STUDY OF A CAT-BIRD.

For more than eight months a catbird has lived in my house, passing his days in freedom in the room where I sit at work, and his nights in a cage not six feet from my head.

Having spent a summer in watching his ways in his home, and acquiring a proper respect for his intelligence, I now wished to test him under new conditions, to see how he would adapt himself to our home, and I found the study one of the most absorbing interest.

He had been caged a few weeks only, but he was not at all wild, and he soon grew so accustomed to my silent presence that, unless I spoke, or looked at him, he paid no attention to me. By means of a small mirror and an operaglass I was able to watch him closely in any part of the room, when he thought himself unobserved.

To the loving student of bird ways his feathered friends differ in character, as do his human ones. My cat-bird is a decided character, with more intelligence than any other bird I have observed. The first trait I noticed, and perhaps the strongest, was curiosity. It was extremely interesting to see him make acquaintance with my room, the first he had ever been free to investigate.

Usually with birds long caged, it is at first hard to induce them to come out. I have been obliged actually to starve them to it, placing food and water outside, and repeating it for many days, before they would come out freely, and not be frightened. Not so with the catbird. The moment he found that a certain perch I had just put into his cage led into the room through the open door, he ran out upon it, and stood at the end, surveying his new territory.

Up and down, and on every side, he looked, excited, as the quick jerks of his expressive tail said plainly, but

not in the least alarmed. Then he took wing, flew around and around several times, and at last, as all birds do, came full speed against the window, and fell to the floor. There he stood, panting. I spoke to him, but did not startle him by a movement; and in a few minutes he recovered his breath, and flew again, several times, around the room.

As soon as he became accustomed to using his wings and learned, as he did at about the second attempt, that there was a solid reason why he could not fly to the trees he could see so plainly outside the window, he proceeded to study the peculiarities of the new world he found himself in. He ran and hopped all over the floor, into every corner; tried in vain to dig into it, and to pick up the small stripes on it. (The floor was covered with matting.) ing thoroughly explored, - the lines of junction of the breadths and the heads of the tacks, the dark mysteries of far under the bed and the queer retreat behind the desk, - he turned his attention to the ceiling. Around and around he flew slowly, hovering just under it, and touching it every moment with his bill, till that was fully understood to be far other than the blue sky, and not penetrable. Once having made up his mind about anything, it was never noticed again.

The windows next came under observation, and these proved to be a long problem. He would walk back and forth on the top of the lower sash, touching the glass constantly with his bill, or stand and gaze at the pigeons and sparrows, and other objects outside; taking the liveliest interest in their doings, and now and then gently tapping, as if he *could* not understand why it was impossible to join them. If it had not been winter, his evident longing would

have opened windows for him; a pining captive being too painful to afford any pleasure.

But he soon became entirely contented, and, having satisfied himself of the nature of glass, seldom looked out, unless something of unusual interest attracted his attention: a noisy dispute in the sparrow family, trouble among the children of the next yard, or a snow-storm, which latter astonished and disturbed him greatly, at first.

The furniture then underwent examination. Every chair round, every shelf, every table and book, every part of the bed, except the white spread, of which he always stood in awe, was closely studied, and its practicability for perching purposes decided upon. My desk is an ever fresh source of interest since its contents and arrangements vary. The top of a row of books across the back is his regular promenade, and is carpeted for his use, with a long strip of paper. There he comes the first thing in the morning, and peers over the desk to see if I have anything for him, or if any new object has arrived. Here he gets his bit of apple or raisin; here meal worms are sometimes to be had; and here he can stand on one foot and watch the movements of my pen, which he does with great interest. Occasionally he finds an open drawer, into which he delights to go, and continue his explorations among postage-stamps and bits of rubber, pencils and other small things, which he throws out on the floor, with always the possibility of discovering what is still an enigma to him, a rubber band, to carry off for his own use, as I will explain further on.

The walls and the furniture understood, he proceeded with his studies to the objects on the table. A mechanical toy interested him greatly. It moved easily, and the wind of his wings, alighting near it the first time, joggled it a little. He turned instantly, amazed to see signs of life where he did not expect

them. For a moment he stood crouched, ready for flight if the thing should make hostile demonstrations. Seeing it remain still, he touched it gently with his bill. The toy moved, and he sprung back. In a moment it was still, and he tried again; and he did not leave it till he had fully exhausted its possibilities in the way of motion.

At another time he saw his bath-tub, a tin dish, standing upon a pitcher. He alighted on the edge. It was so poised that it shook and rattled. The bird flew in a panic to the top of a cornice, his usual place of refuge, and closely watched the pan while it jarred back and forth several times. Apparently seeing that it was a harmless motion, he again flew down to the same spot; and the rattle and shake did not drive him away till he had seen if there was still a drop of water left for him in the bottom of the dish.

