

Uncle Jack's Discovery

STORIES *of* ANIMALS, BIRDS
FISHES *and* REPTILES

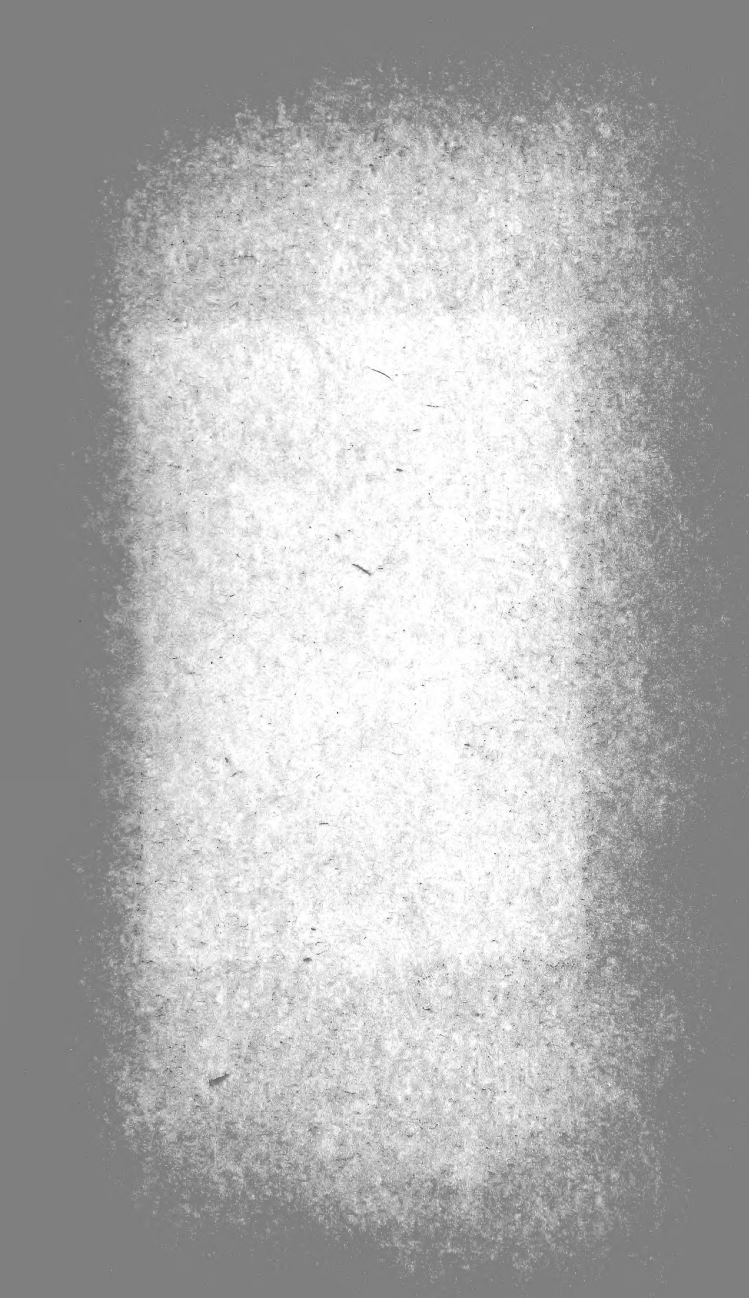


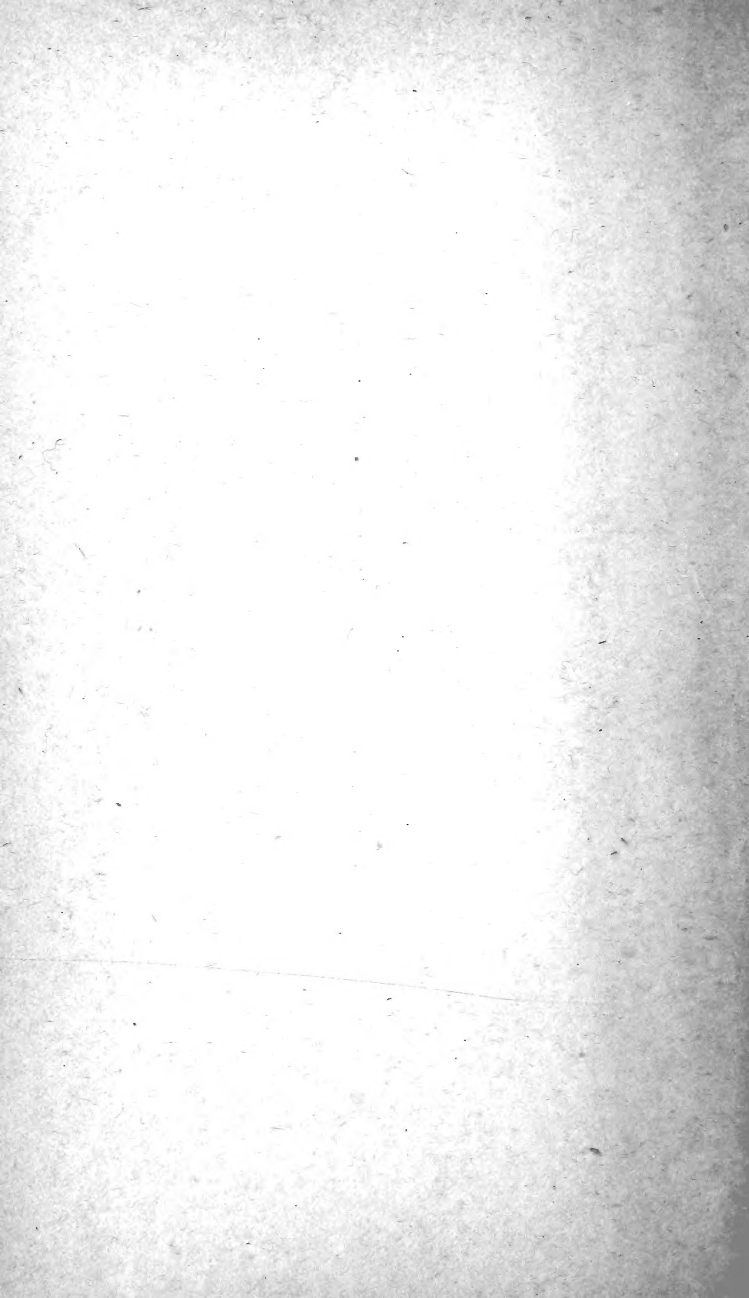
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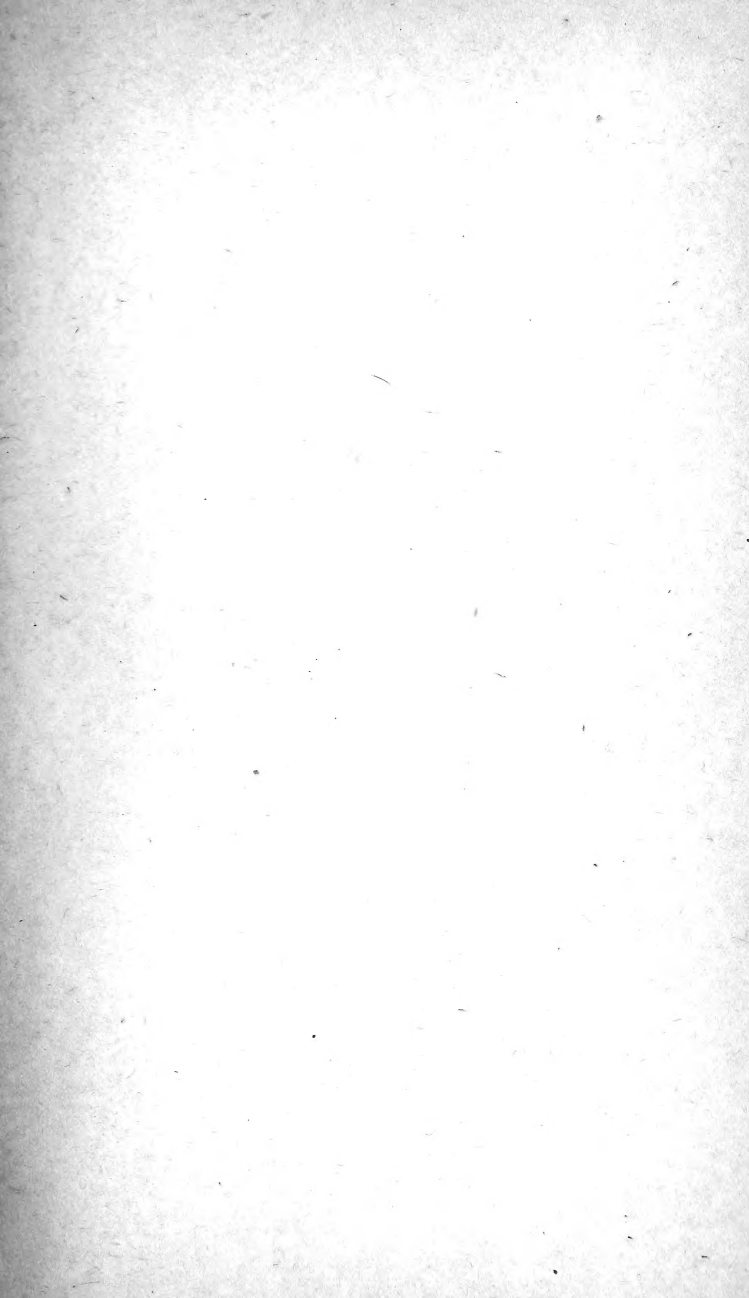
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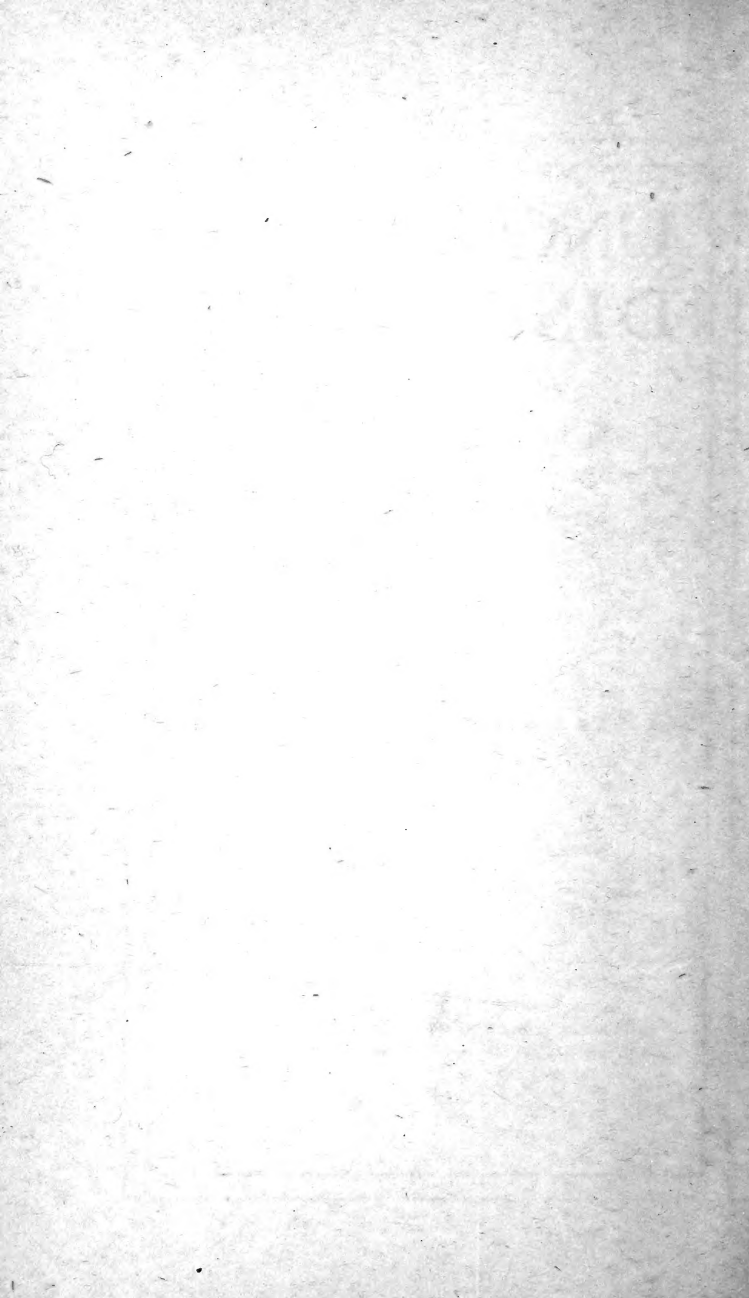
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UNCLE JACK'S DISCOVERY

Sixty Short, True, Strange, Interesting
and Instructive Stories about Animals,
Birds, Fishes, Reptiles and Insects

WITH

A Prize Love-Letter to Young America

BY JOHN H. ACTON



There is a great deal of Human nature in a Pig. or a
great deal of Pig in Human nature.

—*Titcomb.*

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THIS BOOK IS

NOT published as a sample of literary excellence.

NOR as a beautiful souvenir to be kept in a dustless drawer.

NOR as a competitor in the market with the thousands of most excellent volumes for children that can now be found in all book-stores.

BUT it is sent forth as a pleading voice for that large class of living creatures which have no voice to plead for themselves; and as a protest against that false epithet of the ages — "DUMB ANIMALS" — a heartless slander upon creatures that are not dumb.

WE deprecate war and sigh for peace. War is animalism in action—"might vs. right." Peace is the reverse of this law—*right* is the only lawful *might*.

IF we would not rear our boys for soldiers, both girls and boys should be taught that life is a unit, and all life is sacred. That peace can flourish only in that humane sentiment which recognizes the *right* of every living creature to humane treatment by human hands.

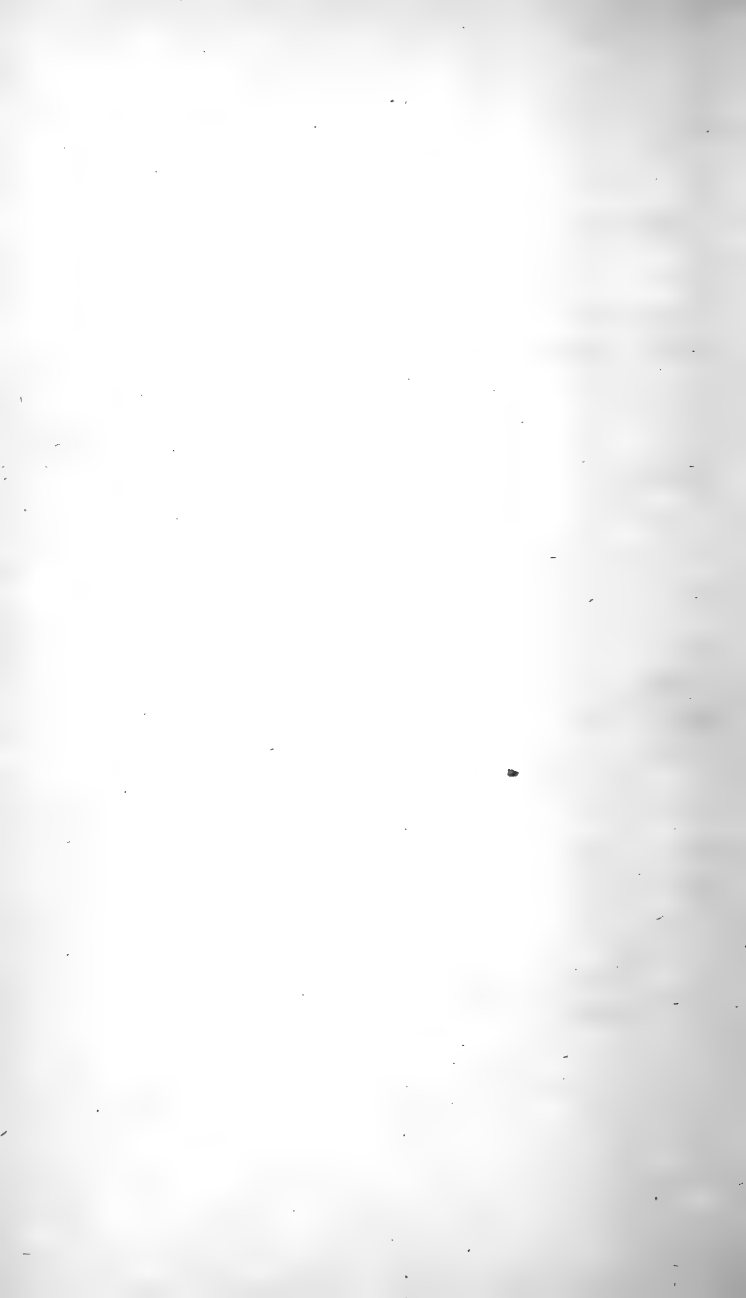
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Young America on Page 208



THE SMARTEST DOG IN THE WORLD

Many smart dogs have been considered the smartest dogs in the world. But owners are not always the safest judges. As there is no way in which we can certainly tell, the claim can never be successfully challenged. Several years ago there was a collie named Bozzie, owned by a gentleman in Chicago, Illinois, whose record for smart tricks seems never to have been surpassed in this country. But she was not simply a trick-dog, she was educated. She did all kinds of tricks, but in addition to these she could count, add, subtract, multiply, and divide, make change with money, distinguish and tell different colors, and in many ways seemed to exercise reason just as a child. She showed that she could think, and that she had intellect equal to any ordinary child of the age of eight or ten years. Bozzie came of fine stock. She was the daughter of the celebrated Boz, a dog that traveled all over this country and Europe, years ago, giving exhibitions. He was shown before the crowned heads of Europe. The Prince of Wales was at one time so impressed with him that one night he had his bed at Windsor Castle, in order that he might be shown to royalty the

next day. This dog belonged to W. A. Harris, of Mendon, Michigan. But Boz never surpassed his illustrious daughter. Bozzie could do almost anything but talk. She was often shown at entertainments, and was a great favorite at picnics and among the children at Sunday School parties. Everyone who saw her did not hesitate to affirm that she was the smartest dog in the world.

At one time there were five men in a room when the performance began. Bozzie was told to take a good look at the company and then tell how many were there. She passed around the room and came back. Her owner asked: "How many people are there in the room, Bozzie?"

Bozzie barked five times.

"How many have their hats on?"

Bozzie barked twice. (Two had hats on.)

The next question was, "How many are there without hats on?"

Bozzie again barked the right number.

A gentleman present suggested this was only a trick, and that the dog barked until her owner gave some sign for her to stop. Her owner then pointing to the skeptical speaker said: "Bozzie, do what that gentleman tells you." He then went and stood with his face to the wall where the dog could not see him. The doubter then took up the examination.

"Bozzie, how many are two times four?"

She barked eight times.

"Take five from that and how many?"

Three barks.

"Add nine to that, and how many?"

Twelve barks.

"What is one-half of that?"

Six barks.

In every case the answers were quickly given, were correct, and there was no trickery about it, as all who saw the performance testified. At another time, a different memory test was made. Four gentlemen present, each wrote a number on a card and placed it on the floor. The numbers were 1, 6, 4, 1.

"How many are there altogether?" was asked.

Bozzie barked twelve times.

"How many days are there in a week?"

Seven barks.

"How many working days?"

Six barks.

"How many Sundays?"

One bark.

"How many weeks in a month?"

Four barks.

To give her a little rest, her owner now put her through some tricks. "Bozzie, we had an election some time ago; if you had been a voter which would you have rather done, vote for Bryan, or die?"

Bozzie stretched herself out on the floor and shut her eyes.

"You must be a McKinley dog, Bozzie, are you?"

A short bark, indicated she was a good Republican.

A five dollar bill was now placed on the floor, a silver dollar, a quarter, and a nickel. Her owner then asked one present to call for some change that could be made with this money. One dollar and a quarter was called for. The dog made the change, carrying the pieces to her master. Other change also, was correctly made.

A hand was held before her and she was asked to tell the number of rings on the fingers. The rings were on the third finger. Bozzie barked four times. She did not distinguish between thumb and fingers. Rings were then put on different fingers, and in all cases the dog told the number of the rings and the fingers.

Bozzie was told to go across the street and sit on the top of some steps. She obeyed, and remained in position until told to return.

"How many steps are there over there?"

Eleven barks. The steps could not be numbered from that side of the street; but were found when counted, as the dog indicated.

While on the street a colored man was met, and Bozzie was asked:

"How many people are here, Bozzie?"

Four barks.

"How many white people?"

Three barks.

"How many colored people?"

Bozzie rubbed her nose against the colored man's leg and barked once. The man walked away amazed, saying: "Dat's a mighty smart dog."

When at the stock yards, she would go into the sheep pens and bring out the number of sheep she was ordered to bring, and when on the farm and ordered to bring up the cows, she never brought the steers. When told to bring the horses the cows were never brought, though they were all in the same lot. If told to bring the gray horse, the gray was brought and no other. Her owner said she brought his shoes when told, or other articles of wardrobe when he was dressing, and did not fail to distinguish between the articles. Her owner said, also, he could send her into a room with fifty articles to choose from, and she would bring the thing ordered; and declared further, she knew more than a lot of people; and when he was getting ready to go down street, was better help than some people. She was taught much as one would teach a child. She learned step at a time, just like a child learns. Bozzie was critically examined by many scientists, at different times, and all agreed there was no collusion, but that the dog certainly did her work just as a child would do it. She was a beautiful animal, always seemed happy, and enjoyed her duties. Unfortunately, when about three years old, she died of poison. How it occurred was never known.

CATFISH BILL, AND HIS CROW

Catfish Bill had been given this name by his companions because they said he had a mouth as big as a river catfish, and that it was always open and making a noise. He was an uncouth, ignorant, and disagreeable lad, cruel to animals, overbearing toward smaller boys, and despised by all the little school-girls. He would rob birds-nests, and take things that did not belong to him, and altogether was an undesirable companion for any one. But Catfish had one lover. In some way never explained, Catfish had secured a young crow. No one ever seemed to know where he obtained the bird, and no one was ever interested enough in his answer to ask him, for everybody knew that Catfish would tell them anything that happened at the moment to suit him, and all knew that he only needed the opportunity to take it anywhere it happened to be when he found it. This crow was a queer bird. It grew to be very tame about the house and yard, and though never confined, and it had freedom to go anywhere it chose, it seldom left the premises. Catfish had a dog he called Lion; and almost any time of day he could be heard calling Lion. The crow learned to call the dog so nearly like the voice

of Catfish that it was hard to distinguish the bird. This pet would get up on the house and call, "Hew Lion, hew Lion, hew Lion, hew Lion," quite as plainly as Catfish could. It would strut about the house saying, "mother, mother, mother, mother," and even learned to tease the little children. It would sit on the roof of the house and as they passed in the street on their way to school, suddenly swoop down, flapping its wings near their heads; they would scream and run, while the crow sailed back to its perch on the roof and began to "ha, ha, ha, ha, ha," just as it had heard its master many, many times. In those days stock was not kept up as in later years, and when the village cows passed along the street, the crow would strut proudly behind them, muttering something to itself at every step. What it said no one ever knew; but it acted just as if it considered itself the driver, and had to talk to the cattle, in order to keep them moving. It never made a friend of any one but those about the home of Catfish; and of all the inmates, Catfish seemed to be its especial admiration. No effort had ever been made to teach the bird to talk. It learned from hearing others, and it was very plain from its manner and speech, that Catfish had been taken as chief model. This crow was quite a curiosity because it could talk, but it had the same overbearing, burly disposition, and swagger of its owner, was not admired by others, and the children of the vil-

lage were all afraid of it. It strutted about with a haughty air, and no one save its home friends ever cared even to attempt any familiarity. Every one said people would easily know who owned this crow, for it was just like Catfish Bill.

WALKING AND CLIMBING FISHES

It would not greatly frighten the bare-foot boy with his fishing pole waiting for a "bite," to be told that he better watch, or a fish might crawl out of the water and bite him. He would only laugh. And if after long waiting and he had caught nothing, if he was told that perhaps all the fish had left the pond and gone visiting, or had moved to other quarters, he would think you were making sport of him; for what school-boy does not know that fish cannot leave the water!

