

But I'd like to see Ida. I'd thought of that. Tell her I'm here, and she'll come."

She did come. At the first sight of her father she had no words to greet him with, but clung to him, sobbing brokenly—"How could you—how could you? And I believed in you so!"

"You may well ask that," he said. "It's more than I know myself. But why should you cry? It isn't as if you'd no one but me to look to. We've come to a cross road, you and I. We say good-bye now, and a long good-bye. It's a general rendezvous, I take it, now that you and Mary come. We're all here now: all I care for, anyway. But I'm the only one that stays out from this circle alone."

"I will go with you!" she cried, and held tightly to his hand. "Not alone—no, I won't leave you!"

He put her away from him with a gentleness he did not often show.

"No, no. You mean it now; but afterwards you would be sorry. There won't be room for two people on the path I'll have to take; there'll be places not fit for you to tread. I wouldn't take you if I could. But when I'm out of soundings of home and friends and all the rest, it will be good to think that you would have come. You're like your mother. She'd have stuck to me to the bitterest end. No more now. Good-bye."

They saw him again, long after this, when Ida and Weldrick were married and had a home in Melbourne. One night he passed the threshold of their door, and came and sat with them, and talked as easily and freely as if it were his habit to visit them every

evening. But not a word was said that would have served to fill the blank of those years in which they had heard nothing of him.

"So you've settled down now," he said. "Adventures and escapades all done with: married people have no spirit for such recreations. All we went through good for nothing now, but a tale to please the children. You were very virtuous about that reward the bank offered you and Mary."

"How could we have touched that money?" Ida said.

"How? It would have come easy to most people. But you must have finer scruples than the commonalty. To my mind, it sets you on a pedestal, refusing that, when they tried to force it on you in so many different ways. But it's a bad plan to be too tender with banks and public institutions. They don't respect you for it. It's so unlike their own policy, you see."

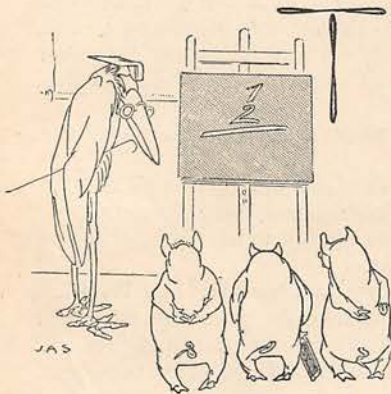
"I'm glad you named the little girl after your mother," he said to Ida somewhat later. "Ay, it makes a lively house when there are children about. I dare say I'll be looking in upon you again."

He kept his word. It seemed as if Justice had winked at the escape of this criminal. His offence was known, and it was generally supposed he was still at large. But no search was made for him, and in the course of years he grew bolder and often visited his daughter's home. He might even, if he had chosen, have ceased his wanderings, and found somewhere a haven for himself. But he was restless to the end—a castaway and a vagabond, the thought of whom was the only shadow on his daughter's life.

THE END.

CAN ANIMALS COUNT?

BY A. H. JAPP, LL.D., F.R.S.E.



HAT animals up to a certain point can count is undoubted. Sir John Lubbock's experiments with his dogs are proof enough of this. Bisset, the famous animal trainer, brought several animals up to this point, and even found that by patience and skill

the pig could be taught one, two, three, etc. Anyone who doubts this must turn to Bisset's own accounts of his experiences with the lower brethren. His success with cats and dogs and monkeys only surpassed in some degree what others had done before him, but it stirs something like incredulity when we read of his success with turtles and goldfishes, and we only

recover faith when we find the facts fully attested. "In the course of six months' teaching he made a turtle fetch and carry like a dog, and having chalked the floor and blackened its claws, could direct it to trace out any given name in the company. His confidence even led him to try experiments on a goldfish, not all unsuccessfully. . . . In the course of twelve months he made a pig—an animal usually supposed to be the most obstinate and perverse in Nature—become most tractable and able to count simple numbers." Bisset was a native of Perth, and having trained many animals and exhibited their performances in Edinburgh, London, Dublin, and other places, died in 1783.