One day, in his travels about the floor, he found a marble. It was too large to take up in his mouth, so he tried to stab it, as he does a grape. The first peck he gave sent it rolling off, and he hastily retreated to the cornice. When it stopped he returned and tried it again. This time it sprang toward him. He gave one great leap, and then, ashamed of his fright, stood and waited for it to be still. Again and again he tried to pierce the marble, till he was satisfied that it was not practicable, when he abandoned it forever.

There is one mystery in the room not yet penetrated, though it is a subject of the deepest longing: it is my waste-basket; the contents are so varied and so attractive. He will stand on the edge, hop all around it, and view it from every side; but it is so deep and narrow that he evidently does not dare to venture further. Every day he goes to the edge, and gazes sadly and earnestly, but is never satisfied.

This interest in my doings is always intense, and at every fresh movement

he will come down to the corner nearest me, if in his cage, or alight on the back of my desk, if out, and peer at me with closest attention. One thing that seems to amaze and confound him is my appearance in a different dress. "What sort of a monster is this," his manner will say, "which can change its feathers so rapidly and so often?"

If I want him to go into his cage, or to any part of the room, I need only go there myself and put some little thing there, or even appear to do so; and as soon as I leave he will rush over to see what I have done.

Next to his curiosity is his love of teasing. The subject furnishing opportunity for a display of this quality is a cardinal grosbeak, which cannot be coaxed to leave his cage. The latter is the older resident, and he did not receive the cat-bird very cordially. In fact, he grew cross from the day the latter arrived, and snarled and scolded every time he came near. The cat-bird soon found out that his enemy never left the cage, and since then has considered the cardinal a fit subject for annovance. He will alight on the cardinal's cage, driving him nearly frantic; he will stand on a shelf near the cage, look in, and try to get at the food dish, - all of which is in the highest degree offensive, and calls forth violent scolds and screams of rage. Finally, he will steal a grape or bit of fruit stuck between the wires, when the cardinal will fairly blaze with wrath. At one time the cat-bird indulged in promenades across the top of the cage, until the exasperated resident resorted to severe measures, and by nipping his toes succeeded in convincing his tormentor that the top of his house was not a public highway.

Worse than all his other misdeeds, however, was a deliberate insult he paid to the cardinal's singing. This ardent musician was one day sitting down on his perch, as he is fond of doing, and singing away for dear life, when the cat-

bird alighted on the window sash, close by the cage. The singer kept his eve on him, but proceeded with the music till the end of the strain, when, as usual, he paused. At that instant the cat-bird gave his tail one upward jerk, as if to say, "Humph!" I noticed the insulting air, but I was surprised to see that the cardinal appreciated it, also. He began again at once, in much louder tone, rising to his feet, - which he rarely does, - lifting his crest, swaying back and forth in a perfect rage, glaring at his enemy, and pouring out his usual song in such a flood of shrieks and calls that even the calm cat-bird was disturbed, and discreetly retired to the opposite window. Then the cardinal seated himself again, and stopped his song, but gave vent to his indignation in a most energetic series of sharp "tsips" for a long time.

Quite different is the cat-bird's treatment of two English goldfinches. On them he plays jokes, and his mischievous delight and his chuckling at their success are plain to see. One of them - Chip, by name - knows that when he is in his cage, with the door shut, he is safe, and nothing the cat-bird can do disturbs him in the least; but the other - Chipee - is just as flustered and panic-stricken in her cage as out, and the greatest pleasure of his life is to keep her wrought up to the fluttering point. He has a perfect perception of the difference between the two birds. When both are out he will chase them around the room, from cornice to cornice; drive them away from the bath, which they all have on a table, purely for fun, as his manner shows. But once caged, he pays no further attention to Chip, while always inventing new ways to worry Chipee. He alights on the perch between the cages, crouches down, with eyes fixed upon her and tail jerking, as if about to annihilate her. She flies in wild panic against the wires, to his great gratification. Then he ruffs himself up to look terrible, spreads his

legs wide apart, blusters, and jerks his body and wings and tail, making feints to rush at her, till she is so frightened that I take pity on her and drive him away.

One day, when she was more nervous and he more impish than usual, I covered her cage with a towel. He came back as soon as I had left it, and proceeded to inquire into this new screen. After looking at it sharply on all sides, he went around behind the cage, pulled at the end of the towel, and peeped in. She fluttered, and he was pleased. I arranged it more securely, and the next performance was to take hold with his bill, and shake it violently. This also remedied, his last resource was to come down on the end of the perch with a bounce, making much more noise than usual; he generally alights like a feather. After each bounce he would stand and listen, and the flutter he always heard delighted him hugely. As long as they lived in the same room, she never got over her fear, and he never tired of playing pranks around her.