It is true, nevertheless, that there are many fishes that can bite so hard as to be dangerous, and there are others that can crawl on the dry land. The fish known as the anabas, that very much resembles the black-bass, is found in the waters of Southern Africa, and Southeastern Asia, and also in India. It can both crawl and climb. Sometimes when the pools where they live dry up, or for any other reason they decide to leave them, these fishes will travel long distances overland to other places. Nature has provided them with a kind of cell in which water is stored sufficient to keep the gills moist while they travel. They will creep over dusty roads in the hot sun without seeming to suffer,

and even wiggle their way up steep embankments. Some writers have claimed that they can even climb trees. They are a fresh-water fish, and do not live in the sea. Just how they manage to climb trees has never been explained; but we know that snakes climb, and it would seem quite as difficult for a snake as a fish that can creep on the dry land. We know also, that an eel can make its way over moist earth. There are many species of these fishes, and they are often caught in the damp grass while on their travels, and some of these are considered a great delicacy. They are known as the Climbing Perch, and walking fish.

INTELLIGENCE OF SEALS

Of all the animals that pretend to locomotion on land, the seal appears the least adapted. Its flippers are not feet, and the absence of hind legs render it a most helpless looking animal; but it shows an amazing ability not only to move about out of the water, but to climb, also. It can wiggle its way up on high rocks from the sea, and when tamed, can get up on a chair or table. They are not desirable looking pets, but show marked intelligence. A young seal caught by some fishermen became very tame and affectionate. After a time its owner, growing tired of it, concluded he would place it back in its native element. The seal was taken in a boat out to sea and dropped overboard. The boatman hurried back to land as fast as possible, lest it should follow him, but had hardly secured his boat at the dock before the seal crawled out and began making a clumsy movement toward its old quarters. Sometime later the owner again gave it away, and instructed the old sailor, who was about to sail on a long voyage, not to drop it overboard until he was many miles at sea. That was the last seen of the seal for many days, and the gentleman congratulated himself

that he had done a double service—he had gotten rid of an undesirable pet, and had given a dumb animal its liberty. But he was badly mistaken; the animal was far from dumb, and he was not rid of its presence, for one morning after a very cold and stormy night, on opening his door, there lay the seal on the step, dead. The poor creature had found its way through weary miles of ocean travel back to its old home, only to die at the end of the long journey, for arriving in the night, it had found no friend to aid it, and whether it died from hunger or from cold none could tell.

A few years ago some fishermen were following their vocation, off harbor on the Maine coast, when they observed a commotion on the surface, and soon saw a seal leaping from the water as if pursued by some enemy. Swimming near the boat, the men saw it was pursued by a swordfish. Dropping his line, one of the men leaned over his boat and held out his hands; to his amazement the seal immediately dashed toward him, and with his help scrambled into the boat, just as the swordfish rushed by, its big eyes apparently wide open in wonder at the sudden disappearance of its prey. The boatmen were so impressed with the seal's intelligence and confidence that they kept it as a pet, and it became a familiar object on shore. At another time, a crew of fishermen caught a young seal, and for several days they were followed by its

mother, who kept up a continued wailing for her lost baby. The kind-hearted sailors were so deeply impressed by her sorrow that they refused to kill the little one, but put it back in the water, when the two immediately went happily off together. Seals that have been tamed have been taught many amusing tricks, like dogs. They will climb out on a platform, sit on a chair, and dive off a high perch into the water for fish that are thrown to them.

SOME WRENS THAT I HAVE KNOWN

The little brown wren is one of the most interesting of our small birds. It seems to be always in a great hurry, and seldom is still for a minute, except when singing, and it sings just like it works—with all its might. The mother bird likes to build her nest near, or inside of a house, and will become very tame. Now, that the English sparrow has become so numerous, these small birds have little chance to nest anywhere that a sparrow can find. But if they can secure a place inside of a porch or an out-building, they can be protected from these foes.

After some weeks' absence from home, we found on returning that a wren had built under an upturned bucket, left on a shelf in an out-kitchen. She had access to the building through a broken pane of glass. A door from another part of the house opened just by this shelf. We were careful for a few days on going in and out not to disturb the little bird as she came and went, and she grew very tame. While setting, I at one time took a straw and touched her on the back. She did not fly, but only settled down a little closer in her nest. She hatched her brood, but a few days later a rat destroyed the

nest and killed the young. For many days the little bird would come in through the broken pane of glass with a bug in her mouth, and cry for her lost babies.

On another occasion I placed a box in a tree near the window. But the sparrows were determined to take it. After several had been killed they left it, and a wren built her nest. No sooner than this occurred the sparrows returned to the fight. There were many small blighted apples under the tree, and the moment I heard the commotion among the birds I pelted the sparrows out of the tree with the apples. The wrens seemed to understand my intention, for they learned to remain in the tree while I pelted the sparrows out, and the moment the coast was clear they set up the most beautiful and triumphant song. But the persistent sparrows would come in the early morning before we had risen. I then placed some apples for use on the window-sill, and raising the window, would drive the wicked intruders away. It finally became quite apparent that the wrens regarded me as their protector, for the moment a sparrow came in sight they would begin to call most vociferously, and I had only to show myself in the yard and they would hastily retreat; and it was most touching to hear those wrens sing their thanks. When they understood that they had only to call me to be helped out of all danger from their

enemy, they did not pretend to fight any more, but simply cried for their friend. The sparrows at last found it too dangerous to longer meddle, and the little wrens hatched out their brood of eight babies. Now they were in a new trouble, that at the time I supposed would certainly prove fatal. When ready to leave the box, though only about as big as the end of one's forefinger, the little birds one at a time crept out, and each in turn tumbled down to the ground. There were so many cats in the neighborhood, that I concluded there was no hope for saving the baby wrens. Heavy grass was all around the tree, and I tried to catch the little birds and help them out of their dilemma. But not a bird could I find. I might as well have been looking for living mice. I gave it up, and from my window watched to see what would happen next. Mother wren understood the situation perfectly, for she soon came down to the root of a large fir tree that stood near, and began to call; one by one the baby birds came to her and followed her up the body of the tree, sticking to the trunk like mice, hopping along, stopping occasionally to rest, while the mother waited for them. One at a time was thus taken far up into the branches, the mother returning after each trip to the same place for the next baby. Why they came out of the grass one at a time, just as she wanted them, I never could understand; but it may be she had a name for

each one and called the baby she wanted; anyway, they came to her one at a time, and in this way I had an opportunity to carefully count them. The last one gave her a great deal of trouble. It seems there must always be one "black sheep" in each family, even of birddom. This little fellow was stubborn, or lazy, or tired, or weak, for after going about two feet from the ground, he perched on a knot and refused to go any farther. Mother wren coaxed and talked to him, showed him just how to hop, going up and down the trunk, but it was all no use. He would not budge; then she went away and left him for some minutes. She returned with a bug in her beak, and would come so near him that he could almost get it, and then she would disappoint him and hop away. She repeated this many times, but the naughty baby would not move. At last she dropped the bug and began to flutter around him and scold as only mothers can. But he would not move. When her patience seemed exhausted, she flew down on the ground, hopped up under him and fluttered him loose from the tree; then he had to take a new hold on the bark or fall off. When he stopped hopping upward, she would repeat the process, and in this way she drove him up with the rest. Whether she spanked him after she got him up the tree, or not, I do not know, but he deserved it. But like all patient mothers, this little wren mother did not give up her baby,

if he was naughty. For many days we saw these happy birds playfully hopping about in the boughs of the big tree, while the parents fed them. And I have no doubt these thankful wrens, if alive the next year, came back looking for their friend, who would again help them to fight their enemies, and rear their family. But a change to another locality had taken their friend away, and it is doubtful if they ever could build there again.

LOVE AND SORROW OF ANIMALS

Everywhere among the lower order of animal life we see displayed the same sentiments of love, sorrow and fear, that are exhibited in the human race. A cow will refuse to go with the herd, and without food, will stand all day just outside of the inclosure where her calf is confined, and bawl most piteously. Birds have been known to stand, apparently in sorrow, over the dead bodies of their mates. Even snakes have been seen to show this attachment, refusing to leave the dead bodies of their companions. There are few living things that will not risk their own lives for their young. Even the most domestic and timid animals often become enraged and dangerous when their young are attacked. An old cat, perfectly tame and a pet, was lying in a yard passed by a street with no fence between. Kittens as large as full-grown rats were tumbling over each other in their play, while the mother was dreamily watching. Any one could play with and handle her kittens, without attracting her attention. One day a small boy passing, playfully picked up a kitten and started up the street. Instantly the old cat bristled up, jumped to her feet and started after the boy.

When he had gone nearly a block, the enraged mother was at his heels, and it so frightened him that he threw down the kitten and ran. Immediately the mother and kitten marched back to the yard in triumph. A mother mare has been known to beat off a grizzly bear which was approaching her colt, by dexteriously keeping the young colt behind her, and vigorously kicking the bear in the snout. Dogs, refusing to leave the grave of their dead masters, have been known to die on the grave. Dogs often show shame. A little terrier grew too noisy about the home of a city gentleman and was given to a friend several miles in the country. A week later the little terrier was seen outside of the city gentleman's back-yard gate, quietly peeping in, but evidently ashamed to enter. The dog knew that something unusual had happened. He had been given away because he was not wanted, and now having returned without an invitation, he was ashamed to come in; but when he was called he came bounding into the house with his old enthusiasm.

In one of the city parks a squirrel was noticed one day running up and down a tree, chattering in the greatest excitement. Finally the animal appeared on a branch holding in its paws the severed head of its mate, over which it was whining most pitifully. On investigation it was ascertained that the dead squirrel had been caught and actually decapitated by a limb split

off from the tree in a storm the night before. All day the grief-stricken mate would not abandon the body, but continued to mourn over it, and carry the head about, in evident sorrow.

Birds have been seen likewise, sitting by their dead mates and crying for hours, while mother-birds will continue for days to carry food to the place where their nests and young have been destroyed, chirping, and crying all the time. All animal life appears, from these instances, to be actuated by the same impulses, and to be moved by the same sentiments.

AN ANGRY ELEPHANT AND A TREACHEROUS LION

“Speaking of escapes from death, recalls my experience with the murderous elephant, Romeo. Had I been a little slower in my movements, I would have been his eighth victim,” said Col. Rice, reflectively. “One day I was directing the arrangement of some canvasmen, and unwittingly ventured a couple of steps backward and within reach of the death-dealing elephant, which at once raised his trunk slowly with the purpose of giving me a settler. He would have succeeded in killing me had not a young elephant trumpeted an alarm, and like lightning I at once sprang forward and out of danger, by such a small distance that on the back of my head I felt the wind descend by his passing trunk. After that experience, Romeo was kept always chained by all four legs. The young elephant who had saved me was rewarded by candy.

“It is strange that subsequently I essayed the role of lion-tamer, and under the able tutelage of Franconelli, the best lion-tamer I ever saw, and who, by the way, met his death in a lion’s den in the city of Havana, sometime later. After

having twice accompanied the fearless Franconelli into the den of Richard III, the largest and fiercest lion ever exhibited in this country, at Vincennes, Indiana, I then determined to enter the den of this beast alone. Clad in tinsel and spangles, at the afternoon performance, amid an outburst of music by the band, I boldly approached the lion's cage, opened the barred door, and entered, unarmed. The great brute was lying at the further end of the cage, and seemed not to notice my presence, other than by a glance of sullen indifference; so that I deemed my first attempt at entering a lion's den a success. But my assurance was a little premature; and it was fortunate for me that beneath the cage was a furnace in which glowed red-hot iron rods and trusty attendants at hand to effectively wield them upon the lion, if necessity demanded. After a three minutes stay in the den, I made a parting salute to the breathless audience and prepared to leave the cage. As I backed toward the door, to my horror I observed that the lion was slowly rising from the floor and preparing to spring upon me. Almost overcome by the grave danger of my situation, I contrived to signal the attendants to thrust the heated rods between me and the enraged beast. Scarcely had I done so, when the great tawny creature hurled himself upon me, and burying his claws in my shoulder, bore me to the floor. I felt his hot breath in my face as he opened his huge jaws

preparatory to sinking his fangs in my throat. A horrible death seemed but a brief second distant, when the red-hot irons were brought into play and used so effectively that the blood-thirsty brute was forced to retreat to the far end of his den without inflicting further injury upon me. I was hastily drawn from the cage, none the worse for my thrilling experience, while the band played, 'See, the Conquering Hero Comes,' and a panic in the audience was thus narrowly averted."

NEST-BUILDING FISHES.

When June comes, with her listless days and first intimations of Summer, the dace, which have arrived at fit age for matrimonial duties, look about for a proper place to locate their nursery. A running brook and shallow water are chosen, and soon a place is cleared in the gravel at the bottom, two feet in diameter. Here a layer of eggs is deposited and then the male appears with a pebble in his mouth, which is placed in the center of the clearing. Both fish now keep up the work until the layer of eggs is covered. Then another layer of eggs is deposited and covered, and so on, until a pile sometimes pyramidal, sometimes domeshaped, is constructed eight inches high. When the eggs are hatched and have become tiny dace, their former habitation is destroyed and swept down the stream.

The Lamprey eel is another animal of peculiar habits. Living in both fresh and salt water, they always seek fresh water in which to deposit their eggs. It is a curious sight while these eels are preparing their nests. These are built of stones, some of considerable size and weight; when the size of the fish is considered. Often

these nests are raised to a height of about three feet, with a diameter of about four feet. The eggs are deposited in the spaces between the stones, and thus the little wiggling babies which come without teeth or eyesight, are amply protected. These stones are moved in a curious way. The eels go above the locality selected, and fastening themselves to stones selected, by the suction of the mouth, raise their tails in the current and are thus carried a short distance down stream, when the hold is released and they take a new suction. This they continue, going backward down stream until the nest is reached. If the stone is particularly heavy, two eels will lay hold of it and help each other.

One of the most curious of all the fish nest-builders, is the Placket, of Siam. It is known to the scientist as the Paradise fish. The natives have them as pets as we do the gold-fish, and often train them to fight. When these fishes build their nests, no hard material is used. The male fish rises to the surface and sucks in the air; this he carries down below the surface and it is ejected with a mucus he secretes in the mouth. In this mucus is deposited the eggs. It rises again to the surface like a bubble. The process is repeated many times until a floating mass of bubbles is secured. The mucus and material of this blubber-nest forms the food of the young fry as they are hatched. When the nest has been eaten up, the young are then old

enough to search for food in other places. There are many other curious nest-building fishes, having the same general characteristics. Some fish seem to build for others, more weak than themselves. A curious fish of Brazil, resembling our common catfish, affords a home in the cavities of its capacious mouth for several kinds of small fishes. Many crabs live in such animated homes. The common oyster often discloses an inhabitant quietly living within its shell. One species of shell found in Northern waters affords a home for two little crabs about the size of a chestnut. The Giant clam, which sometimes attains a weight of five hundred pounds, gives shelter in its folds for many crabs, one of which is always found with it. The shells of this immense clam often measure five feet in length, and are put to a variety of uses, occasionally serving as natural cradles for the children of Eastern lands.

A RAM THAT COULD RUN THE CHURN

Dick was a big pet ram owned by a New York farmer. He would not go with the other sheep, but seemed to feel too high-toned. He kept company with the cows entirely. Whether this was because he had been taught to bring them up from the pasture when they were tardy, or because he had been taught to churn the milk into butter, was never known, but anyway, he preferred to browse with them and utterly ignored the company of other sheep. The farmer's big churn had a dasher connected with a large wheel outside of the dairy which Dick was taught to turn by tramping it. As the butter would form, the wheel would turn harder, and then Dick would tramp with a will, and bleat all the time; he seemed to understand that the harder the wheel turned the nearer he was through with his job, and for this reason would rush things. When done, he would jump off the wheel and lie down for a nap; but if he heard a cow low he was away for the pasture in an instant to see what was the matter. He would churn one hundred and twenty quarts of cream at a time. The farmer had twenty-five cows, and these Dick took to the pasture every

morning, and brought them home each evening. It was noticed in the mornings he was quite frisky, and did not seem at all in a hurry; but would allow the cows to loiter along and eat as they went, but at night he was always in a great hurry and would not permit of any lagging. If one stopped and got behind the rest of the herd, Dick would promptly remind her by a good butt that she must keep up. If when the time came for the herd to go home one was missing or out of sight, Dick would not start until he had found her and brought her along. He acted very much as the shepherd's dog acts among the sheep. He knew his business and always faithfully performed his duty. He was the full boss of the barnyard and would strut around as if he managed the whole business of the farm. But he would not brook any interference, especially from a stranger. If any one he did not fancy attempted to be familiar with him, he soon stopped that by giving them such a butting that they were glad to leave him alone in all his glory. But he had one great weakness. He was deeply in love with the farmer's wife, and usually she could do anything she chose with him. When he first began to churn he did not like it, and would sometimes sulk, stop the wheel, and refuse to go on. At these times he would show in his eye that he was ready to fight. No one but the farmer's wife would dare go to him then, but she would go, and if he still refused to work

after she had petted him a little, she would give him a morsel of something to eat, and this always conquered him. Of course, he was the pet of the whole family, and harmless when in a good humor; but like some boys, when he had a pouting spell he was dangerous. Then, with his great horns he could butt his head through a half-inch board, and if that butting happened to be given in the stomach of some intruder, it would spoil his appetite. Dick had been taken when a lamb, and was like one of the family, and regarded as one of its most useful members.

SPOT—THE STORY OF A CHIPMUNK

For several weeks we had been camping in Northern Wisconsin. It was not long until many chipmunks began to come around our table just outside of our tent. The crumbs that fell while we were eating attracted them, and as soon as we were away and out of sight in the tent, they began to pick up the crumbs. Every time they heard plates rattle, after a few days, they would be on hand, and gradually became tamer, so that it was not long until they no longer waited for us to leave the table but would hurry for the crumbs right under our feet. We noticed that one very lively little fellow, tamer than the rest, was always on hand, and that he had a mark on his back; evidently a scar made by some enemy. We named him Spot. Spot became very tame. With a little patient training, such as flipping him a piece of cracker, without making much motion, and being very careful not to do anything to frighten him, he soon learned to eat out of our hand. But if we attempted to touch him he would strike with his paw. But he preferred to put all the food he could carry in the side of his jaws, and then run off a little way to eat it; and sometimes he would not eat

it at all, but take it away and bury it. One day, thinking to have a little fun at Spot's expense, we tied a piece of cracker to a thread some six feet long, and holding the other end threw him the cracker. He put it in his mouth as usual, and then filled it with other pieces. When his cargo was ready, away he went pell-mell; when he reached the end of the string he tumbled a summersault and the food was all snatched out of his mouth. He thought, evidently, it was all an accident, and his own fault, for he hastily gathered it again and made another trial but with the same result. Now he seemed a little suspicious, and for a moment somewhat undecided, and looked at the holder of the string in a most uncertain and comical way, as if to say, "was that my fault, or yours?" As everything still seemed all right, again he gathered his food and for the third time tumbled over and lost it. Now he sat down, looked longingly at his lost dinner, and then at the holder of the string, and for a little time seemed quite dazed. But he finally concluded there was something the matter with that cracker he had not quite fathomed, for he refused to touch the tied piece again, but hastily gathered the rest and continued his eating. No other chipmunk ever became quite as tame as Spot, and all the rest seemed quite jealous of him, because he could always get the most food. One day suddenly we heard a squall of terror,

and saw Spot flying out of camp, fairly crying murder! murder! or help! help! we could not decide which, and right at his heels was a pine squirrel about twice the size of Spot, making him fairly fly for his life. We had not seen any of these squirrels in our camp, though we knew they were near us in the forest. But no doubt, these had come in also, when we did not see them, and now, finding Spot there they made battle on him, because he was stealing what they claimed as their food. But Spot reached his den in safety. This is the way, doubtless, he got his scar; by rough usage from some bully bigger than himself.

CHARMED REPTILES

Can a snake be charmed? This question has been asked and answered many times both in the affirmative and the negative. It would be impossible to convince some people that a poisonous serpent could be rendered harmless by this process, and it has been repeatedly asserted, that if serpents do appear to become harmless in the hands of their tamers, it is only because their poisonous fangs have been first extracted. But this is now known to be an error. The genuine charmers in India do not depend on such imposture for their success. Many cases have been carefully examined which show positively that these serpents, handled without harm by their tamers, have never had their fangs extracted. Gen. Campbell in his *Indian Journal* gives the following account of a scene witnessed by him.

“There was a dry well in the garden which was the favorite haunt of snakes, and in which I had shot several. One morning I discovered a large Cobra-de-Capello at the bottom of this well, basking in the sun; but while I ran for my gun, some of the native servants began to pelt him with stones, and drove him into his hole

among the brick-work. I therefore sent for the charmers to get him out. Two of these worthies having arrived, we lowered them into the well by means of a rope. One of them, after performing sundry incantations, and sprinkling himself and his companion with ashes prepared from the dung of a sacred cow, began to play a shrill, monotonous ditty upon a pipe, ornamented with shells, brass rings, and beads, while the other stood on one side of the snake's hole, holding a rod furnished at one end with a slip-noose. At first the snake, that had been considerably bullied before he took refuge in his hole, was deaf to the notes of the charmer; but after half an hour's constant playing the spell began to operate, and the snake began to move. In a few minutes more he thrust out his head, and the horse-hair noose was dexterously slipped over it and drawn tight, and we hoisted up the men dangling their snake in triumph. Having carried him to an open space of ground, they released him from the noose. The enraged snake immediately made a rush at the bystanders, putting to flight a crowd of native servants who had assembled to witness the sport. The snake charmer, tapping it on the tail with a switch, induced the snake to turn upon himself, at the same moment sounding his pipe. The snake coiled up, raised its head, expanded its hood, and appeared about to strike, but, instead of doing so, remained in

the same position as if fascinated by the music, darting out its slender forked tongue, following with its head the motion of the man's knee, which he kept moving from side to side within a few inches of the serpent, as if tempting it to bite. No sooner did the music stop, than the snake darted forward with such fury that it required great agility on the part of the man to avoid it, and immediately it made off as fast as possible. The sound of the pipe, however, invariably made it stop and obliged the snake to remain in an upright position as long as the man continued to play. After repeating this experiment several times, a fowl was placed within reach, which it instantly darted at and bit. The fowl screamed but ran off and began picking among its companions as if nothing had happened. In about half a minute its comb and wattles began to change color and soon were nearly black. In two minutes it began to stagger, was seized with convulsions, fell to the ground, and in exactly three minutes and a half was dead. The wound on the chicken was about as large as the puncture of a needle. The charmer now showed us his method of catching snakes; seizing the snake by the point of the tail with the left hand, he slipped the right hand along the body with the swiftness of lightning, and grasping it by the throat with the finger and thumb, held it fast, forced it to open its jaws, and displayed its poisonous fangs. Having

satisfied my curiosity, I proposed that the snake should be destroyed, or at least that its fangs might be extracted, but this being an exceedingly fine one, the charmer was unwilling to extract its teeth, as the operation sometimes proved fatal, and begged so hard to keep it as it was, that at last I suffered him to put it in a basket and carry it away. The very best proof that the fangs of the reptile were not removed was, that some weeks afterward, it bit the charmer and killed him."

PET CRICKETS AND GOLD BEETLES

In Central America there is a beetle which, it is said, the natives confidently believe is partly made of gold. Its head and wings are so brilliantly colored and beautifully polished that many of the simple-hearted inhabitants believing it pure gold have repeatedly tried to obtain this precious metal by smelting the beetle. Of course, they never succeed, for the best of reasons. The beetle is not made of gold, but like many other things in this world not beetles, they only resemble it. Their adornment, like that of many a royal personage, and others who pretend to royalty, is all a deception; but this does not save the beetle. It suffers for its deceiving appearance, just as other deceivers in higher stations, who if they are not melted in the fire for their foolish pretending, are often melted under the scorn of their fellows who despise sham. But it must not be understood that all the natives of Central America believe this silly theory; only those who are very ignorant. These claim that though the smelting processes have been often tried on the helpless beetle, and have always failed, the theory is correct, but the process in some way is at

fault, and that they will certainly yet find the gold when they hit on the right way to smelt it out of the bug.