Then Mr. Hamerton gave an account in the first part of his attractive volume—"Chapters on Animals"—of the dogs of a certain Monsieur du Rouil which certainly could count; and more: could read and do such things as completely mystified Mr. Hamerton, as he very frankly confesses. This Monsieur du Rouil died before his training of his dogs was completed, and we have often wondered what became of the

poor dogs, for no one was found equal to carrying their education to a farther point.

"According to Monsieur du Rouil's account," says Mr. Hamerton—"which was probably quite true as far as it went—the dogs were like actors who had not quite thoroughly mastered their parts, and he himself was like the prompter, near the footlights. To begin with, Blanche really knew the letters of the alphabet and the playing-cards by their names, and Lyda really knew all the figures. In addition to this, he said that Blanche had studied about a hundred and fifty words in different languages—something like twenty in each language—words most likely to be called for, such as chick, dog, horse, cat, pferd, canis, etc. The restriction to one set of letters simplified the business considerably, but Monsieur du Rouil confessed quite frankly that she could not get through a word unless he were present. On the other hand, he could not make her spell a word in public that she had not before practised with him in private. So it was with Lyda and the figures. She really knew the figures when isolated, and this had been satisfactorily demonstrated when he left the room, and she gave me the number asked for up to 9. But he would not tell me the secret of the confederacy. I told him what guesses had been made on the subject, but he simply answered that I must have observed how impossible it was for him to make signs with either hands or feet when he moved neither hand nor foot."

Poor Sally, the chimpanzee at the Zoo, in London, could count clearly up to a dozen at the least, and would bring straws to her keeper to any number under that. And Sally was as wonderful for affection and for sense as for cleverness. She was very fond of her keeper, and when she was dying, found, we do trust, some sense of relief in clasping his hand.

With an accent of the utmost regret, too, the keeper tells of Jack, the ourang-outang at the Zoo, how quickly he was advancing in his training and how docile he had become when he died of that fell plague

of those creatures in confinement in our climate—consumption.

Rooks have certainly powers in counting; and so have wood-pigeons, which follow very strict rules of procedure indeed. When feeding in flocks in the fields among the grain or roots, they never forget to post a sentinel or two, and a settled regulated method of interchange of position is kept up. They walk in a compact body, and in order that all may fare alike, the hindmost rank every now and then fly over the heads of their companions to the front, where they keep the best place for a minute or two, till those in the rear take their place in the same manner. They keep up this kind of fair-play during the whole time of feeding.

The beaver certainly could not do what he does in the way of architecture and engineering if he could not calculate; nor indeed could the little water-vole, which can run

a tunnel right through the dark earth to the exact point it wants: a thing which the cleverest human engineer can only do with the most elaborate helps in the way of levels and instruments of many kinds. Certain species of squirrels must be able to count



"SALLY."



"ROOKS HAVE CERTAINLY POWERS IN COUNTING."

—by steps, probably—else they could hardly be able to find, on awakening at intervals in their winter sleep, the little hoard of nuts which they may have laid up against this contingency. The mole could hardly construct the very scientific house he does in the dark, dark earth, with its passages so nicely constructed for getting rid of water, unless he had some simple notion of arithmetic. There can be little doubt that ants can count up to a certain point; and it is almost incredible that spiders can spin their webs without some simple arithmetical knowledge.