If to learn by experience is a sign of reason in an animal, the cat-bird plainly demonstrated his possession of that quality. He learned very fast by experience. Once or twice alighting on the cane seat of a chair, and catching his claws, taught him that that was not a place for him, and he did it no more. When his claws grew so long as to curve around an ordinary perch, or a book, after being caught once or twice, he managed to accommodate himself to this new condition, and start in a different way. Instead of diving off a perch, as he naturally does, he gave a little jump up. The change was very marked, and he caught his claws no more.

He learned to ask to be uncovered in the morning, in about three days. He would begin his uneasiness quite early, flying back and forth violently in the cage, and at last he would call. I wanted to see if he would learn, so the moment he called I would get up and take off the cover which protected him from cold at night. For two or three mornings he did the same, became uneasy, flew a while, and then called, when I at once responded. From the third day he called the instant he wanted to be uncovered, showing no more restlessness, and calling again and again if I did not move at once, at last giving his most harsh cry, and impatiently scolding with rage.

To beg for worms was an easy lesson. Having two or three times received them from a pair of tweezers on my desk, he came regularly; perched on the books; looked at me, then at the cup which had held the worms; then, if I did not get them, opened and closed his bill, and jerked his tail impatiently.

His great delight and mystery is a rubber band, of which I keep two sizes: one hardly larger than a thread, and the other an eighth of an inch wide and two inches long doubled. These he is wild to get; and since he treats them as he does worms, I conclude that their softness and elasticity are deceptive, and a mystery, like the glass, which he cannot solve. At any rate, after beating them on the floor as he does a worm, he always swallows them. He will persist in swallowing even the large ones, and sit puffed out on his perch in evident suffering for hours, before he discovers that he cannot digest it, and at last disgorges it. To find a rubber band is the desire of his heart, and to keep him from it is the desire of mine. At first, when he pounced upon one, he would stand on my desk and swallow it; but after I tried to get it away, he learned cunning. The instant his eye would spy one, generally under some paper in my drawer, he would first glance at me, then snatch the treasure, and instantly fly to the cornice, where I cannot reach him. I always know by the manner of his departure that he has found what he knows, perfectly well, is a forbidden object.

Another thing interesting to observe in the cat-bird is his way of hiding himself, when in plain sight all the time. He simply remains entirely motionless, and one may look directly at him, and not see him, so well does his plain dark dress harmonize with his usual surroundings. Often I come into the room and look about for him, in all his favorite places, - on the cornice, the desk, and before the glass; no bird to be seen. As I move about to look more closely, he will suddenly fly up almost from under my hand. Still as he can keep, his movements are rapid; he is deliberation itself in making up his mind to go anywhere, but once decided he goes like a flash.

When a new bird was introduced into the room, an English song thrush, twice as big as himself, the cat-bird was at first uncertain how to treat him; but in one day he learned that he could frighten him. The small, dark, impishlooking fellow, rushing madly at the big, honest, simple thrush, put him into an uncontrollable panic. As soon as this fact was established the cat-bird became a tyrant. He will not allow him to enjoy anything on the floor, drives him away from the bath, mocks his singing

with harsh notes, and assumes very saucy airs towards him.

The worst effect of the thrush's coming, however, was to show me a new trait of the cat-bird's character, — jealousy. The first day or two he sulked, would not go out of his cage, would not touch meat, and though he has gradually returned to his liberty and his meat, he still refuses, now after two months, to alight on my hands for his tid-bits, as he did before.

Nothing is more interesting than to note the variety the cat-bird will give to the cry which at a distance resembles the "mew" of a cat. He has many other notes and calls, besides his exquisite songs, but there is hardly a shade of emotion that he cannot express by the inflection he will give to that one cry. Whether he proclaims a melancholy word by softly breathing it from closed bill, or jerks it out with a snap at the end, as though he bit it off, when he is deprived of some cherished treasure, -as, for instance, a rubber band, - from one extreme to the other, with all the shades between, each expresses a meaning, and each is intelligible to a loving and observing student of his ways.

Olive Thorne Miller.

AROUND THE SPANISH COAST.

On the 14th of April, four days' sail from Malta on the steamer Mizapore, we sighted the Pillars of Hercules, two lofty rocks, apparently some ten miles apart,—the gateway to a new world. The wind was west and the day showery. These historic monuments gained imperiousness from the thunderous clouds that concealed their summits, and left something of their majesty to the imagination. They frown at each other across the highway of commerce and dis-

covery, a symbol of Spanish and English distrust. In order to command the strait one power should hold both headlands. But since the English cannot be dislodged from Gibraltar, the Spaniards have seized the opposite rock, the high headland of Ceuta, the Punta de Africa, fortified it and garrisoned it, and converted it into an important military prison. Ceuta was the point from which the Moors embarked for the conquest of Spain, and the Spaniards now hold it