In Japan some of the inhabitants prize crickets and numerous other insects that sing. These are confined in dainty bamboo cages and hung about the houses. These confined insects do not seem to be disturbed by the loss of their liberty, possibly because well fed, and they sing their weird notes as if contented and happy. In an insect-fancier's shop can be found many queer and interesting things. His stock consists of crickets, grasshoppers, katydids, and other tree insects that are supposed to be musical. These songs, however, are not songs at all, but musical sounds made mechanically; much more like a violin performer than a songster. Some produce sounds by rubbing their legs together, while others use their wings. These captives are fed principally on vegetables, such as slices of cucumber, and fruits. Two or three cents is the price usually charged for their bugs, by these merchants, but a fine singer may cost much more. In this country one cricket in the house at a time is quite supply enough, since if properly located he can keep a whole family awake all night. The insect life is a most interesting one, and its use in the work of nature is very imperfectly understood by man. One of the most remarkable in its way, is a beetle that is said to turn

into a plant. However, strictly speaking, this is not true. What happens is this: The larva of this beetle is a white grub which in the autumn burrows in the ground and apparently reappears in the following spring as a mushroom. The grub does not become a mushroom only in this, that the roots of the plant may absorb the grub as material for furthering its own growth. But all these grubs are not thus absorbed. Some must be left to perpetuate the species.

A WREN THAT WAS A ROBBER

The invalids chair sat near the window where she could see the flowers in the yard, and enjoy the sunlight. A climbing vine outside was clinging to the house and partly shading the window, and it occurred to me that it would be a fine place for a wren to build her nest, and at the same time afford a pleasant pastime to the sick one who could watch her employment, and hear her songs. A box was placed in the vine with the opening toward the window, and so near to it that if the sash was raised one could reach the nest. Very soon a wren took possession, and how the songs did ring! But just at the corner of the house, and only a few feet from the vine, stood a large maple tree. The wrens had not yet finished their nest when an English sparrow darted from the tree and drove them away. Several days in succession this occurred. The sparrow would sit in the maple and watch for them. I noticed this, for every time I went about the tree it flew out. I determined to stop this, but the sparrow seemed to understand, for when I came out with my sparrow-gun he immediately flew away. Finally I could get no sight of him at all

except when he suddenly flew down viciously at the wrens. Fixing myself at an upper window that gave a good view of the top of the tree, I concluded to wait until he came to the tree and shoot him from the upper chamber, but after long waiting he did not appear, nor while I sat at the window would he disturb the wrens. Then all at once I made a discovery. The wind lifted the foliage of the tree, and there crouched on a large limb sat Mr. Sparrow watching me. He would raise his head as if peeping, and when the leaves moved and exposed him, he squatted close to the limb with his head almost parallel to it. I took aim at the spot through the leaves and the moment they were lifted by the breeze, fired. That settled the trouble with the sparrow. But this was not the last nor the worst. The wrens built, sang, and fairly romped in the vine, becoming so tame that they cared nothing for the presence of any one at the window. When the mother was setting, I noticed one morning that there were two male wrens, apparently discussing the situation, and that the stranger was the larger of the two. Later, I found them in the shrubbery, fighting, and one morning early, the mother was off the nest and calling for her mate with all her lung power, but he did not come. A few moments later the big wren came, went to the nest and one at a time threw out the eggs, and then proceeded to tear

up the nest and throw it out of the vine. That was the last we saw of the mother or her mate. Whether this robber wren killed, or only drove off the other, we never knew, but he destroyed the nest, and stole our little wren's wife, that was certain. We were all very sorry, for the two seemed so happy, and besides they added greatly to the interest and happiness of the invalid who watched them every day from the window. It was certainly a very mean bird trick; but the worst of it is, it is a trick that is not always confined to bird-homes. Not all the homes thus broken up are confined to wren-houses.

MAMMA ELEPHANT AND HER BABY

A gentleman has described a mother elephant putting her baby to bed, as he saw her in one of the great zoos.

"Mamma elephant had her trunk around her baby's neck, and seemed to be whispering and encouraging him as he rubbed his head against her knee. He stood a moment then raised his head, flapped his big little ears, gave a flirt of his little cord of a tail, and trotted off by his mother's side to the center of the yard, and there she left him and went to a pile of hay that stood in a corner; this she took up in bunches with her trunk so nicely that she did not drop a whisp of it, and spread it around her child, who had not stirred from the spot where she had left him.

"When the hay had all been spread around the baby, the mother stepped into the center and began to tread it down with her feet, the little one following her motions exactly, until a perfectly even space had been trodden down, then the mamma elephant stepped out again, went to the farther side of the yard and fumbled about the ground with her trunk. As she came back the baby flourished his small

trunk, and flapped his ears, making at the same time a grunting sound, as if he knew what was coming and liked it.

“This time the mother stood outside of the baby’s bed, and beginning with the back of his ears, blew a cloud of fine dust into the folds of the skin behind them; then into those around his legs, and under him, until he was thoroughly powdered for the night. This done, she again put her trunk about his body, the little fellow dropped to his knees on his carefully trodden bed, and after a few soft pats and a few soft grunts from the mother, he laid down as a well trained child of the elephant family should; the mother’s work, however was not yet done. She took up delicately the hay from the edge of the bed, and began tossing it lightly along his sides and up toward his back, until his sides no longer showed. When all was done, the small girl who had warned me not to disturb the proceedings heaved a great sigh, and said: ‘I’d just like to know what they do it for!’ So I told her, explaining the habit wild animals have of treading their beds to make sure there are no snakes in the grass; the necessity of powdering the young, whose skin is tender in the folds, and who are troubled by insects; and the piling of grass around them to conceal them from the hunter.”

THREE CATS THAT KNEW THEIR BUSINESS

While a beautiful cat is prized about the home, usually, and often proves very useful in ridding the premises of rats and mice, they are not generally credited with very high intelligence, nor are they so easily taught as dogs. But some occasionally show that they know more than we give them credit for knowing.

A large cat and a small terrier lying near together on a porch apparently dozing, were suddenly awakened by a neighbor's dog which stopped to investigate. The house stood on the street with no fence in front. In perfect good humor, and with an air of welcome for the stranger, the little terrier ran out to greet him. Without a moment's notice and with no reason whatever, the visitor sprang upon the terrier and began to shake him most unmercifully. Two big jumps from the porch brought the cat to the scene, and at the last spring it landed on the strange dog's back, where with teeth and claw it began to make the hair fly like snow in a snow-storm. In less than two seconds that dog had forgotten what he came for, and howling until people heard him the

distance of a block up the street, ran like mad, with old Tom still riding and clawing, while the little terrier looked on wagging his tail. When the cat came back from his ride, the two, side by side, deliberately walked back to the porch as if nothing unusual had happened. But how people did laugh at the cat's defense of its little dog friend!

"Malta" was a very large and beautiful maltese cat, and a great pet about the house. When the doors were opened in the morning, generally he was found waiting at the door on the back porch to be let in. This was always expected and never thought strange; but one morning coming in the door as usual, he acted quite differently from his usual manner. Instead of going on to the kitchen for his breakfast as he was expected to do, he stopped at the door, began to mew, rub against his mistress, walk round and round, look up into her face, and then go back to the closed door. This conduct was repeated so long, that it became quite evident he had something to tell. His mistress opened the door and followed the cat out, and along the porch until he came to the farther end, and there, laid side by side, were two big rats, which he had caught during the night, and arranged for this exhibition. What Malta wanted to tell was now so apparent that had he been a child he could not have made it plainer: "See what I have done." He was

carried into the house in royal style, and given a big breakfast.

"It was our old barn cat which proved to me that animals reason," began my neighbor, "and she was a very cross cat that never cared to make friends with anybody. I encountered her whenever I went out to feed my chickens, and no kind words or attempts at caressing ever met with any response from her. But one night, just before dusk, as I was feeding my chickens, she came up to me and purred and rubbed herself against my dress. I thought it was strange, especially as she followed me into the house, and when I sat down she jumped into my lap and looked up into my face with a look of entreaty, and a mewling that sounded as if she were unfolding the troubles of her heart to me. When I got out of my chair a few moments afterwards she kept running across the floor in front of me, and coming back every few steps as if to lead me on. I went out of doors with her, and she led me to the barn.

"She seemed to be in great distress and kept looking up to the hay-mow. 'What is it, old cat?' I asked. She answered me with a purr and mew. I cast my eyes up to the hay-mow and saw my persistent old hen sitting on the hay in the corner. I had been trying for a fortnight to 'break her up,' for it was too

late in the season to have a brood of chickens to care for.

“I had not thought that she was connected at all with the old cat and her troubled condition, but I called the man to come into the barn and told him to climb up on the mow and take that hen off. But before he could get there the old cat had climbed up and began striking the hen with her paw, and the hen when she was struck first on one side of her head and then on the other, pecked the cat, and shrieked out at her as only hens can. The man lifted the hen, and lo and behold, there were three little kittens brought to view. The mother cat quickly let us know to whom they belonged, and quietly curled herself up with them.

“She had evidently been cuffed by the hen, which had taken her darlings from her, and fearing the assault of her sharp beak had come to me for help.” Isn’t this reason? If not, what is it?

MME. PATTI'S LOST PARROT

Mme. Patti's parrot was named Koko, and on his golden collar, in Spanish, was engraven, "I am Koko, the polyglot parrot of the Nicolini. I don't sing myself, but there are angel voices in our family."

On one of the singer's voyages, Koko was lost at sea, and this is the way it happened: Wearing his collar as usual, Koko was on the shoulder of his mistress in the deck saloon of the steamship *Ionic*, homeward bound. The lee door of the saloon was open, and some children suddenly opening a door on the windward side and coming in with a rush, startled the bird from his perch. Not much accustomed to use his wings, and caught in the current of wind, he was swept out of the saloon, and despite all efforts to save him, carried away from the vessel and helplessly adrift at sea. Sorrowfully his mistress watched him struggling in the wind, until out of sight, and all hope was given up of ever seeing Koko again. This happened in August, 1888. The morning after this accident, the *Lapwing*, an American bark, sailing from Rio to Baltimore, found the tired lost Koko perched on the mizzen mast,

exhausted and speechless. He was brought down, and under the tender care of the captain's wife soon regained his lost voice. He remained in his new quarters sailing the seas. Some months after this, the Lapwing was on a voyage from the Chinese seas to New York. Somewhere south of the Cape of Good Hope the captain met an American Whaling vessel, which asked for fresh provisions and news. A boat was sent from the Lapwing with the needed supplies, and in exchange the whaler threw into the boat a file of the New York Herald for 1888. These papers were all thumbed and nearly worn out; but as the wife of the captain of the Lapwing was carelessly turning them over, she caught the headline, "Mme. Patti's Koko Lost at Sea." Up to this time neither the captain of the vessel nor his wife knew to whom the bird belonged, for they did not associate the family name Nicolini, engraved on the bird's collar, with the one by which the great singer is known to the public. But on reaching New York the mystery was at once solved. Ascertaining the locality of Mme. Patti, through a friend about to sail on the *Lucania*, Koko again set sail, and after an uneventful voyage to England was restored to his delighted owner.

TRADES FOLLOWED BY ANIMALS, BIRDS, FISHES AND INSECTS

The Beaver is an architect, builder, and wood-cutter; it cuts down trees, erects houses and dams. The Marmot is a civil engineer; it not only builds houses, but constructs aqueducts and drains to keep them dry. The Rat is a burglar; it digs into people's cellars, gnaws through doors, petitions and windows, and steals. The Dog is a policeman; he guards the premises, and catches the Rat burglars. Pussy is the watchman; she watches for the Mice. The Horse is a farmer; he plants and attends the crops. The Cow is a dairy-maid; she looks after the milk, the butter and cheese. The Steer and the Porker run the commissary department. Wolves and Jackals and many others, are hunters. The Squirrel is a ferryman; with a piece of bark for a boat, and his tail for a sail, he can cross a stream. The Bear and the Heron are fishermen. The Monkey is a rope-dancer. The Mole is a meteorologist. The Eel is an electrician, he carries a battery. The Nautilus is a navigator; he raises and lowers his sail, casts and weighs anchor, and performs other nautical acts.

Bees are geometricians. They construct cells so that with the least quantity of material they have the largest spaces, and least possible loss of interstices. Wasps are paper manufacturers. Caterpillars and Spiders are silk-spinners. The Tailor-Bird is a tailor; he sews together a leaf to construct his nest. The Woodpecker is a woodman; he bores into trees. The Duck, Goose, Swan and Sea-Gulls are sailors. The English Sparrow is a bully; he is a prize-fighter; he delights in battle and is a selfish, overbearing, swaggering bully. The Parrot is a reporter, and family gossip. The Crow and Buzzard, are scavengers. The Kingfisher, Fishhawk and the Herrons are fishermen. The Mocking-bird is a ventriloquist, and imitator. The Eagle is a butcher. Whole regiments of birds are musicians. Ants are soldiers and slave owners. The Mink is a pirate. Flies, Knats, and Mosquitoes, are hoboes, beggars, and burglars. The Firefly is a slight of hand performer. The Wood-rat an antique collector, and the Coyote a complaining sneak-thief. Snakes are hypnotists; they charm birds.

STRANGE HABITS OF ANTS

There are many kinds of ants, and they do many strange things. They live in colonies or societies, and work as orderly as if they all understood the constitution under which they have agreed to live, and no doubt they do; but just how they communicate to each other has never been ascertained. Like the Honey-bees, they live together in three separate classes, composed of the males, the females, and the neuters. The neuters are the workers, and some of these also act as soldiers and guards. Only the males and the females have wings, and these only in the mating season. After this is past the wings of the females are removed by the males, to keep them from deserting the home. It has been noticed also that in some instances the females remove their own wings. Perhaps this is done as a greater convenience, or to remove the temptation to desert. In the winter months most ant colonies remain dormant, and eat nothing, though it is claimed that some species provide their winter food during the summer months. They live chiefly on sweets, and this they get largely from another insect called the aphis. This is

a plant insect, which ants hunt, eagerly seeking the honey-dew they leave on the leaves of plants and trees. The ant is said to milk these insects like the milk-maid milks her cows, and sometimes two ants will fight over the possession of a particular aphid. They carry the aphid to their homes and keep them as their food supply, the aphid breeding among the ants, and thus affording a continued commissary within their own homes.

The Honey-ants of Arizona, and New Mexico have certain members of the colony that secret honey in their bodies until they can no longer walk. They become so extended that they resemble a round grape, the small head looking like the grape-stem. Other members of the colony place these in cells as prisoners, and keep them for food, when food from other sources fails. These fattened ants are thus devoured by their cannibal relatives. The Amazon ants, are terrific fighters, and make long journeys in great bodies for war purposes. When they have subdued another colony they carry off the eggs and the young ants and carefully attend to these, rearing the young in captivity for slaves. Like all slave-holders these Amazons become lazy, make their slaves do most of the work, and when tired on a journey the slave must carry his master. It is claimed by worthy writers that some species never sleep; but work day and

night without ceasing, and that others plant and cultivate a kind of grass-seed that they attend, and at the proper season harvest and store away for future use. Others construct regular highways, and pave them. In their battles thousands on both sides are killed. If night comes on before the battle is won, both sides abandon the field, return to their homes, and renew the contest the next day, and continue from day to day until the battle is won. When travelling they select small sticks and grass with which they build bridges across little rivulets, or if these are too large for this plan, they sometimes rush bodily into the stream until their dead bodies form an obstruction, when the remaining portion of the colony pass safely over on the dead bodies of their companions. In some countries, they have occasionally become so numerous as to threaten human life, killing small animals and destroying crops, by eating into the roots of vegetation. History records that in one instance, in the Island of Grenada, a certain species of ant descended from the hills in such immense numbers that they threatened the lives of the natives. Rats, mice and reptiles were killed and eaten, and even birds did not always escape. The ants so annoyed the birds when feeding on the ground that they could not procure the necessary food, and in some cases they became so weak as to be unable to resist

the attacks of the insects. Even fires built to arrest the invasion did not succeed, as the ants came in such numbers that they put out the fires. Twenty thousand pounds Sterling were offered for a remedy, but none was ever furnished. In 1780 relief came in a great hurricane that deluged the ant homes with water to such an extent that this pest was removed.

FLYING FISH AND FLYING ANIMALS

Most people know that there are flying fish, and have heard of if they have never seen, a flying squirrel. But many do not know that there are several kinds of fish that fly and several animals besides the squirrel; and most do not know that these fishes and animals do not fly at all, but simply sail a little way on the air like a parachute, or a boy's kite. The bat is an exception. It is a flyer, just like a bird, and is both bird and animal; strictly speaking, it is a connecting link between them. Flying fishes are a small family, some of them capable of jumping out of the water and sailing only a few feet, when they again drop into it; but others are said to be capable of sailing one hundred yards or more before they fall. These jumps from the water occur sometimes because followed by their enemies, and this effort is made to avoid them; but travelers have noticed them in hurried flight, skipping over the surface of the ocean in great schools, apparently in play. Sometimes one jumps on the deck of a ship, and is captured; they cannot fly except from the surface of the water.

Besides these, there is the flying dragon, an

animal belonging to the lizard class. The flying fox; also called the Kelong, a large bat found in Japan, Australia, East India, Africa, and South America. Some of these have wings that spread five and a half feet. Then there is the flying lemurs, and the flying opossum. These last are found in New Guinea and Australia. They differ greatly in size, some being no larger than an ordinary mouse. All animals of this class simply sail from some elevated place from which they spring, spreading out their legs. None have wings, but only a thin membrane stretching from the fore to the hind feet, along the sides of the animal. Birds and bats are the only things that have a spinal column—a back bone—and that fly as a bird. The flying squirrel, though not now very common, is still found throughout North America. Its usual method of travel is to run up the body of a tree, and when reaching a high point, jump off and sail toward the body of another tree. If this tree is some distance away, it will strike it near the ground, again run up and jump as before. If there is no tree within reach of its ability to sail, it strikes the ground then runs to the nearest one, and repeats the experiment, until it reaches its desired destination. The same method is resorted to by all these so-called flying animals. This squirrel, like the ordinary woods gray squirrel, lives on nuts and buds, but it will kill small animals

also, which the gray squirrels do not. Flying squirrels are easily tamed, and make amusing pets. A boy has been known to have one constantly in his side-pocket, fastened to his coat button-hole by a small chain, similar to a watch chain. He would take it out at school and elsewhere, to the great amusement of his companions, and the annoyance of his teachers. These little animals live in holes in dead trees, and move about only at night, except when disturbed.

HOW MOTHERS ARE SOMETIMES TREATED

A gentleman traveling in the west tells the following story of a mother shepherd dog.

“The best of these dogs are worth two hundred dollars apiece, or even more. One herder showed us a very pretty one that he said he would not sell for five hundred dollars. At that time she had five little puppies. The night we arrived we visited his camp, and were greatly interested in the little mother and her nursing babies. Amid those wild, vast mountains, this little nest of motherly devotion and baby trust, was very beautiful. While we were examining, the assistant herder came to say that there were more than twenty sheep missing. Two male dogs, both larger than the little mother, with their hands in their breeches, were standing about doing nothing. But the herder said, neither Tom nor Dick would find the sheep, and that Flora must go. It was urged by the assistant that her foot was sore and that she had been hard at work all day, was nearly worn out, and must feed her babies. But the boss insisted that she must go. The sun was just setting. There was no time

to lose. Flora was called and told to hunt for lost sheep, while her master pointed to a great forest, through the edge of which they had passed on their way up. She raised her head, but seemed very loth to leave her babies. The boss called sharply to her. She slowly rose looking tired and low spirited, with head and tail down, and trotted wearily off toward the forest. I said: 'That's too bad!'

" 'She will be right back, she is lightning on stray sheep,' said the boss.

"The next morning I went over to learn where Flora found the strays. While we were speaking, the sheep were returning driven by a little dog, who did not raise her head nor wag her tail, even when spoken to, but crawled to her puppies and lay down by them. She had been out all night, and while her hungry babies were tugging away, she fell asleep. I have never seen anything so touching. So far as I was concerned, 'there was not a dry eye in the house.'

"How often that scene comes back to me. The vast, gloomy forest, and that little creature with a sore foot, and her heart crying for her babies, limping and creeping about in the wild canons all through the long dark hours, finding and gathering in the lost sheep. There are other than dog mothers who often have like fare. The dog stands for fidelity and sacrifice, and we have heard it said that the best part of a human being is the dog in him."

HAUNTS AND HABITS OF THE SEA OTTER

The sea otter is now a very rare animal. In the places where these furbearing animals once were found in large numbers they are now absent never to return. What few still remain to be hunted by the seeker of rare furs are found only in the far north, and about the Aelutian Islands. They are a very shy animal and as they live almost entirely on the water, and are never, or very seldom, seen on land, they are hard to capture. There are two varieties—the deep sea variety, and a shore variety. But it is the deep sea otter that is chiefly hunted. These come ashore rarely except during storms. They are large, with very handsome and valuable fur. The land variety are called by the hunters, “rock-hobblers.” Some of these large animals have been killed weighing 175 pounds. The pelt from these in some instances has measured nearly two feet in width, and eight feet in length. Occasionally one is caught, known as a silver-tip, with the ends of the fur a silvery color. With the exception of the Albino, this is the most valuable fur in the world. The Albino otter is very rarely secured.

The body of the sea otter measures from three and one-half to four feet in length. They are provided with strong legs and feet with short claws. Their fore legs are used chiefly in securing food—shell fish and mussels from the rocks. Their hind feet they use only for swimming. They swim and sleep on their back on the water. When sleeping, their fore feet are placed over their eyes, and their hind feet stick up in the air, and at a distance are often mistaken for two ducks swimming side by side. There are usually two traveling together; but never in close company. The mother swimming on her back carries the young otter in her arms on her breast, and often plays with it like a human mother plays with her babe, tossing it into the air, and catching it as it falls. She sings it to sleep with a purring sort of sound. The young remain with the mother until grown, which is from eighteen months to two years. Then it sheds its puppy coat, and gets its real fur and this is not shed again like other animals, but continues to come out and grow in, so that its fur is good at all seasons of the year. When the three traveling together wish to go on shore, or on the ice, the male gets out first and then hauls up the pup by its fore arms, and drags it to a place of safety. If the sea is rough or there is danger in landing, the mother remains on the wave and tosses the pup out to

the male who catches it just as a boy catches a ball.

It has often been remarked that the sea otter acts much like a human mother with her babe. When she dives in search of food she leaves her babe asleep on its back; sometimes a sea-gull discovers it, and pecking at it turns it over. In this position it cannot keep its nose above water and soon drowns. When the mother returns and finds it she picks it up in her fore paws, shakes it and holds it up to her ear as if listening for its heart beat. When satisfied it is dead she abandons it with a weird sad cry and goes away. They never swim on their bellies except sometimes when attacked, or in great danger. When diving they can stay under water from ten to thirty minutes, and will then sometimes travel two miles before again coming to the surface. They come ashore chiefly in time of storm, and are very clumsy on the ice or on the land. Sleeping on the rocks they curl up like a fox and are then hard to kill if struck, because of a thick coat of fur, and would easily struggle into the water and escape. The natives hunt them in stormy weather, slipping along the rocky coast with very light skin canoes, while the roaring sea overcomes all other noises and the otter can thus be easily approached. The hunter carries a club and a light stick. Finding the otter asleep, he tickles it with the light stick until it changes

its position, to see what has happened, when it is at once killed by a stroke on the head.