Yet some birds, it would seem—and these some of the most intelligent and gifted, as regards song—have no notion of numbers, else it would be hardly possible for the cuckoo to play on them the tricks which it is absolutely certain that he does play with respect to

which, as they were very pretty, were promised to various friends; but he resolved to try the memory and arithmetical powers of the cat, so he took away three of the kittens to a different part of the farm-building, where it was impossible the cat could find them. She was greatly troubled, almost distracted at first, licked over the two left, and all the rest of it, but would get up and range about distractedly, mewling and searching, and regarding the dogs (which were well known to her) with some suspicion. My friend brought back one of the lost kittens and put it beside the other two. This was welcomed with an extra share of mewling, crooning, and licking, but in a short while the cat was on the move again, seeking and searching. After a little while another of the kittens was brought back, with precisely the same results, and



"SHE REGARDED THE DOGS WITH SOME SUSPICION."

eggs—depositing his own eggs in the nests of other birds. Yet it is hardly possible that *he* can be without knowledge of numbers up to a certain point, for his whole plan circles round a definite way of numbering off the nests in which the female lays the eggs: as No. 1, No. 2, No. 3, and so on. If it is true—as there can now hardly be a doubt—that Mr. and Mrs. Cuckoo not only lay their eggs in other birds' nests, but keep a pretty close watch over these nests by regular turns, to see how their darlings fare—indeed, one very good field ornithologist, who has observed much and closely, gives it as his deliberate opinion that the female cuckoo is ready to aid the young blind monster in getting rid of the true progeny of the foster-parents, and in some cases does herself lift them out of the nest, to her young ones' relief. Of course dogs—clever dogs, at all events—can count, as is proved by the anecdote we have already given of that dog which could carry three-halfpence or more to the baker's shop, and get for them his exact number of rolls, declining to go away till he had had a roll for each copper.

That cats can count was proved by an Essex friend of ours in this way. One of his cats had five kittens,

by-and-by the third, after which pussy was quite content, and did not suddenly get up and go ranging about any more.

Another case I know of was almost as conclusive. A litter of three kittens was thrown into the pond. The cat, by the oddest chance, went to the pond while they were still making their half-blind efforts to maintain themselves afloat. Overcoming her dislike to the water, she got out one and laid it on the bank, and then another, and, though she could see nothing of the third—for it had been carried down in the freshet and drowned—she went round the borders of the pond for a good way, looking anxiously. At last she gave up the search in despair, went to the spot where she had left the two, took them one by one to a hole in a garden hedge, where she was allowed to bring them up in a nice little nest of dry leaves; and these two kittens turned out little spitfires, half wild in every respect, and, unlike the other cats, never entering the house unless on a run by stealth, and never becoming completely domesticated, though repeated trial was made to bring them round in this way.

Here is an anecdote attesting the powers of rooks in arithmetic so far, which is so good and clear that

we must give it here in the writer's own words, as no paraphrase or epitome could do justice to it:—

