left their challenge. Sometimes all the bears in a neighborhood seem to have left their records in the same place. I remember well one such tree, a big fir, by a lonely

little beaver pond, where the separate challenges had become indistinguishable on the torn bark. The freshest marks here were those of a long-limbed old ranger — a monster he must have been — with a clear reach of a foot above his nearest rival. Evidently no other bear had cared to try after such a record.

Once, in the mating season, I discovered quite by accident that Mooween can be called, like a hawk or a moose, or indeed any other wild creature, if one but knows how. It was in New Brunswick, where I was camped on a wild forest river. At midnight I was back at a little opening in the woods, watching some hares at play in the bright moonlight. When they had run away, I called a wood-mouse out from his den under a stump; and then a big brown owl from across the river — which almost scared the life out of my poor little wood-mouse. Suddenly a strange cry sounded far back on the mountain. I listened curiously, then imitated the cry, in the hope of hearing it again and of remembering it; for I had never before heard anything like the sound, and had no idea what creature produced it. There was no response, however, and I speedily grew interested in the owls; for by this time two or three more were hooting about me, all called in by the first comer. When they had gone I tried the strange call again. Instantly it was answered close at hand. The creature was coming.

I stole out into the middle of the opening, and sat very still on a fallen log. Ten minutes passed in intense silence. Then a twig snapped behind me. I turned—and there was Mooween, just coming into the opening. I shall not soon forget how he looked, standing there big and black in the moonlight; nor the growl deep down in his throat, that grew deeper as he watched me. We looked straight into each other's eyes a brief, uncertain moment. Then he drew back silently into the dense shadow.

There is another side to Mooween's character, fortunately a rare one, which is sometimes evident in the mating season, when his temper leads him to attack instead of running away, as usual; or when wounded, or cornered, or roused to frenzy in defense of the young. Mooween is then a beast to be dreaded, a great savage brute, possessed of enormous strength and of a fiend's cunning. I have followed him wounded through the wilderness, when his every resting place was scarred with deep gashes, and where broken saplings testified mutely to the force of his blow. Yet even here his natural timidity lies close to the surface, and his ferocity has been greatly exaggerated by hunters.

Altogether, Mooween the Bear is a peaceable fellow, and an interesting one, well worth studying. His extreme wariness, however, enables him generally to

escape observation; and there are undoubtedly many queer ways of his yet to be discovered by some one who, instead of trying to scare the life out of him by a shout or a rifle-shot in the rare moments when he shows himself, will have the patience to creep near, and find out just what he is doing. Only in the deepest wilderness is he natural and unconscious. There he roams about, entirely alone for the most part, supplying his numerous wants, and performing droll capers with all the gravity of an owl, when he thinks that not even Tookhees, the wood-mouse, is looking.