They are great fighters. After day-break they awake with a great noise, shake themselves, and slide into the water. The pups cry just like babies. And it is said that when closely pursued, the mother will sometimes desert a female pup, but never will desert a male. They will drag their pups after them in danger, and often the pup will hold on to the mother's fur with its teeth. A full grown male will never desert his mate; and when she is wounded or killed will often try to drag her away. Hunters knowing this trait try to kill the female and the pups first, for they know it will not then be hard to secure the old male. Their noses are very sensitive to the cold, and are often frozen. In this way in very cold weather, they sometimes lose their lives.

White men hunt the otter on the sea with rifles. When shot it never sinks, but then turns over and little is seen above the water. They have sharp scent and hearing, but poor eyesight. In the water they are very graceful, and can sleep curled up on the bounding billow fearing nothing. It is claimed by hunters that they feed on shell-fish, sea-eggs, and mussels, which they open by taking one in each paw and striking them together.

DRUNKEN BUTTERFLIES

It is generally believed that man is the only representative of the animal kingdom that deliberately becomes intoxicated; but this is an error. Sometimes monkeys do, and some wild birds will become drunken on rum-soaked grain. Wild geese are sometimes caught by soaking corn in rum and leaving it where they can get it. The ordinary house-fly will become so intoxicated on tobacco juice that they will roll about the floor in a most amusing manner. But who would ever imagine that the butterflies would become "tipsy?" But an English Professor who had a number in captivity for the purpose of experiment writes: "I was not long in finding out that those of the 'fair sex' were remarkable for perfect sobriety. These winged ladies drank nothing but water, several drops of dew a day to quench their thirst. The males, on the contrary, were of a revolting intemperance. They came to the flowers whose distillation produced the most alcohol, and they drank of the juices to the point of remaining inanimate several hours. There was not a day that I did not pick up butterfiles dead drunk."

In these experiments the Professor did not stop with flowers, but used intoxicating spirits, with which he succeeded quite as well or better; the butterflies coming to a few drops he placed on the glass to try them. They did not hesitate but went at their "dram" with the relish of old toppers. Several of them succumbed and tumbled over, and the experimenter became satisfied that the butterfly does not merit the reputation which the poets give it for consistency. When the insect is overcome by the abuse of strong drink, it acts much as other inebriates. It becomes overbearingly affectionate toward its mate, staggering around her for her attention and help. There is this excuse for drunken animals and insects, especially for those that have never been drunken before; they do not know the bad effects of intoxicants, nor the danger they run, nor do they ever drink, we may suppose, for the purpose of the intoxicating effect, as the old toper does. They drink for the sweet contained, which is the food on which they live; and the intoxicating effect is one of which they know nothing until they are caught in the trap. It would be interesting to know if they ever learned to avoid this beverage, and if those that became inebriates ever reformed. But of this the Professor has not told us. That animals do learn to avoid traps and conditions that have gotten them into trouble is well

known, and some become so wise that it is hard, even with the most tempting food, to catch them.

A BEAUTIFUL EULOGY ON THE DEATH OF A DOG

The following beautiful eulogy on the love of a dog is the report of Senator Vest's address before a jury in a civil case where a man had sued a neighbor for killing his dog, claiming \$200 damages. After hearing this plea, the jury returned a verdict for the plaintiff for \$500. One may question the justice of the verdict; for a plea by a lawyer is never a sufficient reason for rendering a verdict, however deeply it may impress a jury; but no one will question either the truth or the beauty of this plea, whether it could be properly applied to that particular dog or not.

"Gentlemen of the jury: The best friend a man has in this world may turn against him and become his enemy. His son and daughter that he has reared with loving care become ungrateful. Those who are nearest and dearest to us, those whom we trust with our happiness and our good name may become traitors to their faith. The money that a man has he may lose. It flies away from him when he may need it most. Man's reputation may be sacrificed in a moment of ill-considered action.

The people who are prone to fall on their knees and do us honor when success is with us may be the first to throw the stone of malice when failure settles its cloud upon our heads. The absolute unselfish friend a man may have in this selfish world, the one that never deserts him, the one that never proves ungrateful or treacherous, is the dog.

“Gentlemen of the jury: A man’s dog stands by him in prosperity and in poverty, in health and sickness. He will sleep on the cold ground when the wintry winds blow and the snow drives fiercely, if only he may be near his master’s side. He will kiss the hand that has no food to offer, he will lick the wounds and sores that come in encounter with the roughness of the world. He guards the sleep of his pauper master as if he were a Prince.

“When all other friends desert he remains. When riches take wings and reputation falls to pieces he is as constant in his love as the sun in its journey through the heavens. If fortune drives the master forth an outcast into the world, friendless and homeless, the faithful dog asks no higher privilege than that of accompanying him, to guard him against dangers, to fight against his enemies, and when the last scene of all comes and death takes his master in its embrace and his body is laid away in the cold ground, no matter if all other friends pursue their way, there by

his grave-side will the noble dog be found, his head between his paws and his eyes sad but open in alert watchfulness, faithful and true even to death."

LITTLE DOG "CAP"

Captain was a little white fox terrier. He was found one day, a most forlorn and bedraggled puppy, apparently homeless, friendless, and starving on the great wharf of the Navigation Company at Astoria, Oregon. Some accident had befallen him, that left him dragging a terribly mutilated tail. The company's agent took the little dog, had his tail amputated and dressed. He very soon was a great pet at the home, and became a fine rat dog. His skill was so great that he soon had a reputation throughout the entire city. Business men would catch several rats, send for Cap, and let them all go at once in the street just to see the little dog catch them. He seldom let one get away. He would catch the half-grown ones at first, give them one strong bite, drop them and run for the next. By this means he had time to give the big ones a good death shaking, and then return and finish the others he had only crippled in his haste. Rats about the home had many hiding places, and were hard to catch. Then a party began watching for, and shooting them. This was something new for the little dog. He had never seen nor

heard a gun, and ran from the report in terror; but when he was once shown a rat that the gun had killed, he understood, and from that time became frantic to go for the rat the moment he heard the gun. After he had seen a few rats killed in this way and taken up on the hill for burial, invariably when given a rat that had been shot he took it off without command, and buried it. He understood the crack of the rat-gun used, and no difference where it occurred if he was within hearing, he bounded away for a rat whenever and wherever he heard it. But the town boys could shoot about the premises all day and he gave no heed.

One day the writer heard a rat in the basement gnawing. After listening a moment he said to one standing near: "I'll take the gun and see if I can find it." The little dog was within hearing, but not wishing him to go, the gun was secured in an adjoining room, and taken out by a doorway through the front of the house, in order that Cap should not see. The door to the basement opened on the outside of the building at the rear. Before the shooter had time to get to the spot and open the door, Cap was there and slipped into the basement between his legs, though the dog had left the house by a rear door, and had run entirely round the building to reach the spot. How did he know what was going on? He did not see the gun, nor the party go to the base-

ment. But he did hear the conversation about it, and the plan laid. He must have known what was said, and acted accordingly, or he must have received his information by telepathy.

Several years after the finding of Cap, another fox terrier pup came into the family. This pup was so playful that he became a great pet. But Cap became jealous. He could not be contented when the children were found playing with the new comer. If the pup had a ball or anything else as a plaything, Cap would watch his chance and take it away from him, go behind the stove, and lie down with one paw on it. The dogs never disagreed at any other time and never fought. They were fine companions at all times save when the pup was given special attention. The pup became as great a rat catcher as the old dog, but seldom had a fair chance to get the rat, and when he did, Cap would take it from him and bury it. Poor Cap, like many another aged being lived to see his laurels slipping from him, and at last died somewhat morose. The younger dog took his place in family affection, and showed marked intelligence. He understood a question when asked; would get his collar and bring it when asked if he wanted to go down street, and always carried his stick of wood from the basement to the stove when anyone went for wood to replenish the fire. He would go into

the ocean surf with the bathers, swim until tired and then go to some one to be taken up and rested. He cared nothing for the rolling waves, and was utterly fearless in the water. He had little use for other dogs. He was entirely too high toned. He lived and acted so much like a child about the house, that he was treated much as a child, and seemed to learn as readily, though little labor was ever bestowed to teach him.

FUNNY FISHES

There are many very queer fishes in the various oceans of the world that the ordinary reader never even hears anything about, and most people do not even know their names, which very often are as queer as the fish themselves. One of these is the Porcupine fish. It belongs with the Sunfish family, which it somewhat resembles. It has no teeth, but the point of the jaws are like enamel, a hard substance, crooked like the bill of a parrot. As these ivory tips wear off by constant use digging out its food from the crustaceans on the rocks in the ocean, they grow out again, and thus keep this fish supplied with proper tools for securing its food. It can inflate its stomach with air until it looks like a round ball, while all over it stiff short spines stand out like the quills on the back of the porcupine, from which this fish takes its name. When it is thus inflated, it resembles the burr of a chestnut. These fishes are not good for food, and some of this class are considered poisonous. When the stomach is inflated this fish swims on its back.

Another strange fish is the Sea-Owl. It has a sucking disk with which it fastens itself by

suction like a leech, to whatever it intends to feed upon. In this way it avoids being washed away by the current. The Dog-fish bends itself into a hoop, and when alarmed springs out without warning like a piece of rubber, by which it can strike a smart blow. These greatly annoy fishermen by chasing away better fish, and cutting off the hooks on the lines.

Another interesting and strange fish of the deep seas is the Portuguese Man-of-war. These belong to the Jelly fishes. They are in shape like a boat, and each carries a large sail resembling isinglass, which bellies out with the wind causing the fish to cut through the water at a surprising rate of speed; they are found in the Indian Ocean. Then there is the Pilot fish. These are found, it is claimed, always accompanying the sharks. Seamen who have studied this subject claim that sharks are never without these Pilots guiding them; a custom from which they get their name. Before a shark will touch a piece of fresh meat tossed from a ship, it is affirmed, one of these Pilots will nose around it and after making an investigation, will return to the shark, evidently for the purpose of making its report.

Then we have the Band fish, the Bat fish, the Baloon fish, the Archer fish, the Trigger fish, the File fish, the Anchor fish, the Musk fish, the Goose fish, the Wolf fish, the Angel fish, and the Sea-Devil, the Angler, the Butter-

fly, Bellows, Star, Sling, and Stickleback, the Hound, Gilthead, and Thornback, the Flying, Moon, Skate, King, Saw, Drum, Trench, Sword, Torpedo, Topknot, and Miller's Thumb. The Torpedo is the electric Ray. He carries an electric battery, and takes delight in shocking anybody who is incautious enough to touch him.

BIRD SURGEONS

Snipe have especial ability for repairing wounds, which often occur by accident. They seem to know how to meet these difficulties much better than other birds. With the aid of beak and feathers they will arrange and apply a dressing like plaster for bleeding wounds, and can also make a bandage suitable for a broken bone. A snipe killed by a hunter had on its breast a dressing made of the down and feathers plucked from its own body, and that had been but recently applied. It was well fixed upon the wound, by the coagulated blood. Another of these birds at the moment it was killed had in its mouth the feathers which it had been applying to a bleeding wound; a third was found with its claws broken, an accident that had happened some time previous. In this case the bird had successfully applied a kind of splint to the broken members, but in the course of the operation its feathers had become entangled in its bill, and unable to disengage them, it had died of hunger. Another snipe was found whose claws had been broken by a shot from a huntsman. In this instance the bird had shown real genius. It had applied

a splint arranged from two small wood splinters, which were retained in position by feathers and moss, and the whole surrounded by a spirally rolled leaf, and this was held in place by some kind of glue.

Other birds have been known to practice this surgery for their crippled mates. They are also careful of their nests after the young are hatched, invariably carrying off the useless egg shells and all offal. If a young bird dies, it is at once thrown from the nest.

VAMPIRES—BLOODSUCKING BATS

A gentleman who for years was a resident of Brazil, gives this description of the Vampire.

“When I was a schoolboy the Vampire was a bat as large as a cow, had a horn on his nose and was described as sitting on its victim’s feet, fanning him with its wings while working its pumping apparatus. There is such a bat, but when it was proved that it was a fruit-eater many of us doubted the whole bat legend along with the old mythology. There is a bloodsucking Vampire, however—millions of them. The old Spanish conquistadors found proof of its existence in sore great toes, which looked as if the skin had been shaved off just deep enough to ooze blood; but they never caught one, and naturally laid the blame to the biggest bat they found, which are nearly all vegetarians. The real thing is a small reddish brown creature closely resembling bats of the same color caught here frequently.

“The Naturalist, however, finds some surprising differences. They have no teeth for any purpose, save for thinning the skin—not enough for the blood to flow freely, but just sufficient to enable them to draw it by suction.

The wound rarely bleeds after they leave it. This preparation is done with a pair of teeth, chisel-like, and sharp as a knife. Their interior anatomy differs from other animals as well as their teeth. All others, so far as known have a stomach and necessary organs for converting food into blood; but the Vampire has only an elongated sacklike intestine for the storage of the blood taken, which requires no digestion till it is taken up into the circulatory system. With neither teeth nor stomach, it has no alternative; it must find nourishment ready made. This peculiarity may or may not account for one very strange thing about its selection of victims. The chief ones are cattle and horses. Not one human being in a hundred entirely satisfies their taste. Not half the people who live among them all their lives are ever bitten. But if one of the family just suits them, they will follow that person to any part of the house, and no matter how carefully he may be covered or screened, they will find their particular tippie.

“The stories of their bleeding people almost to death are true only partly. I have known one boy who was so persistently followed that while the loss of blood was small from a single attack, after months of this drain he was greatly reduced in vitality. He was always bitten in the same place—the end of the great toe—and it became so lacerated that there was

considerable subsequent hemorrhage. This lad was the youngest of four brothers. They all slept in the same room and sometimes changed beds, but none of the others was ever bitten.

“Cattle and horses are always attacked at a spot on the spine just back of the shoulders, where the hair separates in a star-like spot. This in the case of a horse is just where the front end of the saddle comes, and it makes a vast deal of trouble where every one rides horse-back. A majority of the Brazilian horses and nearly all the cows are bitten by these plagues. Fortunately the pests are mostly confined to the forest country. They give comparatively little trouble in cities and villages, though the construction of houses makes it impossible to keep them out. In the cities tiles are used for roofs, and in the country palm-leaf thatching, and all kinds of bats come and go at pleasure. One rarely goes to sleep without from one to a dozen flying about the room. They are nearly all harmless, and are welcome because they catch the insects. They all look so much alike that one does not know which to attack.

“How the genuine Vampires eluded scientific research so long is a mystery. The species was not positively identified until the visit of Darwin in the Beagle. It was in the seventies, I think, and there is not at the present day, as

far as I can learn, a single well authenticated case recorded in the natural histories of a true Vampire captured while feeding on a human being."

COLD STORAGE CATS AND RATS

When "cold storage" of foodstuffs was first inaugurated, it was found a sure preventive of rats and mice. They could not endure the cold in these buildings, and business men were congratulating themselves that at least there was one place safe from their deprecations. But men were mistaken. It was not long until Mr. Rat found means to adapt himself to the new conditions. After some of these houses had been in operation for a few months, the keepers found that rats were at work in rooms where the temperature was constantly below the freezing point. These rats in some way unknown to the attendants, had clothed themselves with a winter coat of fur never known on a rat's back before, and even their naked tails were covered with a growth of hair. It was not long until all these cold storage warehouses were in trouble with rats, just as formerly. Their fur-coats were such a protection that Mr. Rat found no inconvenience in a cold climate. This new trouble led the owners to devise means to meet the emergency. They supposed if rats could live here, cats could also, and so they placed cats in these cold ware-

houses to catch the rats. But the cats died of the cold. Pussy is too much a lover of warmth and comfort. But cats also have a great adaptability to conditions, and after several unsuccessful trials, a cat was found, and introduced into one of these houses, that proved equal to the demand. She thrived and grew fat in these cold quarters, and like the rats, soon had on an extra fur-coat. She was carefully nursed in quarters where the temperature was kept below the freezing point, until she brought forth a brood of kittens, which like herself, had coats to withstand the cold. These were distributed among other warehouses, and there is now a new breed of both cats and rats. These cats are strong, chubby animals, with short tails, and long hair with a thick under growth of fur, much resembling the wild cat of the forest. One of their strange peculiarities is the development of excessively long "feelers" from the nose. In the ordinary cat these are about two and a half inches to three inches in length, but in these cold storage cats they grow to the length of five to six inches. This, no doubt, is because the light is so dim in these places that the cat must depend on these feelers, rather than sight. But these cats cannot live now in a warm place, they die in a few hours. Thus it is that nature has some mysterious means of adapting its living subjects to all the conditions that con-

front them. The strongest and fittest, if given the opportunity, will develop the necessary qualities to meet the demand.

“WHO KILLED COCK ROBIN?”

Two robins that had been accustomed to build their nest in an elm near the house, when the spring opened began as usual, and went on joyously. They were a happy pair and greatly appreciated by the family in the house; but one morning a great commotion was heard in the tree, and it was evident that a fight was going on. An examination showed that the pugnacious English sparrow had disputed the right to the elm, and while the nest-builders were absent had begun to tear up the nest. This disheartened the robins and they soon left their unfinished nest to the merauders. But they were determined to build in the yard. They had done so for years and they did not recognize the right of the sparrows to all the trees. Going very much higher in the branches, they began again, in a maple tree that stood near. In a few days the same struggle with the sparrows began again, and it was not long until the new enterprise was in ruins like the first. Sticks, feathers, grass and bits of string, that the builders had used in construction, littered the yard under the tree, and again the sparrows were victorious.

This is the habit of the sparrow. He can whip most of the small birds, and these he drives away, so that now these are seldom seen. But the larger birds he is not equal to in a pitched battle; but he watches his chance and while the owners of the nest are absent seeking new material, or food, he slips in and tears up the nest. Once the nest is destroyed a bird will not build in that place again. In the case of these robins their nest was destroyed twice, and how many more times no one knew, but the robins' morning song soon ceased, and this last enterprise was also abandoned. An examination showed that something worse than the destruction of the home had occurred. A dead robin was seen to be dangling from the nest. A long pole was secured, on the end of which a knife was fastened, and the dead bird was cut down. It was then found that it was the cock, and that in some way he had become tangled in a string, one end of which was fastened in the material of the nest and twisted among the twigs of the tree. The string was passed around the body and knotted around the bird's neck. Now the question is, how did it occur? Did the dead bird in despair under his trouble commit suicide by hanging himself; was it an accident, or did the sparrows murder him? It does not seem possible that either the first or last supposition could be the truth; but the question unsolved is still, "who killed cock robin?"

A LADY'S PRIVATE ZOO

Mrs. John Elitch, according to a magazine writer, has in Denver, Colorado, a Zoo, all her own, and which she personally superintends. More than this, she associates with her birds and animals on the most familiar terms. She goes into the bear-pit, and the fierce beasts which would not tolerate a stranger, at her presence only grunt their satisfaction, and sometimes frolic around her, as if trying to show their appreciation of her visit. They eat sugar from her hand, and are perfectly harmless. She will take the kittens from the lioness mother and romp with them on the grass, while the birds raise a perfect pandemonium of noise at her presence. Everything not confined in a cage makes a rush for her the moment she appears, for they have learned she is principally all pockets full of good things, and they know each will get his share. When she leaves, a whole menagerie follows regretfully at her heels until they can go no farther. In the line are deer, kangaroos, ostriches, and birds; the lions roar, bears growl, and coyotes bark a goodbye.

During one of Denver's flower festivals Mrs.

Elitch astonished the mountain natives by appearing in the carnival parade riding in a beautifully decorated vehicle drawn by a giant ostrich. He was under perfect command, and though bridled like a horse, was safely guided by the slightest touch of a whip. The ostrich became a great favorite and was sadly mourned when he died, as it was said, by eating the McKinley buttons from the coats of visitors. This does not sound reasonable, but it has been published as the truth; and it is known that these greedy birds will eat almost anything they can find. Other birds in their greediness, especially when in flocks, will rush to anything that falls among them, and swallow it down without taking note of it, whether food or not. A flock of ducks before the door of a blacksmith's shop, when a red-hot slug of iron was thrown to them all scrambled for it. One swallowed it, and a moment later this duck stretched its neck out on the ground and the slug burned through and dropped away. What became of the duck after this warm meal was not observed. The chief work of the lower animals is the endless search for food, and they are always hungry. A good supply of the right kind of food will subdue the ferocity of any animal. It was wholly through this method that this zoo was made harmless. The demand of the stomach in all animal life is irresistible, and housewives persist in saying

man is no exception, since it is the only way they have of reaching his heart—with good meals—through his stomach.

SEALS AND SEAL HUNTERS

The most expert hunters in the world are the Esquimaux. As they must depend entirely on their ability to catch the wary seal in order to live, their entire business, aside from their domestic duties, consists of hunting; and when it is remembered they live in the midst of eternal snow and ice, without the modern conveniences of the hunter of more favored localities, their success is wonderful. The seal is an animal that cannot breathe under the water, and must often come to the surface for air; but when the ice covers all the water, the only opportunity for breathing periods is through what is known as a breathing-hole. These are little openings through the ice often no larger than a goose-quill and entirely covered by two or three feet of snow. The hunter's dog is trained by his scent to detect these seal-holes, even though nothing appears above the surface of the snow. When a hole is discovered the hunter seats himself by it, and like a cat, watches for the game to appear when it is immediately thrust with a spear. These hunters have been known to thus stealthily watch a seal-hole for twenty-four hours without eat-

ing or sleeping, then go home and return for a similar vigil the next day. Some hunters use a very slender ivory rod about twelve inches long which they attach to the ice above a breathing-hole, allowing the rod to stick loosely through the ice in the hole. When a seal comes to breathe it takes no notice of so small an obstruction, and pushes it up with its nose. The hunter seeing it rise knows that a seal has approached, and that is the hole to watch. If already on watch at that place, he at once drives his spear down by the side of the ivory rod, and thus catches his prey. Another method of hunting is by the use of the young seal as a decoy. When a young seal is about to be born, the mother scratches away the ice until she can climb out. Then under the snow she makes her home for the new baby. This is done by making a tunnel in the snow, much like the hunter makes his house. The young seal remains here until the sun melts away the snow, or it is able to take care of itself. These seal igloos are discovered by the trained dogs, and when found, the hunter jumps on the top with all his weight, packing down the snow on the baby seal which he then spears through the snow. The instrument used for this purpose is called a sealing-hook. When he has dragged the young seal out, the hunter ties a long line to one of the hind flippers, and allows it to slip into the sea through the tunnel, and

holding it there, hopes to spear the mother when she comes to aid her captive baby. Still another mode of hunting is to watch for the seals when on the ice. The seal sleeps only in little naps of a few seconds at a time, then lifts its head and looks for an enemy, when it sleeps again. The hunter creeps forward while it sleeps, and lies motionless when it lifts its head. In this way he imitates the seal, and can approach within spearing distance, all the time droning what is known as "seal-talk," which is supposed to have some kind of magic or charm.

When the seals are in the open water, they are hunted in a boat. The spear-head is not solidly fastened to the shaft in these excursions, but is temporarily held with a thong which is secured to a leather float, filled with air. If the seal is killed outright it always sinks, or if only wounded may escape, but with the spear-head fast in the wound, and also attached to a float it can neither sink nor get away. When the seal is caught the hunter balances it on his frail boat, which is all covered except a place where he sits to paddle, and regardless of the tossing and shifting waves, carries it home.