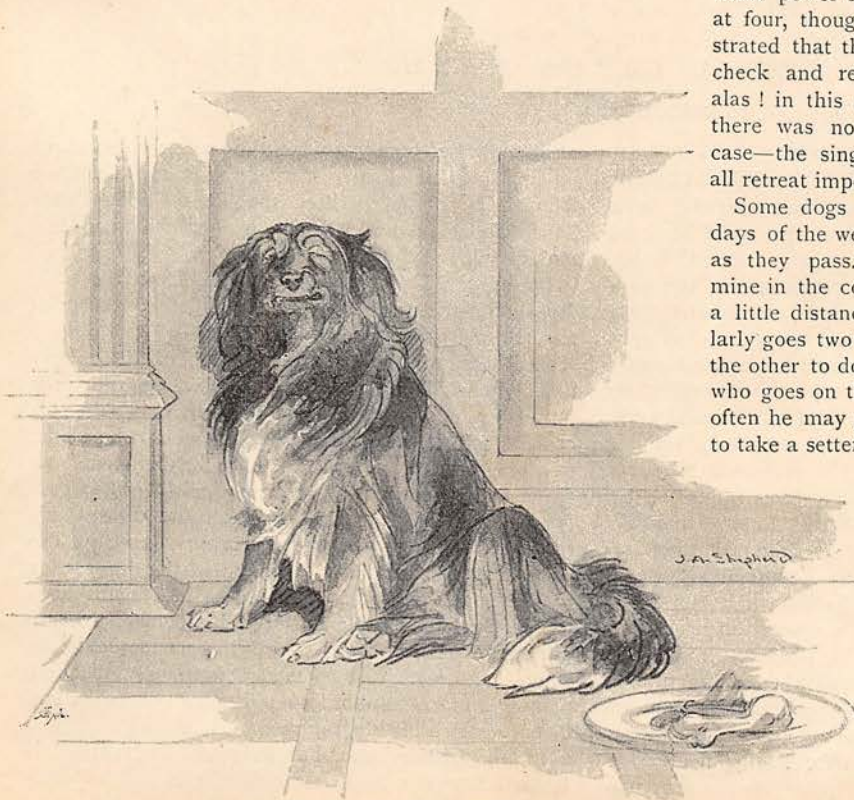
"A very large field had been sown with wheat, and in the centre a little hut had been erected to shelter the boy who had to tend the field, and to enable him to reach all parts of it. A gentleman who wished to obtain a few birds to hang up in his own field thought this would be a good opportunity for procuring them, for they thronged around in great numbers, and kept the boy actively employed to drive them off. So, taking his gun, he went into the hut, accompanied by the boy, and through some holes in the sides prepared to pour a volley on the invaders. But he reckoned without his host. The watchful sentinels seemed instinctively to divine the plot. Their warning caw was loudly uttered, and the presence of the ambushed foe was made known. They circled round and round, and settled in the surrounding fields, but not one of them would trust himself within gunshot of the hut. For some time the gentleman waited in vain, and then sent the boy away, with directions to walk straight out of the field; but this ruse did not succeed. The rooks still refused to 'come and be killed,' so he left the field and followed the boy; but no sooner had he gone out of the field than the sentinel gave the signal, and scores of their fellows at once descended and commenced their foray. The sportsman determined not to be outwitted in this way, so he immediately took two persons with him into the hut and resumed his ambush, the rooks having taken flight on his

re-appearance. After a short time had elapsed he sent one of the persons away, and after another interval the second, expecting that as soon as they both left the field the rooks would return, but he was again doomed to disappointment. 'Beware!' cawed the sentinels in the most sonorous tones, and none ventured to disregard the warning. Determined still further to test their powers of numeration, he again left the hut, and returned with three persons, all four entering together. Again, one by one, the companions were sent away, and the plan was at last crowned with success. The rooks could count as far as three, but four was beyond their powers, and no sooner had the third person left the field than they hurried to the spoil, but only, alas! to leave two of their number dead on the field, victims to the want of a knowledge of numeration."—"The Birds of Sherwood Forest," by W. J. Sterland (pp. 135, 6).

Some allowance should, however, in this case have been made for possible confusion arising in the course of the action. Even with very correct-minded human arithmeticians in similar circumstances doubt will often arise, after a lapse of time, whether it is a second or a third that has last been reckoned, and where there is no possibility of clear record at the moment, there is much room for confusion, as anyone will find who will try to keep count of the sacks of coal delivered into the cellar from a cart without the aid of pen or pencil, or anything to make definite mark. We can hardly from this circumstance decide that the rooks' power of numeration absolutely failed at four, though it was conclusively demonstrated that they could not only count, but check and re-check up to three, though, alas! in this case, as in so many others—there was no possibility of re-trying the case—the single slip was enough to make all retreat impossible.

Some dogs certainly come to know the days of the week—probably count the days as they pass. For example, a friend of mine in the country, who has two farms at a little distance from each other, and regularly goes two days in the week from one to the other to do certain bits of business, and who goes on these days for certain, however often he may go in addition, used regularly to take a setter bitch with him as companion

in his walk. But circumstances arose which made him wish to leave her at home on these days, and he would contrive to escape without her; but invariably she overtook him before he reached his off-farm, bowing and beseeching his favour in such a way that he could not resist her. Finally, he had to make up his mind that she must be locked up next



"NOT ON FRIDAY!" (p. 430).

time, and said so to his wife as Floss lay apparently asleep in the room. But when the day came Floss was not to be found. She had gone off early in the morning, much to the farmer's wonder and anxiety; but what was his surprise to see her waiting for him at the exact spot where she used to overtake him on the road, and on his approach, her efforts to fawn on, and wheedle, and please him were extraordinary, and after this the interdict was removed. Shepherds' dogs, on the asseveration of many shepherds, know Sundays, and in the Highlands of Scotland enjoy their journey to the church as much as their masters.