A COW SCARED TO DEATH

A Pennsylvania farmer noticed his cow making repeated and furious charges at a dense thicket. The animal would rush at the spot again and again, striking with its horns and bellowing long and loud. An investigation showed that she was fighting a big blacksnake, and trying to stamp it to death with her fore feet. The thicket was an isolated clump of laurels, and the snake did not seem disposed to leave it. Finally the cow lowering her head attempted to impale it on her horns, but it suddenly sprang on her head and coiled itself around the horns, and refused to be shaken off. For a moment she seemed dazed and uncertain what to do, then she set off at a furious pace, occasionally stopping and trying to rub the reptile off. When at last she realized that all her efforts to get rid of her enemy were fruitless, she rushed like mad across the field. The men on the farm made an effort to follow and corner her, but she was so frenzied that she would charge at everything in sight. She bellowed herself hoarse, while foam came from her mouth, and blood from her nostrils. Her sides were distended, and she panted as if her

skin would burst. Whenever the men approached she would start again, tossing her head, and bellowing louder than before. But do what she would, the snake maintained its hold. It did not seem to make any effort to strike the cow, but it was determined not to be shaken off. Do what they would the cow kept out of the reach of the men, and acted as if entirely crazy. Occasionally the serpent would half unwind itself, and allow its head to play before the cow's eyes, then she would bellow with renewed energy and gallop off in another direction. Various methods were devised to head her off and remove the snake, but all in vain. She would rear and pitch, run backward with her head near the ground, leap into the air, and cut all imaginable capers. At last she could hold out no longer and fell from sheer exhaustion. When the men rushed to her side and dispatched the snake, she was no longer able to rise, and after violently panting for a few seconds, expired. The snake when killed was found to measure more than six feet in length. As the blacksnake is not poisonous, the cow was in no danger, even if it had bitten her, but the poor animal did not know that. She was simply frightened to death. It has often been noticed that animals have a dreadful horror of serpents; and it may be for this reason that so few are ever bitten by them. In the mountains of British Columbia the

rattlesnake is very common, but the farmers allow their stock to fatten on the grassy slopes for months without any attention, and it is very seldom that an animal is ever bitten. Deer will stamp serpents to death, and many dogs will kill them without fear; apparently understanding just how to catch them to avoid danger. But this poor cow was so crazed with fright that she could neither help herself, nor would she allow her friends to aid her.

A MAN SAVED BY HIS FAITHFUL DOG

A gentleman who had taken up a homestead claim in Oregon, was far away from his nearest neighbor, and alone with his Collie. Everything went all right until he was taken sick. For some time he worried along fighting off the disease, hoping that he would be able to continue his work; but day by day he grew worse, until he was at last confined to his cabin, and later, had to take to his bed. Now he was in a strait indeed, for he could neither help himself nor go for help, the nearest neighbor being four miles away, and the only road leading over the mountains. Growing worse and worse he saw that he must have aid or die, and there was but one messenger within reach. He had his faithful dog, and determined to try this last chance. He scribbled his condition and need on a piece of paper, fastened it around the dog's neck, and told him to go. The dog seemed to understand, for he at once started as bidden. The animal had not been away from the cabin for six months, but he made the trip over the mountain alone. He started from the homesteader's cabin at midnight, and so far as is known, never halted

until he covered the four miles of mountain trail, showing up in the early morning at the home of his owner's brother. When the dog was admitted, he jumped on the bed and barked. His manner was such that had he lost the note the family would have understood that something had happened and the dog had come to tell them; but the note was still on his neck, which clearly revealed the situation and what was needed. A physician was hastily called and sent to the sick man, who found a very sick patient; but later reported that he would recover. Here was a clear case of a man's life saved by his faithful dog. And it raises the question, how are we to reconcile such an act as this with the theory that animals do not reason? This dog did precisely what he was told to do, and in precisely the manner any other messenger would have done it. He did not carry the message only, but he told the story in his own language, just as any other messenger would have done, and no doubt would have told all the incidents of the midnight trip over the rugged mountain trail had he been able to do so. But how did he know what was wanted? Dog-tricks are plenty. These are easily explained. But this is no trick. The dog acted promptly, intelligently, and exactly as any other messenger would have done who fully comprehended the urgency of the situation. He knew what

was wanted, though he could not read the message he carried; and if he knew, how could this occur, unless he reasoned, "the man's brother must be informed of the sick man's situation, and he wants me to go and tell him; to do this I must go at once through the darkness, alone over the mountain trail and deliver the message tied around my neck." If he did this, he reasoned. If he did not thus reason and meet the need, how did he meet it? That he did, and that just such intelligence by dogs has been shown again and again, is a matter of undisputed history.

THE PASSENGER PIGEON

Sixty years ago the passenger pigeon—then known as the wild pigeon—abounded in the United States, especially east of the Rocky mountains, in such countless numbers that no attempt can convey to the reader of today who never saw these millions, any adequate conception of this army of birds. For years they could be seen hourly flying in all directions, or sitting upon the trees near their feeding places, in such vast numbers that there was no room for more. They numbered untold millions, and often could be seen as closely packed together as could be to allow of any movement, fluttering close to the ground, the rear ranks successively rolling over those in front like great billows, and with the roar of the ocean surf. When suddenly the whole army would rise to depart, the noise was like thunder. They were scattered all over the country, and at no time could one look over the fields or toward the heavens without seeing great flocks coming and going in restless hungry quest. Their roosting places were great colony collections in the timber, that were hastily resorted to late in the evenings, always in the same places,

gradually growing more extended from day to day. Long during the night new arrivals would continue, lighting on the backs of birds already settled, and in the darkness and crowding, keeping up an incessant protest of cackling until people beneath the trees could not carry on conversation. From time to time limbs would crack, break off and crash to the ground with the weight of the birds. To these roosts hunters came with their express-wagons, a lantern, and a long fishing-pole. A tap on the head would bring the dazed and fluttering bird to the ground. It was then picked up and placed in a cage in the wagon. There was no end to the number that could be thus secured in a single evening. One accustomed to it could tap these birds so as to secure them, without permanently injuring them, and thus hundreds were kept caged for weeks or even months. They seemed always hungry, and would eat as soon as captured, often out of the hunter's hand. They were caught also in traps and nets; and thousands were marketed, while other thousands were dressed and salted down for future use.

Like their regular roosts, they had their breeding places where they congregatd by millions, using the timber much in the same way. Every available space would be taken in all the trees over acres upon acres of the great forests of Wisconsin and Minnesota. These

forests had not then been disturbed by woodsmen as in later years; and these birds took possession of large areas, crowding each other for their nests, just as they crowded for a place to roost. Their feeding places were in the great oak and beech woods of the East, where they could secure the acorn, and the beech-nut; and during the winter, over the ranges where in those days the farmers feed large bodies of cattle and hogs. It was the custom then to "Hog down corn," as the farmer expressed it. Hundreds of hogs for the market would be fattened by turning them into great fields of standing corn, allowing them to pull it down themselves and eat at leisure. A large quantity of grain would thus be shelled and the loose kernels abandoned on the ground. This was a rare chance for the pigeons that could always be found about these fields, on the ground feeding, or having full crops, in the dead trees lazily waiting for hunger to renew the quest. For a number of years, these countless flocks did not seem to decrease but rather to increase, and when at length they were gone, no one seemed able to account for their disappearance. There were many conjectures as to the cause. One author claimed they must have been destroyed in a hurricane, by being blown out to sea; others supposed that some disease must have killed them! and it was not until of late years that the truth has been told. It

is the same old story. They were destroyed by the pot-hunter, who shipped them to the eastern markets, not by car-loads, but by train-loads. Whole tribes of our western Indians went into these forests and camped on these nesting grounds, not only killing the old birds by the hundred thousands, but securing the squabs, and destroying the nests and unhatched eggs by cutting down the timber.

Thus the buffalo and the passenger pigeon have met the same fate at the hands of the same merciless game hunter. Both belong to a period of American history that can never return. Neither can be seen again as in these earlier years, not even if it was desirable. The physical changes of our country alone would prevent this, even if the most costly and heroic effort of the government was made to secure it. There are now too many hunters, guns too dangerous, too little forest mast for the one, and no grassy plain for the other. The gray haired men of today who were boys then, look back with regret to the time when daddy's back lot was a hunting ground, and any boy with sufficient skill to make a trap of sticks and set it with a figure-four trigger, could keep the larder supplied with meat; and all the more so, because they cannot even describe these millions upon millions of flying birds so that their own children can understand the wonderful picture.

A DOG THAT PLAYED 'POSSUM

Dogs in the cities often become very troublesome. People who have them are not always careful to keep them at home, and some times great damage is done to lawns, flower gardens, and other property. The authorities are compelled to make owners pay a license on them, or have them run the risk of being caught by the officer whose duty it is to kill them. It is not a popular employment, and the "dog killer's" place in society is not an enviable one, since nobody wants his dog killed, though he may not think enough of him to pay for his protection. Dogs caught are placed in a large enclosure, and if no owner appears to claim them, after a certain time limit, they are shot. It has been found that many dogs thus imprisoned seem to anticipate their fate; and especially is this seen to be the case after one or two has been seen shot. They know what is to be their fate, and often set up a howl of despair, as they see their turn coming. An officer whose duty it was to dispatch the dogs, tells this story: "Many times I have gone to the pound and found forty or fifty dogs there, and the moment I entered, the dogs seemed

to know my mission and would try to avoid me. I used a small rifle, and it was therefore necessary to hit them squarely in the head in order to quickly kill them, and with as little pain as possible. But they seemed to understand so clearly, that they would turn from me and hang their heads against the wall, out of range. Many a time I have left the pen heart-sick with myself and my job."

"The most disagreeable experience I ever had was with a little black and tan terrier. That morning there were forty-five dogs in the pen. In half an hour they were all dispatched and lying about. It was the custom to go about among them, and touch each one with the foot to see that he was really dead. That morning while doing this last duty, the little terrier suddenly jumped to his feet and made a break for liberty. He was the deadeast dog I ever saw until I touched him with my foot. He had been only 'possuming.' When he reached the gate to the enclosure and found it locked, he ran round and round the fence crying most pitifully, and my heart failed me. The fact is, I would have lost my job before I would have shot that little dog, and as he came round again I called the gate keeper and we let him out. He fairly flew down the street, and was soon out of sight. Our chief was very strict about such matters, and I felt uneasy about letting the dog go, but when I told him of it, he de-

clared he would have discharged me if I had killed that little dog."

TRAPS THAT CATCH THE WRONG GAME

Several years ago a gentleman in Berlin, Germany, established a dog-school. His training was not for the purpose of teaching the dog the usual tricks, but for the purpose of making him a useful watch dog; and while proving a terror to the thief and burglar, to be gentle and affectionate toward his owner. His idea was that a dog was not at his best as a performer of tricks, however interesting these might prove at an entertainment; but that he could be trained to be very useful as a policeman about the home. Under this gentleman's plan each dog to be trained is first put through a process of instruction as to what part of a burglar to attack, should this occasion occur. But first of all, the dog must be taught obedience. This is secured by teaching the ordinary dog-tricks, such as sitting on his haunches, jumping over a stick, bringing a ball, carrying things for his master, and any other duties which qualify him to obey commands. When he has mastered these simple lessons, he is given instruction in more complicated things. Just outside of the gate a dummy representing a tramp is placed. A

string is fastened to the gate by which it is slowly pulled open, and the tramp's head is thrust in. The dogs are taught to fly at the intruder the moment he appears. But this is not all. The dog is taught where to lay hold the more successfully to overcome the enemy. He catches the imitation burglar by the throat at the first spring. But like many traps people set for others, this instruction proved too serviceable. Desiring to fully test a dog that had shown unusual ability in this school, this gentleman dressed up as a burglar and tried the game himself. Coming into the gate in rags, and stealthily approaching the house, the dog flew at him as it had been taught to do, and refused to be quieted. The gentleman supposed his voice would subdue his assailant, but this did not work. No sham for that dog! He proposed to do his duty as he had been carefully taught, and his instructor only succeeded in getting away with his life by running several blocks, with this trained pupil nipping at his heels. Thus it often turns out, that we are caught in our own traps. A few years ago a gentleman in Ohio whose premises had been robbed, on going away for several days instructed his hired man to watch at night and fire on any one he saw approaching the house. Like the dog, he was too well trained. A man approached the first night, and was promptly fired on with buck shot, after being ordered

to halt. Instead of obeying the order the man turned and fled and was shot down as he ran. This man was the owner of the premises, who had instructed his help to shoot. For some reason he did not live to make known he had unexpectedly returned the evening of the same day he left, and it is supposed he had forgotten his orders to the hired man and in his sudden confusion at the order to halt, as the situation of danger flashed upon him, instead of halting he ran, and thus lost his life. A stranger feature of this case was, that years before, this man had been shot through the body near the heart at the battle of Stone's River, and had survived, only to be killed by a gun shot through his own orders.

A DISHONEST DOG

Barbekark was a smart dog once owned by an Esquimaux. He was considered the leader of the team. It is reported of this dog that he knew much more than just to lead other dogs in the great race with sledges over the vast snow fields. Once he went hunting on his own account, killed a deer, bit a piece from its neck, took it home, and then brought his master to the place where he had left the dead deer. A brother of this dog was also very intelligent. Once when with the rest of the team as the leader, he saw a seal lying on the ice, he dashed forward and caught it just as it was slipping into the water. He caught it by one of the hind flippers, and the other dogs giving help, the two soon had it back on the ice, where their master secured it. But Barbekark was in the habit of performing a dishonest trick, like many animals that are not dogs, and thus benefitting himself at the expense of the rest of the team. These dogs were fed on a small dried fish called "capelins." Their master would have them all stand in a circle and give each a fish in turn, but Barbekark took it into his head to play a white man's trick,

so every time he received his fish he would back square out of the line, move a distance of three or four dogs, and force himself in line again, thus receiving double the share of any other dog. His master determined to put a stop to this dishonesty. His master said, "each dog on receiving his portion, always shook his tail apparently in thankfulness, but Barbekark always wagged his tail as if he was doubly thankful, and a twinkle in his eyes as they caught mine seemed to say, 'keep dark; these ignorant fellows don't know the game I'm playing.' Seeing my face smiling at his trick, he now commenced making another change, thus getting three portions to the other's one. This was enough, and it was now time to reverse the game by playing a trick on him. Accordingly, every time I came to him he got no fish, and though he changed his position three times he got nothing. Now, if ever there was a picture of disappointed plans—of envy at other's fortune, and sorrow at his own misfortune—it was to be found in that dog's countenance as he watched his companions receiving their allowance. Finding that he could not succeed by any change of his position, he withdrew from the circle and came to me, crowding his way between my legs, and looking up into my face seemed to say, 'I've been a very bad dog, forgive me and I will cheat my brother dogs no more; please, sir, give me my share of

capelins.' I went the rounds three times more and let him have his fish, as he had shown himself so sagacious, and so much like a repentent prodigal dog." These team dogs seem always hungry, but in spite of this can endure almost any amount of hardship, without appearing any the worse for it. Capt. Hall relates that one of them in seven seconds ate a piece of walrus hide and blubber six feet long and an inch and a half square; a team has been known to eat nothing for forty-eight hours and in the meantime to travel seventy-five miles, and yet appear as fresh as when they started.

HABITS OF THE HONEY-BEE

Honey-bees are not only the most wonderful workers, and for this reason often pointed to as examples of unflagging diligence and untiring patience, but they exhibit a skill and knowledge that are unsurpassed among insects. Like the ants, their colonies are composed of three classes. The queen, the workers, and the drones. The queen lays the eggs, and these are produced from three hundred to one thousand a day. The number depends largely on the condition of the weather. Some writers claim that the queen places the eggs in the various cells provided for them by the workers; but other writers claim that she lays her eggs promiscuously about the hive, and that these are carefully collected and deposited in the cells by the workers. There are three kinds of cells. In one kind only queens are hatched; in another the drones, and in still another the workers. The workers number many thousand; in large swarms as many as sixty thousand; but there are only a few hundred of the drones, who alone are the male bees. When the honey collecting season is about over, the drones are all killed off by the workers. At this time if one watches the hives they will see every few minutes two

workers come struggling out of the hive each holding on to a drone, which can always be known because they are much larger than the workers. The unfortunate victim is dragged to the front, his wings are cut off, and he is then dropped to the ground to die. Whether the workers do anything else to destroy the drones is uncertain. But these may be seen for hours creeping and struggling on the ground about the hive before they finally perish.

The queen does not seem to have any authority among the workers, but she is quite a royal personage, goes where she pleases in the hive, and is always attended with a bodyguard, who show her great deference, always opening a passage for her, and often feeding her; but she is a jealous queen, and would kill all the young queens hatching in the cells if she was not prevented by the workers. When a new queen comes out then there is royal trouble. The old queen leaves the hive with her subjects, and a new one takes her place; but two cannot live free in the same hive. If an accident happens to the queen and there is none to take her place, there is some not well understood process by which the ordinary larva in a worker's cell can be made to produce another queen. This is one of the greatest mysteries of beedom. When the eggs hatch they come out a small worm, and are fed by the workers; after a short time the workers seal the grub up in its cell and

leave it to work out its own destiny. By an arrangement of Nature, in its mouth it has a silk-factory, and at once begins to clothe itself with a silk wardrobe, spinning it out much as the spider does his web. Later it bursts its enclosure and comes out a young bee, and just like any other baby is carefully trimmed and guarded, until in a day or two it is ready to fly with the rest. One of the most singular things about bees is that they have five eyes—two large eyes in the front of the head, and three smaller ones on the top of the head. When a swarm leaves the hive for a new home, it usually settles in a great body, bees hanging on to each other until the swarm presents a bunch of bees that would fill a peck measure. Here they wait until their spies that have been sent on to look out a new home, return and report. A swarm has been known to remain in this position for thirty-six hours, but this is rare. They seldom remain in this condition over night; but in at least one instance a large swarm settled near the ground on some vines and remained two days and nights exposed to a cold rain. The last morning all seemed to be dead; but when the sun came up and it began to get warm, two or three bees were seen to crawl with great difficulty into the sunshine. After these were warmed up, they went to those apparently dead, crawling over them and rubbing them exactly as one would massage another person. As each bee began to move it

was escorted to the sunshine, and in turn became a helper. In a little while hundreds of bees were brought back to life, and later in the day the whole swarm was revived and sailed away to their new home, somewhere in an adjoining forest. Drones have no sting, but the queen and workers will sting an enemy that disturbs them, and the worker usually leaves its sting in the wound and dies later from the damage it has inflicted upon itself. But no hive will work and make honey without its queen.

THE MONKEY AND THE BULLDOG

Some of the monkey family in India are held sacred. They are protected from harm, and became very tame. But this kind treatment makes them very troublesome. They come about the people's homes and do many mischievous things. A gentleman traveling in India had a bulldog he called Toby. Toby hated the mischievous monkeys, for they watched for occasions to play tricks on him. When asleep, they would tickle his nose, pull his tail, hit him with a stick, or any other annoying thing they could think of. Toby would bound after them so mad it would have been the last of Mr. Monkey, only Toby could never catch a monkey, though he tried his best. They were so nimble and active, that by the time Toby got well started the monkey was on the roof of a house, or safely perched in a tree. He seemed quite distressed by his failures. But one day Toby thought he saw a fine chance to get sweet revenge. An old, sleepy looking monkey sat on a low branch allowing his long tail to hang down until it nearly touched the ground. Toby's owner gave him a sly "sic," and the dog apparently understanding he must be very sly, crept cautiously along the ground

toward the monkey. Nearer, and nearer the dog crawled, until he was within reach of the motionless tail. Sure he had it, he made a bound toward the limb, no doubt determined to catch that tail as near the body of the beast as possible, but just as he had it, he hadn't. The monk with one hand snatched up his tail so suddenly that the dog did not know what had happened, while at the same instant, with his free hand the monkey hit Toby a sound rap on the head. Toby was disgusted; and with hanging head walked back to his master, no doubt, saying to himself: "That was your fault; you got me into that trouble." But the old monkey hardly batted one eye, and looked on as unconcerned and as sleepy as ever. But this was not the last time this trick was played. Toby could not refrain from repeated efforts to catch that tail, and the old monkey was always ready when opportunity offered, to give the dog a chance. Toby could not resist the temptation, but as often as he made the effort, the tail disappeared so suddenly and mysteriously, that in his confusion he never failed to get a slap on the head. The amusing part of the affair was the utter calmness and satirical indifference of the monkey. It was all so easy that he did not even seem to see any fun in it. But poor Toby! He could whip any other bulldog he ever met, but monkeys he could not understand, and after each attempt would retire with his head down and a

look of shame, that was easily understood. The dog had only one chance to get even with the monkey, and that was to treat him with utter indifference; but this Toby could never learn. He was always so cocksure he could catch that tail that he never failed to try, and invariably got his head bumped for his pains.

THE STRENGTH OF AN APE

Of all the man apes now known, the Gorilla is the most formidable. A full grown male frequently stands over five feet and a half in height; but the bones of at least one have been found that in life stood more than six feet. We now know from experience that the Gorilla is not untamable as it was once claimed. When taken quite young, its ferocity can be largely overcome by kind treatment, but it is a morose and loveless creature even at best. It is not certain it ever walks erect in a wild state, except at the moment of attack when like the bear it will rear on its hind legs, but at other times it rests its knuckles on the ground or supports itself from a branch or by leaning on a stick. When enraged it beats its breast with its fists, until, as travellers claim, the sound can be heard the distance of a mile, resembling that of a bass drum. When the male attacks a man, with its huge size, its great hairy limbs, and its hideous head set low down between its great square shoulders, no description can exceed the horror of its appearance. When it is recalled that this monster lives in the depths of forests where the light is so dim that it is difficult to see any object clearly at a distance

of more than a few yards, it is not a cause of wonder, that the natives have invested it with a horror greater than that of any other living creature. It is claimed by some writers that this monster will secrete himself in the lower branches of a tree overlooking a path, and when a human being passes, drop one of its long arms suddenly, and clutch its victim by the throat. It then drags its prey up into the tree to its lurking place. It is said to carry off women into the forest and keep them, bringing food to prevent their starvation. These accounts have been doubted by modern writers. But there is on record an account of a female that captured a man and carried him to her home in the forest, carefully guarding him night and day. She fed her victim on fruits and vegetables on which she herself lived; but he finally succeeded in making his escape. The circumference of the middle finger near the first joint of one that was measured, was found to be six inches; and its strength far exceeding that of any other of the monkey tribe, or of the strongest man. These animals do not fear to attack any other animal, and it is claimed they will put the wild elephant to flight. In defense they employ a huge club with tremendous force.

For their homes they entwine the small branches of trees together, and thus make a kind of swinging bed on which they sleep. They are very fond of their young, which re-

main with the parents until fully grown, and they will fight for them until killed. Whether the Gorilla in combat would prove superior to the African lion is not known; since they do not occupy the same territory, and are not known to ever come together in battle.

BUTTER BIRDS

In Caripe, South Africa, there is a great cave, noted for its extent, and celebrated for its strange inhabitants. From its dark recesses flows a river, and in its gloomy depths, the superstitious inhabitants surrounding it suppose the spirits of their departed ancestors reside. The name of this cavern is Guacharo; which means literally, fat; and was, no doubt, suggested by the great quantities of fat derived annually from the thousands of birds that live in this cavern. The cave is so straight that a traveler can enter quite a distance without needing artificial light. As he proceeds over the somewhat rough ground that forms the bed of the river, he begins to hear from afar the hoarse cries of the Guacharo birds; and when he has arrived at the dark part of the cavern, the noise is so terrific as to be alarming. Thousands upon thousands of these birds utter their piercing cries together; and the screams echoing from the surrounding walls make the place a perfect pandemonium. When it is remembered that this noise takes place in perfect darkness, it is not difficult to understand the superstitious terrors which the ignorant natives associate with this place.

These are the butter birds; a mysterious fowl about as large as our domestic fowl, that lives exclusively in these dark recesses, coming out only in the night. Their wings expand to about three feet and a half, and in their habits they resemble the owl or night-hawks. They live entirely on fruits, seeds and nuts, and have powerful beaks with which they break the shells. Once a year, in midsummer, the natives make a raid on these nesting birds and secure the young squabs for the fat. This is found underneath the bird's body; it is carefully removed and melted in pots of clay at the mouth of the cavern. It is so pure that it can be kept for a long time without becoming rancid. The young birds are secured by knocking down the nests from the roof of the cavern with long poles prepared for that purpose. Many of these nests are sixty or more feet above the river-bed. Of course, the young bird is instantly killed, and except for its fat is of no further use. This fat is known as the butter of the Guacharo, and at the Convent of Caripe no other oil is ever used in the kitchens of the Monks.

CATCHING WILD ELEPHANTS

Elephants abound in both Africa and India, but it may not be generally known that the Africans never catch and tame them as do the natives of India. Some have supposed it is because those of Africa are more incorrigible than the others; but this is not the case. Rather it is for want of ability on the part of the Africans. Nevertheless, they do capture them for their ivory, and also as a supply of food, and prefer to capture the very worst, since these are generally the largest bulls, and have the finest tusks. These are known as the "rouges." They are great leaders of the herd, that have lost their place to some more powerful fighter, and have left the herd in disgust, ever afterward to seem as if holding spite at every living creature. They tear up the gardens of the natives and become dangerous neighbors. When a "rogue" elephant is known to be in the neighborhood, it is a cause of general rejoicing in a Hindu village. Elephant hunters now take two, sometimes three "koomkies" (female elephants). They ride these "koomkies" to the place where the "rogue" is known to be, keeping themselves closely covered, lying prone on the "koomkies' "

backs. These "koomkies" understand the game, and will help the hunters to disguise themselves by holding branches over them, or placing their trunks in such positions as to shield them from the "rogue's" sight when they are on the ground. When the "rogue" sees the female elephants near he is again happy, for now he imagines he can again rule a herd. The "koomkies" caress him, play with him, surrounding him in such a manner that they shield from sight the hunters, who slip down and pass ropes around the "rogue's" legs. To his hind legs they fasten a hinged yoke of wood filled with spikes; and having been careful to entice him near a tree during the performance, this yoke is securely fastened to the tree, and hunters and "koomkies" bid the "rogue" goodbye, leaving him to his fate. If he was furious before, he is doubly so now. Before, he was only a disappointed lover, driven off from the herd; now he is both disappointed and confined. He storms, and trumpets, and rages; tears up the ground, and if it was possible to get at the tree would pull it up by the roots, but it is all in vain; and the more he struggles the worse he hurts his hind legs with the spiked yoke. Worn out at last, hungry and disheartened, he is completely conquered. When this occurs the "koomkies" and hunters come back and give him food; in this way they continue from day to day until the "rogue" has learned he is dependent on these visits for

food and all the companionship he can have, and little by little he is tamed and becomes tractable; then his legs are fastened to the legs of one of the "koomkies" and he is marched off to his new quarters. Sometimes he still resists, and is then dragged by the "koomkies," and pushed from behind by another elephant. He is now treated with kindness but firmness, and soon learns to take his place and to do his work with the rest of the tame elephants.

Another mode of catching these animals is to build a strong enclosure and drive a herd into it. Those selected for capture are kept in confinement until subdued by hunger. Yet another mode is much as the wild horse was once caught on the plains. The hunters ride tame elephants after them, and throw ropes with nooses over their heads. When these ropes are tightly drawn it chokes the captive, and causes it to stop its flight. However the hunter attempts the capture of this wild animal he must depend absolutely on the tame elephant to make the capture possible, and the knowledge and obedience of these tame creatures are wonderful. An instance occurred, where during a stormy night an elephant got loose and escaped into the forest. Four years afterward when a herd was driven into an enclosure, the owner of the lost animal, thought he recognized it in the herd captured. He climbed on the enclosure and called the name of his lost animal. It instantly showed that

it recognized his voice. He went inside, ordered it to kneel, it obeyed, and climbing on its back its owner rode it out. Another instance is mentioned where a "koomkie" was missing for several days and it was later found that she had gone out into the jungle alone and had tied a wild elephant to a tree.

TWO PATHETIC DEATHS OF DOGS

An affecting account of the death of an old hound is given by his owner in the *Animal World*. Hector was a long tried and trusted dog, a leader of a pack of hounds. At last the old hound became too infirm for the field and was left at home when the pack went out. Year by year his feebleness grew upon him, but he was well cared for, and passed his time mainly in sleeping by the kitchen fire. His long absence from the field where he had so often been heard in the lead, caused his fine, deep-toned note to be almost forgotten. "But one afternoon," says the owner, "I was sitting in my room writing, when suddenly I heard the splendid note, as I thought at that moment, of a strange hound, and stopped to listen again, when, instead of it being repeated, the whole pack in the kennel near my house gave one burst as if in full cry, and as the sounds died away and all was again hushed to silence, my huntsman rushed into the room saying: 'Hector is dead, sir.' The splendid note which I thought that of a strange hound, had been the leader's farewell call to the pack, and they had heard and answered." Just like many a human being, doubtless, the old hound in his last delirium,

dreamed he was again in the lead on the mountain trail, and in sight of the final goal.

Another case is that of an English gentleman who was traveling on horseback accompanied only by his faithful dog. Having occasion at noon to stop for his lunch and to rest his steed, there being no inn nor residence near, he selected a grassy spot, tied his horse where he could eat grass, and seated himself under a tree. While eating his lunch, which he had carried with him, he took the occasion to take out his wallet and look over some papers it contained. The dog rested near and watched the performance. When the traveler again started the dog began to act most strangely; jumping up at its master and catching at his foot. The farther the man rode the more violent became the dog's action. He would bite at his master's foot, jump at the mouth of the horse, catch the bridle and run back a little distance and then return more violent than before. The traveler finally concluded the dog had gone mad, and fearing it might bite his horse, there was no other alternative than to dispatch it. Drawing his pistol he shot the dog, and leaving it lying by the road-side went on his journey with a heavy heart; but he could not avoid musing on the strange actions of the animal, and at last it dawned on him, perhaps he had left something at his resting place. Feeling for his wallet it was gone. He hurried back to the spot where

he had used it, and there to his unspeakable sorrow laid his wallet, and his faithful dog by its side with one paw on it. At the approach of his master the faithful creature looked up in his master's face, joyfully wagging his tail, then laid its head on the wallet and died. The traveler records, that he never could forgive himself. The faithful brute had more intelligence than himself, and when mortally wounded still refused to abandon his trust.

A HEART-BROKEN BIRD

That animals and birds, and no doubt insects also, have the same feelings that move the human race, is proven by their conduct. The only difference we can detect is that they are limited in knowledge and have not audible speech with which to express them. They suffer bereavement and mourn their dead. They often show amazing gratitude for help given them, and in their way often ask for it. A gentleman tells a sad story of a little mother bird. For some time the weather had been very warm, and a window in an upper chamber had been left open. When it became cooler he went and closed the window, and sometime afterward noticed a little bird dashing itself against the glass on the outside. It would go away for an instant, then come again, as if determined to enter the room. Both sympathy and curiosity were aroused. What did that little bird want? He went to the room and opened the window, and immediately the little bird flew in, going straight to a spot where it had built its nest some time before, and that the gentleman had not observed. It sat on the edge of the nest a moment, then drooping, it looked very sad, and fluttered down to the floor.

As it did not make an effort to rise again the gentleman picked it up. The little bird was dead. Examining the nest, the gentleman found the mother bird and four baby birds, all dead. The closed window had shut in that little mother, and unable to get food for herself or her family, all had starved. When the window was at last opened, the male had hurried to the nest with food, but it was then too late. His mate and all her brood had perished, and the little bird with food in its beak fell down to the floor broken-hearted and died also.

The gentleman looked at the dead birds and cried. He even reproached himself for his carelessness in not having more carefully examined the room before closing the window. And who was this gentleman? A noble Englishman, who rose from a poor boy to be a great mechanic, and who has been called the "Father of the Railroad." He tenderly lifted the little bird from the floor and tried to revive it but it was in vain. For days this great man mourned; and yet at that time the wisdom and force of character of George Stephenson was changing the history of the whole world. Greatness does not consist in indifference to small things, and the greatest men who have lived have always been most sympathetic and tender toward the lower animals and birds. No humane person is ever indifferent to the suffering of any living thing; and no

one, not even a true sportsman, gives anything needless pain.

THE GREAT SEA-SERPENT

That there are sea-serpents, many of them, and that the bite of these serpents is dangerous, are no longer unsettled questions. They have been found, captured, carefully examined, and reported, and their existence is no longer doubted; but is there a monster sea-serpent? Those that have been discovered are small like our ordinary land serpents, and bear no relation to the great animal so often reported as seen by captains and crews of vessels at sea. For many years past these reports were considered the myths of sailors that it was supposed had their origin in the old Scandinavian Mythology, which described a huge sea-monster living at the bottom of the sea, with its coil encircling the earth. But since these reports have continued to come from many sources, describing this animal somewhat minutely, as seen at various places, and under circumstances where there could be no mistake, this opinion is no longer accepted. It is now pretty well settled that there is at least one enormous snake of the sea. It has been seen so often, and has been reported at so many places by sea captains whose authority cannot be doubted, that it must be true. The descrip-

tions of this monster do not agree in minute details, not even by those who claim to have seen it at the same time; but this is not remarkable since no two descriptions ever fully agree even when reported by eye-witnesses a few minutes after the occurrence described. This is shown in civil court examinations of witnesses, every day. On the other hand, all these descriptions do agree perfectly in the general appearance, movements, size and characteristics of this creature. Almost without exception it has been seen moving forward with head and body erect several feet above the surface of the water, indifferent to its surroundings, and swimming in a direct line as if bent on some special mission, while its size and length always have been estimated as large; ranging from sixty to one hundred feet in length, and as large or larger than the body of a good sized man. At no time has any one had a very close observation, though in one instance a few years ago, a ship captain described a sea-serpent passing his ship near enough for those on board to see its great eyes and the shape of its head, and to note that it had a scaly body. One of the earlier descriptions is by Captain M'Quhea.

In 1848, Captain M'Quhea, and Lieutenant Drummond, of the same vessel, while sailing in the South Atlantic Ocean near the Tropic of Capricorn, not far from the African coast, saw this ocean mystery, and each has left a public

description of the animal. The Captain says:

"It passed rapidly, but so close under our lee quarter, that had it been a man of my acquaintance, I should have easily recognized his features with the naked eye; and it did not, either in approaching the ship or after it had passed our wake, deviate in the slightest degree from its course to the southwest, which it held on at the pace of from twelve to fifteen miles an hour, apparently on some determined purpose. The diameter of the serpent was about fifteen or sixteen inches behind the head, which was, without any doubt, that of a snake; and it was never, during the twenty minutes that it continued in sight of our glasses, once below the surface of the water; its color was a dark-brown, with yellowish white about the throat. It had no fins, but something like the mane of a horse, or rather, a bunch of sea-weed washed about its back." Lieutenant Drummond describes this serpent, seen at the same time, as at the nearest, one hundred yards away, and having a "back fin." This fin as seen by him doubtless, is the same described by the Captain as a "mane," or "sea-weed."

A later and still more remarkable discovery of this monster is that reported by Captain Drever, of the English ship *Pauline*, in 1875, when, driven out of his course by a hurricane, he found himself in the midst of a herd of Sperm whales, that came sporting around his

ship. While all hands were watching the antics of these animals, suddenly they beheld a sight that filled every man on board with terror. Starting up straight from the bosom of the deep a gigantic serpent rose, and wound itself, in two mighty coils around the largest whale, which it proceeded to crush. The whale bel-
lowed, and in its struggles lashed the water into foam, but all in vain. It could not release the hold of its enemy; and as the struggling mass sank out of sight the crew heard the cracking of the ribs of the whale. This is a most unusual description. And in as much as it describes a scene witnessed by a ship's whole crew, it seems incredible, if a myth, that it was never denied by some of the reported witnesses. Many other still later descriptions have been given to the world, some so recent as to leave little doubt that this monster of the sea is not a myth of superstitious sailors, but one of the strange realities of Nature, yet to be minutely examined and reported; and it is not unreasonable to expect that it will not be long until with the improved long-range weapons and scientific aim now possible, one of these monsters will be captured and this sea-mystery of ages will be solved.

AN INTELLIGENT FOREST TREE

There are many plants that seem to give evidence of feeling, and all vegetable life by adapting itself to surrounding circumstances, and especially bending toward the light when growing in a darkened spot, exhibits something akin to intelligence. But it is not generally known that there is a forest tree that shows this last quality in a most wonderful manner. This tree grows in the forests of New Zealand; and one traveler has said of it, "It is the most unique and intelligent tree that ever breathed." It seems to know as much as some animals. It is known by name as the Rata tree. When it first comes through the ground it seems to look all around for the Rimu pine, another tree common in these forests. If there is one anywhere within reach it starts for it and climbs straight up the body without leaf, bud, or branch, just like a common vine, until its head is among the upper limbs of the pine. Then the Rata sends out branches like other trees, and at the same time the vine-like stalk from the ground up begins to push out from each side a line of aerial roots which gradually creep around the body of the pine until they meet on the oppo-

site side. There they grow together into a solid mass, forming a complete case around the doomed tree which in time it kills and entirely consumes.

But if the Rata cannot find a pine to thus smother, it grows up a respectable tree like others of the surrounding forest, and becomes valuable, being greatly sought for ship building. When the life of the pine thus encircled has been destroyed, the tree is not only killed and prevented from growth, but is consumed—eaten up—by the Rata, and the Rata is left a great hollow trunk. If this story had been told by some ordinary sailor who might have seen it as many a tipler sees snakes where there are none, it might well be assigned to the realm of myth. But it is recorded by a traveler known to be of the highest intelligence and veracity, who says: “Now, if this story of the performance of a tree had been told me without my having seen anything of it, I most likely should not have believed it.

* * * But I have seen the Rata tree in every stage of its growth; as a slender vine, as a stalk with a set of comb-like teeth on each side, then with the rootlets half way around, and growing together at all points, and finally as a great hollow tree eight to ten feet in diameter.”

If this is not intelligence, what is it? We have here the same evidence of choice we find in animal life; and if choice, then there

is intelligence, for we know of no choice without intelligence. If any animal should habitually seek out some other animal and by some specific method destroy it, and consume it as food—of which we have very many examples—we would say at once this was done designedly, and intelligently, because done of choice, since choice is preference, and preference is the result of reason.

THE TOILET OF A FLY

The fly attends to its toilet as carefully as any fastidious maiden. It does not need a looking-glass, for it has learned to do its work without that luxury. He is a vain fellow, and wabbles his little round head from side to side, just as if he wished to "show off." He is a most dirty fellow, also, for he does not hesitate to feed on the most detestable diet, and sometimes gets smeared all over, so that he needs to clean up very often. After a day of dissipation he selects a clean spot and, beginning his toilet, he never stops if not disturbed, until he has completed the cleansing and arranging of his whole body. Resting on his front and middle legs, he throws his hind legs rapidly over his body, bending down his frail wings, scraping them as if he would break them off; then changing the process he rubs them from beneath bending them in reverse order. Then he slips his legs under the wings, pushing them along the body, giving it a thorough cleaning. Occasionally he thrusts his legs forward, rubbing them together. When this is completed to his satisfaction, resting on the hind legs he begins a vigorous scraping of the head with his fore legs. Now

he uses his proboscis, as if to dampen his legs very much as a dog licks his paws. Sometimes he works so energetically, that it seems as if he would pull his head off. But we do not know that flies ever commit suicide. Sometimes we wish they would. They remind one of pussy at her toilet. But work as hard as he will, and clean as much as he chooses, the fly is still a very undesirable member of the household. No sooner has he finished his toilet than he is again ready to go into the most detestable places, walking over filth of all kinds, and then he comes right back again into the sugar-bowl or on the molasses-can, without ever cleaning his feet. He falls into the cream pitcher, and sticks fast in the butter, and is a poisoner of our food. Every little boy and girl while about the house should have a fly-killer, and make it a practice to kill every fly they can reach. Many diseases are brought into homes by these foul-footed flies walking over our food. It does not matter how fastidious Mr. Fly is when he makes his toilet, he just hurries right away into the same poison offal, and then comes back again as filthy as ever. Kill him. He is good only for chicken feed and for the birds. And here we find a good reason for cultivating the friendship of the birds; that they may aid in getting rid of flies and poisonous insects. If the birds are treated kindly, they soon cease to fear us, but will come in great numbers for food, and water

placed within their reach, and the number of flies, mosquitoes, ants, and troublesome bugs about our homes will be greatly reduced. Fight the poison-footed fly, but make friends among the beautiful, harmless birds.

A MARVELLOUS MONKEY

A few years ago there was a Chimpanzee that, under training, did many wonderful things. He was taken by his owner over the world and shown as a great curiosity. He was known as Consul. He dressed like a man, sat at the table and ate like other people, used his tooth-brush and manicured his finger nails, and not only smoked his cigarette, as other monkeys have been taught to do, but had learned the habit of smoking so well that he demanded his cigarette, and had to be refused lest he would injure his health by too much smoking. He would strike a match and light a fire, and when it burned low get wood and replenish it. He had 200 suits of men's clothing which he wore both on and off the stage, and these he kept scrupulously clean. In the morning it was his custom to jump out of bed before his keeper, don a sweater and go through a regular athletic exercise, after which he takes a sponge bath, and is then ready for breakfast. It was said, this he never neglected. He ate with a knife and fork like any well-educated child, and signed contracts with his own hand like any other business man. His presence anywhere always

created amazement, for he was a perfect monkey gentleman. Which is strong evidence that animals are not the subjects of unreasoning instinct. They are capable of intellectual cultivation; and many closely associated with the human race—especially the dog and the horse, man's most intimate animal companions—can be taught many things just as the child in the public schools and in the home, is taught. Instinct is the seed from which reason is developed; the first life-movements with which all living things enter conscious activity; it is not guided by the will, but is spontaneous. When the will becomes active, action is no longer simple instinct, but is then guided by a choice between things, a design toward an end, and an arrangement of plan. This is reason.

A DOG THAT SPEAKS GERMAN

It is reported that a large mastiff is owned by a lady in Germany that can talk—not with his tongue, but with his paws. The facts as reported seem so utterly unbelievable that was it not that they have been testified to by the highest scientific authority, and widely published, they would not be given a place in this collection. This dog's name is Rolf, and he is almost entirely self-educated. He has been the constant companion of the children of Dr. Moeckel, the wife of a prominent lawyer. During the lesson hour of the little daughter the dog was allowed to sit by her side, and it was noticed that he paid very strict attention to the lesson. It was during one of these lessons that the dog's superior intelligence was accidentally discovered. The little girl was unable to answer a simple question in mental arithmetic. When it had been explained she responded: "How stupid! Why, even Rolf could answer that, couldn't you, Rolf?" To the utter amazement of both mother and child, Rolf raised his paw and beat out the exact number to the problem. This was thought an accident; but when they proposed another problem he correctly answered in the same

manner. A third and fourth followed, and all were quickly and correctly answered with the paw. Frau Moeckel then concluded she would try what could be done with some training. An alphabet was arranged and Rolf was asked: "How many paws do you want for A? How many for B? How many for C?" The dog himself intimating how many paws should indicate each letter. It has been noticed that in spelling he omits all useless letters.

Many of the things reported done by this dog would be at once assigned to the realm of myth, was it not that they have been tested and reported under conditions that forbid this. The report of a Professor from Basle reads like a romance. He says: "Frau Moeckel has just received a letter addressed to Rolf from a gentleman who had been to see the dog, and of whom Rolf was very fond. This letter reads: 'Dear Rolf:—I still think very often of you, and how kind and nice you worked for me. I have told our Pick (the gentleman's own dog) about it. He cannot read, speak, or calculate yet. We also have a Dachshund, but, I am sorry to say, he is sick. Many greetings.' Before my eyes Rolf dictated with his paw a reply, which translated, is: 'Lib: big bei mudr gonn irun dagi aug dogdr holn grus. (Dear Pick: My mother come learn. also Dackel (short for Dachshund) Get doctor. Greeting. Rolf.' The Professor then asked Rolf why he (the Professor) had come

to see him? The dog answered: "To see Rolf work." The letter M was written on a piece of paper, and Rolf was asked to spell some word beginning with this letter. The dog answered, "Mouse, Man, Michel." The last is the name of one of the house servants. When a motor car passed the house he was asked what passed, and he replied, "Audo." Rolf considers himself, Daisy, the cat, and another little house dog, Iola, superior to other animals, as will be seen by his answers. Germans make a distinction in the matter of eating, between animals and human beings, using the word "fressen" for the former, and "essen" for the latter. Speaking one day on the subject of eating, Rolf interposed with the word "essen," showing clearly that he understood the difference. "Then it isn't 'fressen'? How about Iola? 'Iola 'essen' and Daisy 'essen,'" was the reply.

One day Herr Moeckel informed the family that a cousin of his had just become engaged to an English girl by the name of Daisy. Immediately the dog began to spell by raps and spelled out: "She has the same name as the cat." Until Rolf pointed it out, no one had thought of it. One of the most remarkable of his answers was when asked what Autumn meant, and he answered, "When they find the apples." An amusing thing occurred when giving Iola a bath; a flea was found, upon which comment was made, when Rolf began to spell

with his paw. (He calls himself Lol.) His communication read, "Lol viel floh; Iola viel-er." Lol has fleas, but Iola has more. The dog is fond of pictures, and understands what they mean. Shown a picture of a baby in a bath, he was asked what it was. He replied, "Carl in bath"; which was correct. He was shown the name of the town in which he lives and asked to name it. He spelled out "Mannheim," which was correct; but after looking intently at the rest of the printed page for some time he added, "the rest I cannot understand, which is very funny." At last accounts Rolf was taking the lessons in Geography and Grammar with the Doctor's children, and it is hoped the dog will yet learn to read. This dog and Bozzie, owned in Chicago, in many things greatly resembled, and in both instances the experiments led some to believe that dog-knowledge is obtained through telepathy. They read the answers from the mind of the questioner. This is certainly not unlikely, since all animals below man seem to possess this faculty by which they communicate with each other.

AN INTELLIGENT GOOSE

It is generally conceded that of all the birds or animals, the goose is the most dumb. The very name has become a term meaning intellectual stupidity. A gentleman accustomed to train birds and animals has left on record the statement that of all he ever handled, the goose seemed to have the least ability to understand. But this at last, may be a slander on the goose. The following story is taken from a number of the *St. Nicholas*.

"This goose made its appearance near Quebec over fifty years ago, when some British troops had been sent out to put down a rebellion of the colonists. A certain farm in the neighborhood, suspected of being a resort for the insurgents, was surrounded by sentries placed some distance apart; on one day the sentry whose post was near the gate of the farm, heard a singular noise. A fine plump goose soon appeared on the run and making for the spot where the soldiers stood, and close behind in pursuit came a hungry fox. The sentry's first impulse was to shoot the thievish animal and rescue the goose, but since the noise of the gun would have brought out the guard on a false alarm, he was forced to deny himself

this satisfaction. The fox was gaining on its prey, when the goose, in a frantic attempt to reach the sentry-box, ran its head and neck between the soldier's legs just as the pursuer was on the point of seizing it. Fortunately, the guard could use his bayonet without making a disturbance, and did so with such good advantage that the pursuit was soon ended. The rescued goose, evidently animated by the liveliest gratitude, rubbed its head against its deliverer's legs, and performed other joyful and kitten-like antics. Then deliberately taking up its residence at the garrison post, it walked up and down with the sentry while he was on duty, and thus accompanied each successive sentry who appeared to patrol that beat.

"About two months later the goose really saved the life of its particular friend in a very remarkable way. The soldier was again on duty at the same place, and on a moonlight night, when the moon was frequently obscured by passing clouds, the enemy had formed a plan to surprise and kill him. His feathered devotee was beside him as usual, while he paced his lonely beat, challenging at every sound, and then standing at ease before the sentry-box, the goose always stood at ease too, and it made a very comical picture. His enemies now were stealing closer and closer to him. When about to spring on the sentry with uplifted knife, the goose covered itself

with glory by suddenly rising and flapping its wings in the face of the would-be assassins. They rushed blindly forward; but the sentry succeeded in shooting one of the party, and bayoneting another, while the goose continued to confuse and worry the remainder, until they fled from the scene in confusion." That goose was worth having; not because it laid the "golden egg," but because capable of doing a golden service.