The famous French theologian and essayist, M. Rénan, who was a great lover of animals, told a number of stories of animals to a contributor to *Truth*, who gave a report of them in that journal in an article headed, "M. Rénan on our Humble Relatives" (issue for July 28th, 1892); and among them was the following:—

"When a child, M. Rénan had for a neighbour a dog that, disliking the Friday dinners of fish and potatoes, used regularly on Thursdays to go looking about for bones, to hide them for his meals next day. How did he know that Thursday preceded Friday? Another dog associated Sunday with personal cleanliness, and used, as regularly as it came round, to go and take a bath, unless the weather was very cold,

when he gave himself absolution. His name was Jocko."

And here is a little passage, with some anecdotes, from Mr. Hamerton's "Chapters on Animals" which may well cap these:—"A lady said that she had known a dog that belonged to a celebrated publisher in Paris, who had a country house at Auteuil. Every Friday his family went to Auteuil, and always regularly found the dog there on their arrival. He went alone through Paris, from the Rue de l'Ancienne Comédie, and he never made a mistake about the day. The family frequently went out on other days, but on these occasions the dog stayed contentedly at home. Another dog that she had also known had been bred in a strictly Catholic family, and would never touch meat on a Friday. Bets were made, and the greatest temptations used to overcome his conscientious scruples, but always in vain. He was shut up in a room during a whole Friday, with meat in his reach, but preferred to suffer hunger rather than touch it. One of my friends mentioned a dog that he knew quite well which lost its master three years before from small-pox, and ever since then, in all weathers, paid a daily visit to the cemetery, where it mourns upon his grave. The widow goes to the grave on Sundays after mass. The dog knows this, waits for her at the church door, and accompanies her."

BY A GIRL'S HAND.

BY MRS. HENRY E. DUDENEY.

CHAPTER THE FIRST.

JESSIE PENNIEFEATHER let the newspaper fall in a crumple on the lap of her cool cotton gown, and stared blankly across the room at the professor's bald head, which happened to be in a straight line with her startled eyes.

Professor Penniefeather was at work, as usual, on his projected "Life of Silas Bubb."

Bubb, novelist, dramatist, poet, traveller, and all-round talented individual, was the professor's hobby. Bubb had



been a celebrity in his time among a certain cultured "set." But as his time had been full thirty years before the opening of our story, those who once knew him might be forgiven for having nearly forgotten him, and those who had never known, perhaps hardly heard of him, might be forgiven faces

of ill-concealed boredom when the professor descanted on his favourite theme. Strange as it may seem, no fellow-celebrity had written the life of Silas Bubb. This labour of love Professor Penniefeather had undertaken.

But it would never be written—published, at least, Jessie thought sorrowfully, with a sidelong glance at the fatal newspaper paragraph.

And then, with a quick realisation of the misery that hateful, hateful paper might cause the poor professor, his daughter stuffed it hastily under the sofa cushion as the maid brought in the tea-tray: signal that biographical labours were over for the nonce.

Jessie Penniefeather was a very pretty girl, if grey eyes, golden hair, and a skin fresh and downy as a ripe peach, are constituents of beauty. She was so pretty that she absolutely glittered in the dim setting of the panelled room. They lived in Bloomsbury; the professor had to be near the Museum for literary purposes. He loved, too, to prowl about the old bookshops with which Bloomsbury is thickly studded, picking up rare "Bubbs" to add to his collection, and facts to enrich his biography.

In Bloomsbury, too, but in a glorified corner, is Russell Square, where Jessie filled the post of daily governess to the two little girls of Mrs. Abrahams.