CAPTURED BY ANTS

The smallest things in this world become most formidable enemies when in overwhelming numbers. A few years ago a ship laden with lumber arrived in Liverpool. No sooner had it landed than all hands from the captain to the cook, rushed frantically on shore, as though they were pursued by a deadly enemy. As a matter of fact, the vessel was literally swarming with millions of hungry Jamaica ants. They had invaded the locker, dived into the sugar barrels, bored into the reserve boxes of "hard tack," penetrated the pockets of the crew, climbed the spars by millions, were cutting up the sails, boring into every box, trunk, hammock, and extra wardrobe, and eating up all the ship's food supply. The ship encountered a West India hurricane on its voyage and this somewhat lessened these attacks, as it blew millions of the pest to sea, having drenched the ship from stem to stern, killing other millions in the vessel; and the sailors hoped the end of their trouble had come. But after the storm, these ravages began again with renewed energy, and the crew were nearly crazy. They could neither eat nor sleep, nor rest anywhere. The marauders were in their

hair, in their pockets, in their underclothing, and the sailors had difficulty in keeping the pests out of their ears, eyes, and mouths. When the vessel landed, the captain stated it was still swarming with millions of these insects. The ship had been loaded with a cargo of logwood that it was supposed had been secured originally from the vicinity of some of the large ant-hills for which Jamaica is noted. The captain declared, that in all his experience at sea he had never encountered anything like it, and hoped in all the years to come he might be spared a like experience. These ant kingdoms abound in that country; their ant battles with each other are wonderful encounters, sometimes lasting for many days, in which many thousands of these insects engage. The most warlike are the Ecitons, which seem to have no other business but to make war on other ants. When on one of their forays these march through the country in regular order, with their flanks protected by a giant ant much larger and stronger than the rest of the colony. Travelers describe these thousands of large-jawed giant warriors on the flanks of the ant army as looking like the officers in command. The ants of the main body have other work to do, such as foraging for food; but these big fellows do nothing but guard the flanks of the army from the enemy. When the army approaches another colony, its home is immediately surrounded, and the

approaching enemy lays regular siege to the ant-hill. They begin by mining from the outside. Some do the digging while others carry away the dirt. When a breach is finally opened, assault after assault is made until all the surrounding ground is covered with dead ants. The assailants being professional fighters are always successful in the end, when they carry off all the booty to their own homes. It is not difficult to understand the condition a ship at sea would be in with millions of these determined fighters aboard, compelled to secure their food wherever they could find it.

A GOOD NATURED GRIZZLY

It has long been a common belief among writers, and often claimed by hunters, that the grizzly bear could never be met in the forests without being attacked by it, unless this was avoided in a hasty retreat to a place of safety; and that when wounded this animal always fought to the death. That it is one of the most formidable animals on our continent, and the most dangerous to attack, is true; its tenacity of life is very great, and when wounded it often does fight to the bitter end. It has been claimed that when struck with a bullet, this animal will fly round, tear up the ground, bite at anything within reach, then sniff the air for a moment, and if it catches the scent of its enemy will at once rush upon it. But these statements are only true in part. Sometimes it acts in this way, and sometimes in quite the reverse order. A hunter who shot a grizzly, browsing on the mountain-side with a young cub near her, reports that the moment she was hit, she whirled round, began slapping her babe, made it climb a tree, and then hurried off up the mountain. Others report, they have wounded the grizzly and had it act in a similar manner. The facts seem to be, that if in close

quarters and wounded, they will not run, but will turn to fight it out, and in such cases the hunter is in great danger. It is further true, that no wild animal has any specific mode of acting, always followed; but it may be stated with absolute certainty that there is little danger from any animal on this continent if unmolested, unless it is ravenously hungry or accompanied by its young. Every wild thing is afraid of man, and needs only to get the scent of his presence to make a hasty retreat. Yet, sometimes they will do very strange things. A hunter sat with his back against a log at night before his fire, and without noise a black bear slipped up behind and smelt of his head, and then tore off through the woods as if mad. Cougars have been known to follow the tracks of a traveler in the snow for many miles, but never coming within sight. Two prospectors were in the mountains of British Columbia, and on their way out, when one day they stopped about noon to lunch. They were unarmed, having nothing but their shovels and picks, and their packs with blankets and food upon their backs. One of them had just taken off his pack, the other had not stopped to unload, but was making a fire to cook their bacon, when they heard a noise very near them in some bushes, and immediately a huge grizzly walked up, prancing along sidewise like a good natured dog, and when within two or three feet of the man without the pack, stood up on

its hind legs. This man had just taken a small sack of flour out of his pack, and having at the time nothing else in his hand, threw it at the grizzly's face. The bear caught it just like a boy catches a ball, remained standing, and began tearing the paper sack to pieces, while both men hastily retreated, the unloaded man cutting the straps of the other's pack, and both leaving everything behind. Some distance away they looked back and saw the bear tearing away at one of the packs. That was the last view they had of bear or property, and were right glad of the riddance; but they had to make a two day's tramp without blankets or anything to eat, before they were out of the mountains. In this case, evidently, the bear was not mad, nor did it want to fight. It was hungry, and no doubt smelt their bacon, and wanted it—and after they left, certainly got it. Had they given it the bacon, they would not have been molested, at least while the bacon lasted. As it was, they had ample time to get away, and no doubt the bear was as well satisfied to have them go, as they were to leave. It is quite certain that when wild animals thus deliberately approach one in the forest, if they have not been disturbed, it is not for fight, but for help; generally they want food, and in such cases if food was given them they would do exactly as this grizzly did, eat the food and pay no attention to the intruder on their wild life. Nevertheless, it is a most foolish thing

to go into the mountains, or anywhere else where dangerous wild animals have their homes, unarmed. No one can ever certainly decide in advance what may happen, nor what moment his life may depend on the ability to shoot his foe. In this instance mentioned, while the bear examined the flour sack, if its owner had been armed with a good Colt revolver, he did not need to move from his position, but could have shot the bear through the head without any danger of a miss, since he was within two feet of his target, and the animal was careless of his presence. Of course, this would have required a little nerve, but what man is there in the habit of spending days and nights in the mountain forests, that is without nerve? Such men do not seek these wild places. Only very young grizzlies can climb trees. When grown they are too large and heavy, and by climbing, when in great danger from a wounded animal, hunters sometimes escape; but this may become an embarrassing position, especially if without his gun or having no more ammunition, as a wounded animal has been known to lie down under the tree and begin an uncertain period of "watchful waiting."

A SOLDIER'S FAITHFUL DOG

Soldiers always like to have something with them to pet. Their lives in camp are very monotonous, and a dog, or cat, or even a bird is a welcome companion. It is reported that in the late war with Germany, a French soldier's dog followed him into the trenches and remained a faithful companion through all the terrible artillery firing. He refused to be driven out and so was allowed to remain. The artillery used is so large that often an exploding shell striking a trench, will not only wound and kill many men, but literally bury some of them. One day a shell fell into the trench where this soldier and his dog were, and killed many men. It wounded many others also, and tore such a hole in the earth that some, both wounded and killed, were covered with dirt. Among those wounded was the French soldier. He was so badly hurt that he could not rise, and his face and body were almost out of sight under the earth. He must soon have suffocated in this condition, even if he had not been otherwise hurt. But his dog instantly saw the situation, and began digging at the earth, until at last it succeeded in uncovering the soldier's face, and this kept him

alive. But the dog was not content with this help; running here and there among the soldiers further down the line, tugging at their trousers and coat-sleeves, until one of them at last followed to see what he wanted, the faithful dog was not long in showing, for he led the soldier to his wounded master, who was just recovering consciousness. The dog had saved his life, and now others began to unearth him, and give "first aid" treatment; then the soldier was placed aboard a train in the rear of the line and taken to a hospital not far from Paris. No further attention was given to the dog; but the animal was not to be left behind, for in some way he managed to follow, and crawl unseen into the car with his master, and there he sat by the side of the wounded soldier during all that slow long journey. When the hospital was reached his master's leg was amputated. The dog was not allowed to see the operation, but he had shown such devotion and sympathy, and had done such a noble work in saving the life of his master, when there was no one else to help, that none had the heart to deny him his right to still stay near. So the attendants found a box, and allowed him to remain in the kitchen, and, twice a day he was taken to the soldier's cot. The report was that the soldier recovered, and that not only had his faithful dog saved his life on the battlefield, but the continued visits of the animal at his bed-side helped him to recover from his wound.

A FRIGHTENED TRAVELER

A gentleman not long since, who has mining property in British Columbia, had gone to visit it during the winter, and after a snow storm. One day he was deliberately walking along a mountain trail, thinking of no danger, and in no hurry. After he had gone some distance, the trail winding in and out, up and down, as mountain trails usually do, he reached a long stretch of pathway, on a high ridge, and looking back, to his consternation, saw three black bears following him. They did not seem in any hurry to overtake the man, but he did not enjoy the idea of their companionship, and began to hasten his steps. He was entirely unarmed and defenseless. After going some distance at a much quicker speed, he again looked back, only to find that his unwelcome followers were still jogging along, and evidently had quickened their pace also, for they were nearer than when last seen. Just what to do did not seem clear. Indeed, there was nothing to do but to get away in some manner. Again he hastened his steps, now almost running, and the faster and farther he went, the worse his fright. The trail was now so crooked he could not see far enough to certainly tell

just how near the bears were, and his imagination did the rest. At length, reaching another high ridge and a straight road, for the third time he looked back only to see his followers still jogging along. Out of breath, out of courage, and with muscles wearied, and no goal in sight, and with a boundless imagination, the case had grown desperate. He could not climb a tree with any hope of success, for the black bear is a good climber, and to get up a tree and have three bears climb after him, was a thought quite enough to break the stoutest heart. What was he to do? It did not matter, that the three bears did not seem at all anxious to overhaul him, or they might have done so before he spied them, or any time afterward during the long race. They were bears, and that settled the question. Coming at last to a place where there was a great ravine, almost perpendicular, on one side of the ridge, in which the snow had drifted many feet thick, and that presented a long steep icy surface, for there was a hard crust on the snow, our traveler determined to try escape down a toboggan-slide. He got over on the icy surface, sat down, and away he went like a shooting star, from the heavens above to the depths below. Landing in the soft snow at the bottom of the ravine, he crawled out perfectly safe from the three bears; for they had too much sense to attempt to toboggan it in pursuit. But now our traveler was in a worse pre-

dicament than before. At the bottom of a narrow gorge, between high mountains, in deep snow, without a trail to lead him out, and not knowing where to go, he was in far more danger than when fleeing from the bears. For three days he wandered in the mountain fastnesses, beset with the constant fear there might be other bears, and if not, he must soon perish for want of food. After a frightful experience, he finally succeeded in finding his way out to safety. And had he known it, he was in no danger when followed. If he had hidden behind a log, and when the bears came up, suddenly jumped out and boo hooed, they would have scampered. No doubt, it was a mother, and two grown cubs, following out of curiosity.

SOLDIER DOGS

Dogs have long been found very valuable in the armies of Europe. They have never been used in this country, because we are not a warlike nation, and keep no large standing army. When this nation has been compelled to go to war, it has depended on volunteers who have to be trained quickly, and as there is no standing army-life, save small garrisons here and there throughout the country, there never has been opportunity for training dogs, nor have they been regarded of much use. In Napoleon's disastrous retreat from Moscow, it is said dogs often led wounded and starving soldiers to places of safety and food. In 1840 a dog named Aia, became famous. He was only one of many in his regiment. They were then used in patrol and guard duty, principally at night. In the present European war there are thousands of dogs used. The French army has a Dog Division, and each dog has a special military suit, consisting of a white blanket on which is a red cross. Each one carries a flask containing some stimulent. These dogs are for helping to rescue the wounded. Some are trained for one service and some for another, and one of the requirements of all is, that they

must not bark. If they did this they would disclose the location of the troops, and the places of the big guns. Each army must conceal itself as much as possible from the other, only when hotly engaged. These dogs draw carts, assist ambulance men, and are often sent with dispatches to places where it is considered too dangerous for a soldier to go. Sometimes they are killed when on this duty and at other times they are wounded just as the soldiers are. Each dog carries a complete first aid dressing outfit, and has a pocket under his collar where a message can be placed. There is a demand in the French army for more dogs than can be easily secured. In the month of July, two hundred and fifty patrol dogs were sent to the front. These animals can act as sentries, and are so watchful that they often detect an approaching enemy after dark, when the sentinel has not seen or heard anything. Clarion, a noble dog, the pet of the regiment, while doing sentry duty was killed by a fragment of a shell. He was mourned as if he had been an officer in command, and was buried with military honors. Another famous dog was Marquis. The regiment was hotly engaged, and it became necessary to send a dispatch. The German fire was too intense to risk a soldier's life. He would never have lived to deliver the report; but the noble dog did not flinch, but when wounded he arose, staggered to his feet and dragged himself to the spot re-

quired, delivered his message and died. He has a monument over his grave, "Marquis, killed on the field of honor."

As far back as 1870, the German army began to teach dogs for military service. These were trained principally to aid the wounded, and scent the approach of the enemy. The German army now has nearly 2000 dogs in service and during a recent drive by the Germans, one of these dogs accustomed to go ahead of the troops, came back growling and showing that there was danger near. It was dark, and the soldiers could not see anything; but they knew the dog was not mistaken, and they halted. It was found later that a large detachment of Russians were lying in wait for them, hidden in a wood, and only the dog's keen scent had saved them. No one can ever tell how many lives in this awful conflict have been saved by the faithful dog, and it is no cause for wonder that soldiers want them and learn to love them as brothers.

STRANGE HABITS OF THE AMERICAN COUGAR

The American cougar, or mountain lion, is not a panther, as it is often called. They belong to the same family, and in their habits are much alike. They are all cats; but the mountain lion is not the color nor physical form of the panther. The panther is of a mouse-color, has a head somewhat like a collie dog, and has far more slouch in its slow movements than the cougar, while the cougar has a head far more resembling that of a bull-dog, and is of a tawny colored skin. But all this class hunt their prey much as the common house cat, and strike with their claws like a streak of lightning. They are savage animals, and many hunters say they dread the cougar in an attack, more than the grizzly bear. They do very strange things; and it has been observed that they seldom attack man unless by mistake; but they do make these mistakes. They will hide in a tree or behind a large stump overlooking a deer runway, and spring when the deer passes. In this way they sometimes make their mistake. Two hunters passing along a mountain trail, one behind the other, the first man carrying his hunting knife in his

hand, without a gun, passed round a great root of an upturned tree, when suddenly a cougar from its hiding place sprang on them. The man with the knife threw up his hand and caught the animal on its point. The cougar retreated, but the other man killed it before it could escape. In this case there was no doubt but the animal had made a mistake, thinking that a deer was passing. Another instance is recorded where one of these animals leaped from a branch into the rear of a driver's express wagon as he passed through the forest at night; and still another instance, where one sprang on the rear of a horse ridden by a lady. In the first case the report is that the cougar rode a little distance on the man's wagon, eyeing the driver with curiosity, and then bounded away into the forest. In the other case, the frightened horse did not permit the intruder to ride; but jumped so suddenly that it fell to the ground, making no further effort to hold its place. In another instance a traveler passing through the forest unarmed on a moonlight night, saw a cougar with its head through the brush just in advance. As he approached it retreated and took up a similar position again ahead of him, and continued this play until he was out of the forest. At another time, one came into the road ahead of a traveler and playfully rolled over like a cat. As the traveler approached, it ran a little way and repeated its gymnastics, and continued this

coquetry until the frightened man reached an old out-building near a ranch, where he took shelter in the building and the animal followed; but finding it impossible to reach the man it climbed on the roof, and later was killed by one from the ranch-house. This animal had no bad design whatever. It wanted company. Doubtless, it was mateless, and was searching for a companion. When one loses its mate, as they often do by hunters killing them, the bereaved animal has been known to come within city limits and yell all night. A guide, who had occasion to take a party a long distance through the dense forests, found it would be impossible to return before darkness overtook him, and not wishing to risk following a blind trail after nightfall, fixed a temporary shelter against a large tree and laid down to await the morning. He went to sleep with his gun across his breast. In the night he awoke and was conscious he had a bedfellow. Some large animal was stretched by his side, with its head near his own, and from its breathing he judged it was asleep. It was on his left side, and the gun-muzzle almost touched its head. With the utmost caution the man slipped his right hand to the gun-lock, carefully adjusted it without noise, moved the muzzle into as direct aim as possible in the darkness, and without further movement fired and jumped. The animal was dead, and when examined, this kindly bedfellow was found to be a large

cougar. It had investigated, and selected a warm place, and like the traveler had gone to bed. What it would have done in the morning had it not been killed, no man could ever guess; but in all probability, unless ravenously hungry, it would have slipped away, without even saying "thank you." A sad case is recorded as having occurred not long ago in the mountains of the North Pacific. A gentleman driving through the forest late in the evening, had a small boy sitting in the rear of the wagon, when a cougar jumped from an overhanging bough, seized the child and made off. It was all done so suddenly that nothing was seen but a dark body like a flash bounding from the wagon into the dense undergrowth. There was nothing that could be done, but to abandon the child to the savage brute.

Sometimes these animals over a carcass will eat until they are almost helpless, unable to eat more; but will positively refuse to leave the uneaten food. In such instances, hunters have approached them shooting them several times before killing them, while they will not leave the carcass. At other times they are so timid that when treed by dogs the hunter cannot get near enough to the tree to see them, before they jump and run; and though a good dog can outrun them, they are very hard to capture, since they select the fallen logs and down timber, where a dog cannot follow; and for this reason are not often successfully pur-

sued. They become very destructive to calves, and sheep, or indeed any small stock about the farm not protected. An old mother and two full-grown cubs have been known to follow a woodman out of the forest, coming up to his yard-fence. He shot one, wounded another, but the two hurried off as they came. There is no describing the habits of these animals, nor indeed, any others of this class. But as a rule, they are the most shy and stealthy of the prey-hunters; the hardest to find, and the most dangerous when wounded. But hunger will change the character of any wild animal, and even that of man himself, is not an exception.

COULD THIS FLYING SQUIRREL COUNT?

Two woodsmen one day were clearing off land, and cut down a large dead tree. While they were at work chopping, the noise and jarring of the tree trunk frightened a flying squirrel, which the workmen noticed flying from the decaying top. When the tree fell, a decayed limb broke off, and was partly covered by decayed wood which had been pulverized in the fall of the tree. The tree trunk was hardly on the ground until the little squirrel came sailing back from a near-by tree, dropped on the log, and ran swiftly to the broken limb. In a moment the workmen noticed that she had something in her mouth, and running up another tree, was soon out of sight. They went to the spot to examine, and there was the flying squirrel's nest, which the broken limb had exposed, and in it were two baby squirrels too young to help themselves. The mother, finding her home destroyed, had hurried to the fallen tree and carried off one baby, and before the workmen left the spot was back on the log for another. This one was removed, and then the other, in the same way. In a few minutes back came the little mother on the log. She ran up to the top,

then back to the stump. Then she jumped to the ground and searched in the leaves. She seemed so much disturbed and in earnest about something, running here, and there, now on the log and then on the ground, that she attracted the men's attention, and they watched to see what she would do next. For several minutes she continued her search, and finally ran to the broken limb, smelling all around it carefully. Then she began to dig into the decayed wood that partly covered it, and a moment later sailed off with another baby. It had fallen out of the nest when the limb broke, and had been covered by the decayed wood. The workmen had not seen it, and supposed that the three were all she had. But the little mother knew how many there were, and refused to leave the place until she secured them. The question now arose, how did she know? The three in the nest were all she could see. Could she count? And though she missed it, how did she know where to dig for it? She might have detected the place where it was buried by scent; but she had some other means of knowing the number. One workman contended that this was a clear evidence that flying squirrels can count; but the other argued it was instinct; and they could not agree. But neither attempted to define instinct, nor has any other person ever given a satisfactory definition of this much abused word. If it has any definite

meaning that cannot be shifted about, it is the capacity for certain things born with each living creature. This varies among both animals and birds, and all other living things; and as far as we know, is limited to those acts in each case, that are necessary for it to do in order to live, before it has attained to any mental knowledge concerning the act. Instinct, therefore, is the spontaneous action of the newborn creature, independent of its own choice or knowledge; and therefore, covers no conscious acts of the creature. This little mother had some other means of knowing the number of her babies.

INTELLIGENT FOXES

Some people are called "foxy;" this is because they are supposed to be tricky; to do sly things that deceive other people. This is a trait of the fox. He is a hard animal to trap, for he seems always to be looking out for trouble and is shy of anything that appears out of the common order. All wild animals roaming the forests have special places where they go; sometimes these are the places where they drink, others, where they take a nap, and still others where they feed. Thus they become accustomed to the appearance of everything about them for they see it so often. Every tree, shrub, bunch of grass, little rise in the ground, or a little hillock. And because of this familiarity, they quickly detect any change in the appearance of things, even though it is only a changed twig of a tree or bunch of grass. Then their scent is so keen that anything that has been touched or handled by a man, they avoid because of fear. Hunters who trap handle their traps with gloved hands for this reason; and even then old Mr. Fox is so suspicious that some foxes are never fooled by a trap. Others as soon as started by their enemy have learned the only way to get

safely from a pack of hounds is to seek a hole in the rocks or under some mountain, as quickly as possible. They know when there they are safe. But other foxes seem to have never found such a hiding place, for once started by a pack of hounds they will run for twenty-four hours or more, round and round in a great circle sometimes of ten, or even twenty miles, until they are at last too tired to keep ahead of the dogs and so are caught. But even these do strange things to deceive their pursuers. Sometimes they get on a fence and for long distances walk on the top rail, to throw the dogs off the scent, then jump down and run again. At other times they get on an old root of a blown down tree, walk a long distance out on the trunk, jump to another big log and then to another, until they are some distance, then again take to the ground. Where the hounds cannot get up on these logs, they make a great circle, sometimes for half a mile or more, until they again strike the trail on the ground; but if Mr. Fox happens to know of some hole he can get into in some log, and does not again touch the ground, he sometimes deceives the dogs, while he can peep out and see them hunting for him. A gentleman who had a pack of hounds he took great pride in, had several times run a fox, but could never catch it, and he knew it was the same animal, because it always took the same course, ran on the same circle, and he could never run it down.

He would go home at night with his dogs exhausted, but no fox. But he had noticed that when he ran that fox, some time during the day, it would always run under the root of a great tree, wait until the dogs had nearly reached it, then jump out and run again. At last it dawned on the hunter that there must be some trick about that performance, so he stationed a man near that stump to watch. When the fox came round, evidently intending to run in as it had always done, this watcher scared it away, and it had to pass. After a while the hounds were heard coming, and when they neared the stump, out jumped the fox as usual and away it went with the dogs close after it. The fox trick was now easily explained. There were two foxes that did the running. When one got tired it ran into the old root and rested while the other took a turn before the hounds, and so these wise animals were saving each other's strength, by taking turns running and resting. They were both soon caught when each was forced to do his own running, with no help from the other.

One morning, soon after a farmer's wife opened the doors of their house, she heard hounds running, and a few minutes later a fox jumped on the porch, ran into the kitchen, and dropped down by the stove and soon died. It was but a short time until two hounds ran up to the door and stopped. They were nearly as badly fatigued as the fox, and immediately

went out into the yard and laid down. Neither the woman, nor her husband knew the hounds. She fed them and they were still there the following morning. She continued to feed them and for three days they laid in her yard, but finally arose and trotted off. No one in the neighborhood had ever seen them before, and none could find to whom they belonged. Some weeks afterward it was accidentally ascertained that they belonged to a farmer some twenty or more miles away. He had started a fox, and these dogs ran it all day, all night and until the next morning, without stopping or eating, until they had run the fox to death and nearly killed themselves.

A farmer who caught a mother fox alive, took her home and in the night she gave birth to four baby foxes; in some way she got out of her box and made off, leaving her new babies behind. The man's old cat had little kittens but a day or two older than the foxes, so the kittens were replaced by the four baby foxes, and the old cat mothered them. The man took great pride in his baby foxes, for he said now that they would be reared by a cat, they would never know that they were foxes, and would make fine pets. He sold one or two of them when about the size of a common rat; but while they were perfectly tame to handle, they were foxes all the same. A man who bought one soon killed it, for he said the first time he let it into his yard it caught one of his young

chickens. Not one of the four ever came to a good end; for like some girls and boys, even if they have a good and harmless mother, they were "foxy" foxes, and not to be trusted.

STRANGE DEATHS OF ANIMALS

In the early days of life on the plains, when the sparsely settled portion of our Western country was inhabited only by Indians, wild animals, and the stockmen, these cowboys did many strange things. They hunted not only the Indians who would run off their stock, steal their horses and burn their houses, but they often hunted the wolves, and grizzlies in the mountains. There are numerous reports of these reckless riders running down and lassoing the black bear. They would throw their ropes around its feet. Usually, two riders would do this; for it was not a safe trick to get a single rope on a bear's leg, for its other three would make trouble. Once two of these riders came on a grizzly bear in the open, and at once determined to rope it. This was not an easy thing to do for several reasons. The grizzly is a very different animal from the black bear, and the California grizzly is one of the largest to be found in this country. They are nearly extinct now; but in those days they were often found. These boys put spurs to their ponies. A horse can outrun a bear, but horses are afraid to approach a bear. Some will become unmanageable if they only scent one from a

distance; but with their terrible spurs they forced their horses near enough to throw their ropes, and one caught one fore leg and one the other. In this way they could keep the bear away from each rider, for they placed themselves on opposite sides of the animal, one rope pulling one way, and the other rope the other way, thus rendering the bear powerless, unless the noose should slip or one of the ropes break. But nothing of the kind happened. They firmly sat their horses with the ropes fastened to their saddles. The bear growled, and fought, bit at the ropes, reared on its hind feet, tumbled down, rolled over, and struggled, with all the great power it possessed. But with both legs held as in a vise, it could do nothing but wear itself out with struggle. When it found at last that it was hopelessly held fast, it laid down, put its face between its paws, and died.

A short time ago an elk was found near a city in the West where no elks have been seen for many years. How it came there no one knew; but it was supposed, it might have escaped from some traveling circus. It did not seem very wild, and evidently, for some reason, was out of its accustomed place. Thinking to capture it alive it was roped; but before anything could be done with it, it died. Now, the question is, what killed these animals? Simply roping them is not sufficient to account for their deaths. Some said the elk

was frightened to death. It is possible, that was the case with the elk, but what killed the grizzly? The cowboys, concluded that when it finally gave up that there was no hope for it to get away from its captors, it died of a broken heart, and this too, may be the true explanation. But who can tell?

SMART SPIDERS

There are many kinds of spiders. Some are so small that they can hardly be seen with the naked eye; others are so large that they catch humming birds. The very large ones, like most of the large wild animals, are found only in very warm climates. They are all insects of prey, but do not all catch their victims in the same way. Some build webs like a circular platform, and sit in the middle watching for flies and other insects that may fall on it. Others build their silk platforms, making them quite thick and strong, and do not sit on them, but hide away in a corner out of sight, ever ready to dart out the moment anything is within reach. These platforms are always constructed with reference to the locality, and what the spider wishes to accomplish. Some that live on the ground chiefly, build their silk houses with trap-doors. When anything comes in that they wish to catch they pull the door shut. But if something approaches they are afraid of, they shut it out. Some do not build webs at all, but are known as jumping spiders. These slip up to their prey, and when near enough, spring on it. Sometimes when a mother spider is in her web attending to her

own affairs, and a hobo male spider comes along, she does not run away, get scared, and shut the door, but pounces upon him, kills him, and eats him.

There was a window pane out of the sash in an out-building, and on the window sill on the inside, a spider built his web platform under this opening close to the sill, arranging a kind of funnel at one end in which he sat hidden. It was somewhat dark in the building, and there were no flies, as far as I could see, and I could not understand what that spider expected to do sitting there in that dark corner with such a web. After I watched a little while I soon found out his plan. When the sun became hot on the outside of the building, flies would sail into the cooler place through that broken glass. As none would stop, however, Mr. Spider had arranged a plan to stop them; and not only that, but to stop them at the exact spot he wanted them. On the inside of the open pane he had drawn just two or three silk strands. These I had not noticed; but presently along came a fly sailing in; it struck one of these almost invisible silk strands and tumbled right down on that soft platform. It never hurt the fly to fall, but before it could escape from the web platform the waiting spider had caught it and carried it back into his den. That spider knew his business. Like other sensible people, he built his house according to conditions.

Once when the soldiers were resting on the march during the war, one of them found a spider on the ground near by. He stuck a stick in the ground three or four feet long, and put the spider on it. Immediately, in its fright it ran to the top of the stick, attempting to get away; but finding it could not jump off, and there was nothing else to get on, it hurried back toward the ground; but the soldier prevented it reaching the ground, and again it ran up the stick. On reaching the top, for a few times it turned round and round, feeling outward with a foot as if trying to reach something; it then settled itself with its web-spinning apparatus turned from the stick and began spinning a silken thread. There was no object within several yards of the stick, and the wind began to carry the thread across the highway. Every few seconds the spider would feel the silk thread with its foot, in the same manner a fisherman uses his hand to feel of his trolling line while fishing in order to detect the bite of a fish. In a little while the long thread carried by the wind, and tossed this way and that, touched a tree on the other side of the roadway and stuck fast. Immediately the spider broke the thread from its body, fastened the end to the top of the stick, got on it, and imitating Blondon, the rope-walker, safely crossed to the tree on the other side. When this insect turned round and round feeling with its foot, it was testing the way of

the wind, in the same manner the hunter tests it when stalking his game. Having ascertained this, it turned its body in the right direction for the silk thread to be carried from the stick. Evidently, the insect knew if it spun its thread long enough it would at last touch something, and wherever this happened it would stick fast, and this was the thing intended; but to know when this occurred it was necessary to continue feeling of the line. If these adaptations and adjustments do not prove that animals and insects must reason just as men reason, within the limits of their necessities and capacities, what does all this mean?

THE LAST AND GREATEST FISH STORY

Oregon is one of the royal fish markets of this country. During the spawning season tons and tons of large salmon are caught in the Columbia river, and other rivers of the state. There are many other fishes, also, both of the salt and fresh water; but the salmon fisheries, especially on the Columbia river, give employment to thousands and are known all over the world. When the fishing season arrives, the docks are loaded with these beautiful fish, caught with traps and gill-nets principally during the night, and occasionally one is caught weighing more than seventy-five pounds. They come annually from the ocean seeking the fresh water, and their course is a persistent effort to swim up stream. As the spawning season comes in the early Summer and continues during the warm weather, it often occurs that the melting snows of the mountains cause all the streams to overflow the low lands. It is then the fish easily find their way into sloughs and overflowed ponds by thousands; and when the water suddenly subsides as it sometimes does, they are left land-locked and perish. Near-by farmers have been known to go to these places and using a pitchfork, load their

wagons with dead fish and carry them out on their farms for fertilizer. The salmon continue their way out into all the small mountain streams a persistent but fatal journey, and are often found dead far up in waterless places where these transient streams left them stranded. This is the bear's picnic, since he is a lover of fish, but not particular that it shall be perfectly fresh.

When the salmon find a suitable place for depositing their eggs they may often be seen lying closely side by side apparently in solid mass from shore to shore, and as far as the eye can see, all heads pointing up stream, and each fish keeping up a continued swimming motion just sufficient to prevent the current from moving them from their selected places. In many of these streams there is hardly enough water to cover them, and bear have been seen to wade out in the water, wait until the frightened fish returned to their places and then with a sudden and terrific stroke of the paw impale and throw a great fish to the bank to be eaten at leisure.

These fish are canned, dried, smoked, placed in cold storage, and marketed all over this and foreign countries. About the same season every year, and in about the same numbers, they come in from the ocean, and during a single night's fishing two men in a boat will sometimes catch three tons of fish. The government regulates the size that can be taken,

and the nets are constructed in such a manner as to allow the small fish to pass through. It has also supervision of a number of hatcheries where millions of small salmon are turned out every year to find their way to the sea. Many people in the East have no proper conception of these large and beautiful fishes. A lady visiting the state for the first time recently, declared she had no idea these fish were so large, and in her surprise said, "Why, they are whales."

But this is neither the largest nor strangest Oregon fish story. Only recently the following statement appeared in the local press of Clatsop county, at the mouth of the Columbia river, "Two big water buckets full of live, kicking fish weighing from four to sixteen ounces and measuring from eight to twelve inches in length were secured in less than an hour by Judge Thomas Jewett and party on the beach near here, Friday morning. Judge Jewett was lead to go after the fish through stories told by a party who claimed to have dug up a large number from the sand the day before, but who could not produce the evidence. The fish are found about a foot below the surface, with a little air-spout showing where they lie, and have been found here and there from Seaside up, for the past year; but never in such quantities as are here." At first this statement was regarded by readers as a reporter's joke; for no one had ever heard of

fish living under the sand like clams. Little attention was paid to the statement until a communication from Judge Jewett, an old and respected citizen of the state, settled the question in the following explicit letter: "There is no doubt about the strange fish being genuine fish. The first I ever saw was about one and a half years ago when I found one; but it was only partly buried. I have seen none since until about three months ago when I found another, since which time I have found probably half a dozen one or two at a time. About two weeks ago some of the boys were out and brought in about fifteen of them, and the next night the same party got probably one hundred pounds; since then few have been found. They have a smooth tough skin without scales, and in shape resemble the ordinary bullhead. The mouth is high up on the head, and the outer lips are lined with a row of very fine sharp teeth. Most of them were found buried in the sand, and were dug up with a shovel, their mouths being near the surface with small mounds of sand over them. One of the smallest, and which I gave to the reporter of the Astorian, weighed four ounces and measured eight and a half inches in length. I think the largest would have weighed fully sixteen ounces, and measured twelve inches. We had several messes of them at my boarding house and found them an excellent flavored fish, with no small bones. I am certain they

are new to this locality, as I have been on the beach digging clams and crabs all my life and I am sixty-four years old and have never seen them until eighteen months ago." Preposterous as it seemed, that fish do live in the sand and have been dug up like fishermen dig clams, has been settled beyond question. But they are no ordinary fish, and as Judge Jewett has stated, no doubt are new to this locality. The name of this fish is "Sand fish," sometimes called sand-burrowers. They are closely allied to what is known as the sand-eel, belonging to the genus technically called the *Ammodytes*; but the *Ammodytes* are a small fish, sometimes known as the launce. These Columbia beach fishes are the sand fishes technically named *Trichodontidae*. They burrow in the soft water-soaked sand, coming and going with the ocean tides. But the statement sometimes made that they live in the sand is misleading; they live in the water as other fishes, and are provided with all the necessities for navigation that others possess; but like the bullhead they burrow at the bottom of the ocean, and probably seek food in the soft shifting sands. That they stay long in such places as these were found is not reasonable to suppose; nor is it likely that these were thus marooned by choice. In this instance they were caught, probably, under the sand during a receding tide and the water soaked sand quickly becoming too dry for them to burrow through it, they were left

behind. Whether another incoming tide would release them and allow their return to the ocean, seems to be somewhat problematical. That they were helpless and unable to get out of their sand-bed when found is rendered certain by the fact that they were so easily taken; and unless the sand covering was again made soft enough for them to move it, they certainly were trapped, and later would have perished. It is not improbable, however, that another tide would release them, and at their leisure they would have returned to the sea. That a number so large was here taken together indicates that a whole school of these fishes had visited the spot, and these like tardy girls and boys, tarried so long that they were too late to "school" and were punished for their delay.

UNCLE JACK'S LETTER TO YOUNG AMERICA

Dear Girls and Boys:

I write you this letter because I love you; because a long while ago I was a boy myself, and because I know what girls and boys like to do, what troubles they have, how forgetful they are of many things that would greatly aid them to keep out of trouble if they would only remember them, and because I have two things, especially, to tell you. But before I name these things, can you tell me what is the greatest thing in this world? That is one of these things I now have in mind; but this is a great secret, not to be told in this letter; one that I have hidden in this book, and which I want you to find. When you find it you will have the greatest value that any one has ever possessed, a gift you all may possess, and that will make you as rich as any one ever was in this world. Read every word in this book; do what this letter advises, and you may learn this secret, and win a fine prize, also.

The other thing I wish to tell you is this: This book is all about animals, birds, fishes, reptiles and insects. I have been a student of animal life ever since I was a small boy; have hunted in the forests and mountains, fished in the rivers, lakes, and the ocean, have trapped animals for their skins, and have had many pets of both animals and birds. I have

learned in these long years now past, many strange things about animal life, and some of these I have told you in this book. When you read them, do not imagine they are just fairy stories to amuse you. I believe them to be all true. Many of them I positively know to be so, others I have from the highest authority, while still others have been reported as true under conditions that leave no room to doubt them. Some of these little stories will make you laugh, some will make you almost cry, while others will appear so strange that you will wonder how they ever could have happened. When you have read them do not forget the one thing which every one of them shows; that is, that all animal life has very much in common. The old notion is all wrong; the so-called "dumb animals" are far from dumb. This old slander is not held now by the greatest minds of the world. Animals think, plan, rejoice, and suffer just as human beings do, and no truly great personage ever lived who was cruel to the lower animals. Even the true sportsman who shoots game tries to avoid giving unnecessary pain, and not to kill just for sport. I do not believe any little boy or girl, after reading of the wonderful things—lovely things—done by some of the animals I have mentioned in this book, will want ever again to kill a living thing, unless it is absolutely necessary. But it does become necessary sometimes. Dangerous animals, poisonous reptiles, and insects and disease-breeding flies, should not be allowed to live; at least where they may endanger human life. But every boy and girl in all our land, should become a member of the Humane Society, and stand up for the rights of every living thing. Now, this

secret hidden in this book which I want you to find, came to me one day in this way:

I was sitting at my window. Over in the next yard two beautiful little girls, sisters, were romping with a large dog. They climbed on his back; rolled him on the grass; pulled his ears and tail; tied his legs with strings; put a string around his neck and tied him fast to a tree, and then for a little time went off and left him; then they came back and untied him, and I suppose because they could not think of anything new to do, they got an old tin-can and tied this to his tail. Did you ever see that done? It is a dreadful thing to do, for it frightens a dog so much that he will almost run himself to death. If it should get fast and pull his tail off, it would ruin him; or if he was unable to pull himself loose, might hold him in some place where he would perish before any one found him. A gentleman once found a beautiful little fox terrier with a terribly mangled tail, which might have been caused in this way. Anyway this little dog was lost, and whether he had run in fright for this cause until he was no longer able to find his way home, no one ever knew; but he would have died had not a kind gentleman taken him, cut off the mutilated tail, and then took care of him until he became well. When these little girls tied the can to this big dog's tail, my heart almost stood still, for now I expected to see serious trouble. How were they ever to get that can off when the dog became frightened and began to run? I would have gone right over and warned them not to do that, but then I knew the dog would not let me come near those little girls. He went with them everywhere they went and would allow no stranger to touch them.

When the can was tied, away went the dog, round, and round, and round the house, running as if he would kill himself; and how the little girls did laugh! Every moment I expected to see him go through the yard gate, and then they might never see their splendid dog again. But to my astonishment after they had as much fun out of that old can as they wished, dog and girls came back to the shade under the tree, and all laid down together on the grass to rest. The old dog seemed to have had as much fun as the little girls. He was not scared at all; he had been just pretending to be scared to make them laugh. It was all sham. I had never seen any dog act in this way before, and it set me to thinking. What was it that caused him to do so? Then I remembered another time when a dog acted in a somewhat similar manner, when a neighbor boy and myself tied a bunch of firecrackers to his tail. The dog was a pet, and this was a cruel thing to do, not only because of the fright to the dog, but we never dreamed he might run into the house, or into the barn, or about the wheat stacks and set the whole place on fire. Here you see a common cause for many troubles boys and girls get into. They don't think far enough ahead. Their heads are like bullet moulds; they get just one thing in and forget everything else that they should remember.

When we had the firecrackers arranged we waited to see what would happen. They began to sputter, fiz, bang, bang, and we were all ready to laugh at the dog's misfortune, but we didn't. The dog just sat down and pulled them off with his teeth, and lazily walked away to a shady place and tumbled down for a nap. All our firecrackers were spoiled.

While thinking of the strange performances of these dogs, and wondering why they did not get frightened and run like other dogs do, I made the discovery of this secret. Now, I want every little girl and boy in America to find this secret. Read every word in this book, and if you cannot find it at the first reading, go over it again, keep on thinking about it, and decide what you believe it is. It is mentioned in the Bible many times, and there is one text in the New Testament that describes it perfectly. This occurred to me while watching the little girls at their play. I now offer four prizes, the whole amounting to \$50 in gold. First prize, \$25. Second prize, \$10. Third prize, \$10. Fourth prize, \$5. The conditions of this competition are as follows:

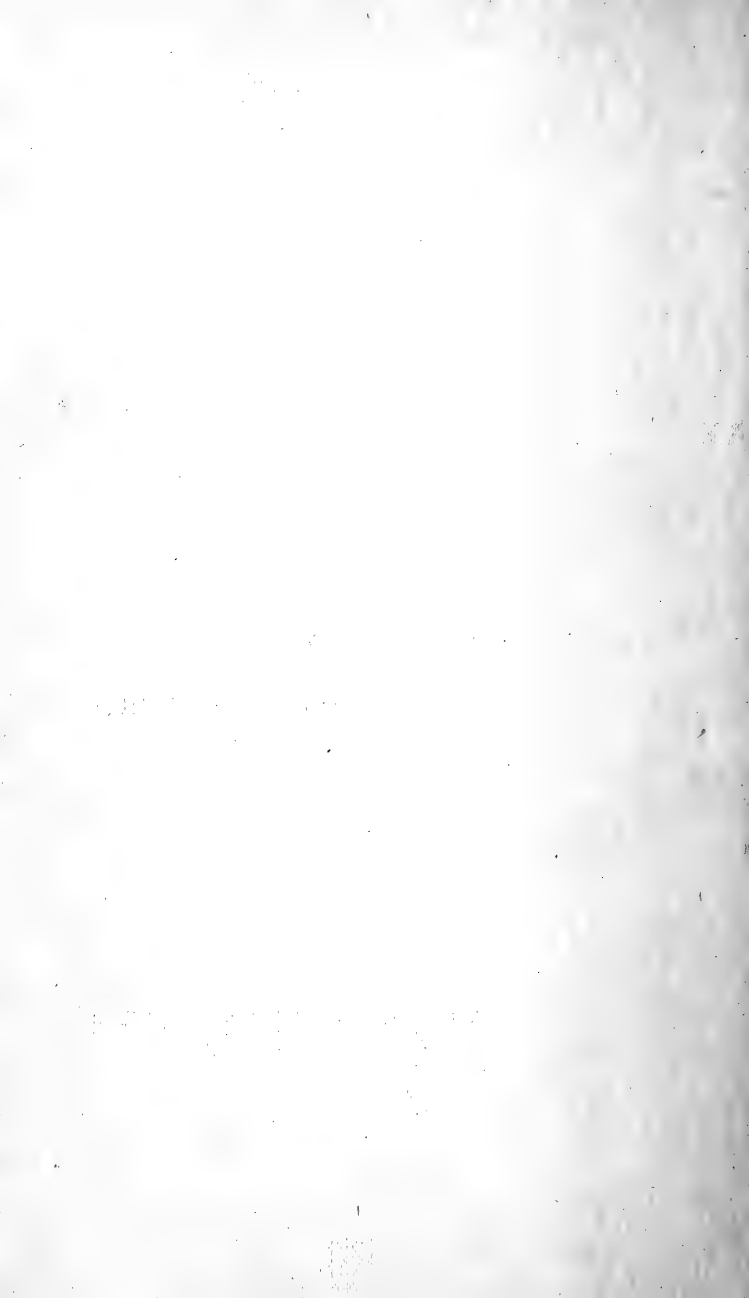
Competitors must not be over twelve years of age. Each competitor must be the owner of this book. Each must decide on some subject as the secret, and send the text describing, or referring to it, with a letter to the publishers, not over 300 words in length, but as much shorter as they please. Any name may be signed to these letters but the true name of the party writing, but they must give their true address, and with the letter send one dollar to pay for the book; or if the book is purchased for them by some one else and given as a present, they must give date of purchase, and the name and address of the buyer. Any one can buy the book. This prize offer will remain open until the first day of May, 1916, and awards will be made at some time near that date, hereafter to be named. Should one or more find this secret, and name the true text, the decision for first prize will then be determined on the quality of the letters ac-

companying it and the next nearest to this secret will be decided in the same manner, and so of the other two.

Lovingly,

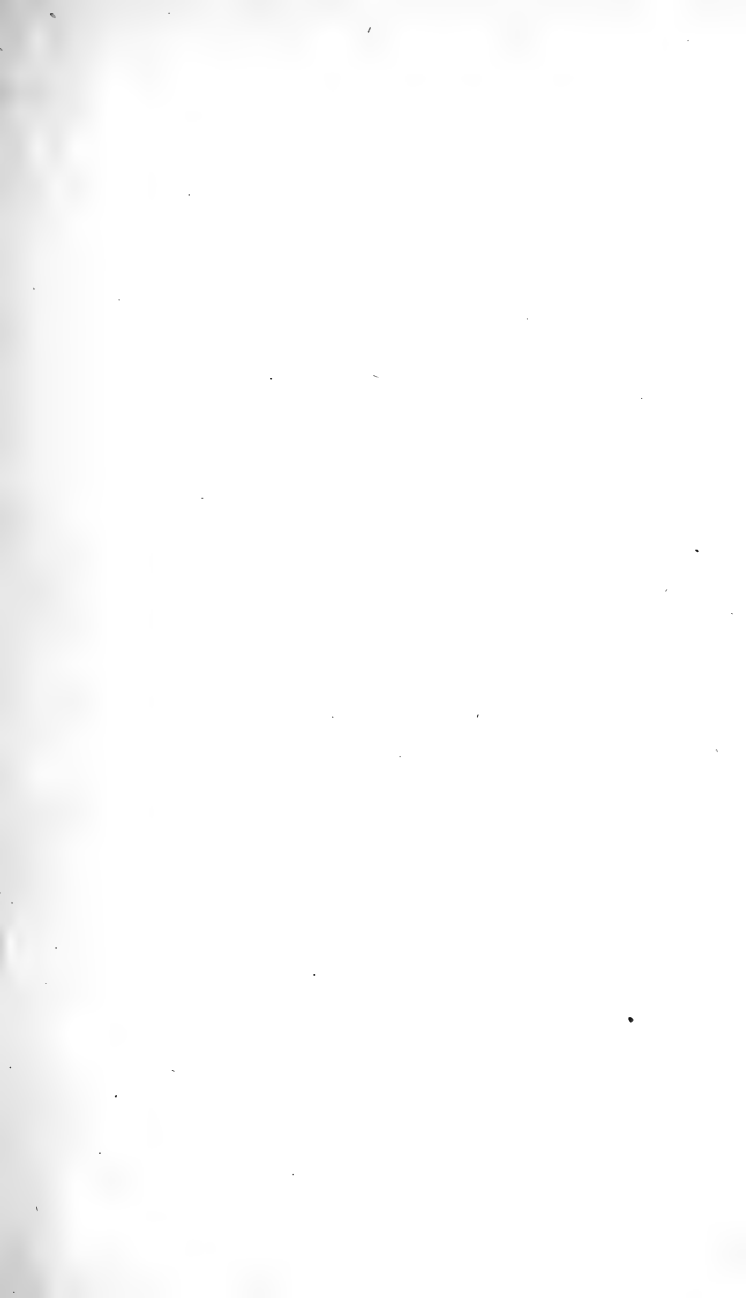
UNCLE JACK.













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