

look at Lily, which made her suddenly blush very much, as I could see even in the moonlight.

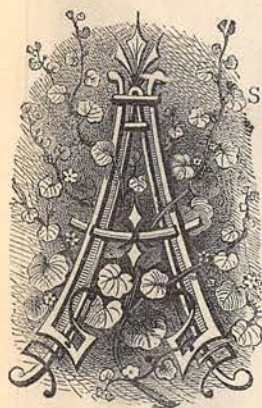
"You may have noticed," began Mr. Gregory, "that I am somewhat deaf, and I have been much more so. In consequence of this I have acquired the art, which I believe almost any one can acquire, of reading the movements of the lips in the same way that the deaf-and-dumb are taught to do, so that I can always understand what people say if only they are within seeing distance; and my sight is very acute. I need hardly say that I avoid *over-seeing* conversation, if you will allow the expression, as much as I would *over-hearing* it; but I frequently see people speak a few words on accidentally glancing at them. I think that what has puzzled you will now be plain. Perhaps I ought to confess that I have yielded a little to the temptation of mystifying the company during the last week, especially in the case of Mr. Briggs, who has, like many people who have lived a good deal alone, a habit of talking to himself as he goes along, which he is scarcely aware of. This afternoon, however, I watched the Grices in good earnest. I was very much astonished at what I saw. Your sudden departure had disarranged their plans, and they had a full discussion of past and future operations. It was not at

all a bad idea to hold their deliberations before your very eyes, so as to keep up their watch on your movements and disarm suspicion, but they had taken no precautions against being *over-seen*. The rest you know."

"But how about the purchase of the hair-wash, that sad proof of occult art?" I said.

"Oh, that had nothing to do with it. I was in the shop, being shaved, and I saw the transaction in a looking-glass."

Later still, when my uncle had gone in, I heard him quietly say, "So you will do whatever I like to mention?" But these words were not addressed to me, and I judged it best to fall into the rear, and having no gifts of clairvoyance myself, I cannot tell you the rest of the conversation. I can only add that our return was postponed, and that shortly after these events Mr. Gregory again requested a private conversation with my uncle; that he had again some revelations to make concerning a conspiracy of two, male and female in this case also; and that shortly after the first pair of conspirators had been "sentenced for life" by one of Her Majesty's Judges, a similar sentence was pronounced upon the other pair by the Rev. Mr. Briggs.



A FEW WORDS ABOUT WOODCOCKS.

AS soon as a slave sets foot on English soil, he becomes free," was the dictum of Lord Mansfield. A legal axiom, this, which may apply to featherless bipeds, but certainly does not benefit those feathered ones whose name stands at the head of this paper; for from the moment when they first reach England till the fifteenth,

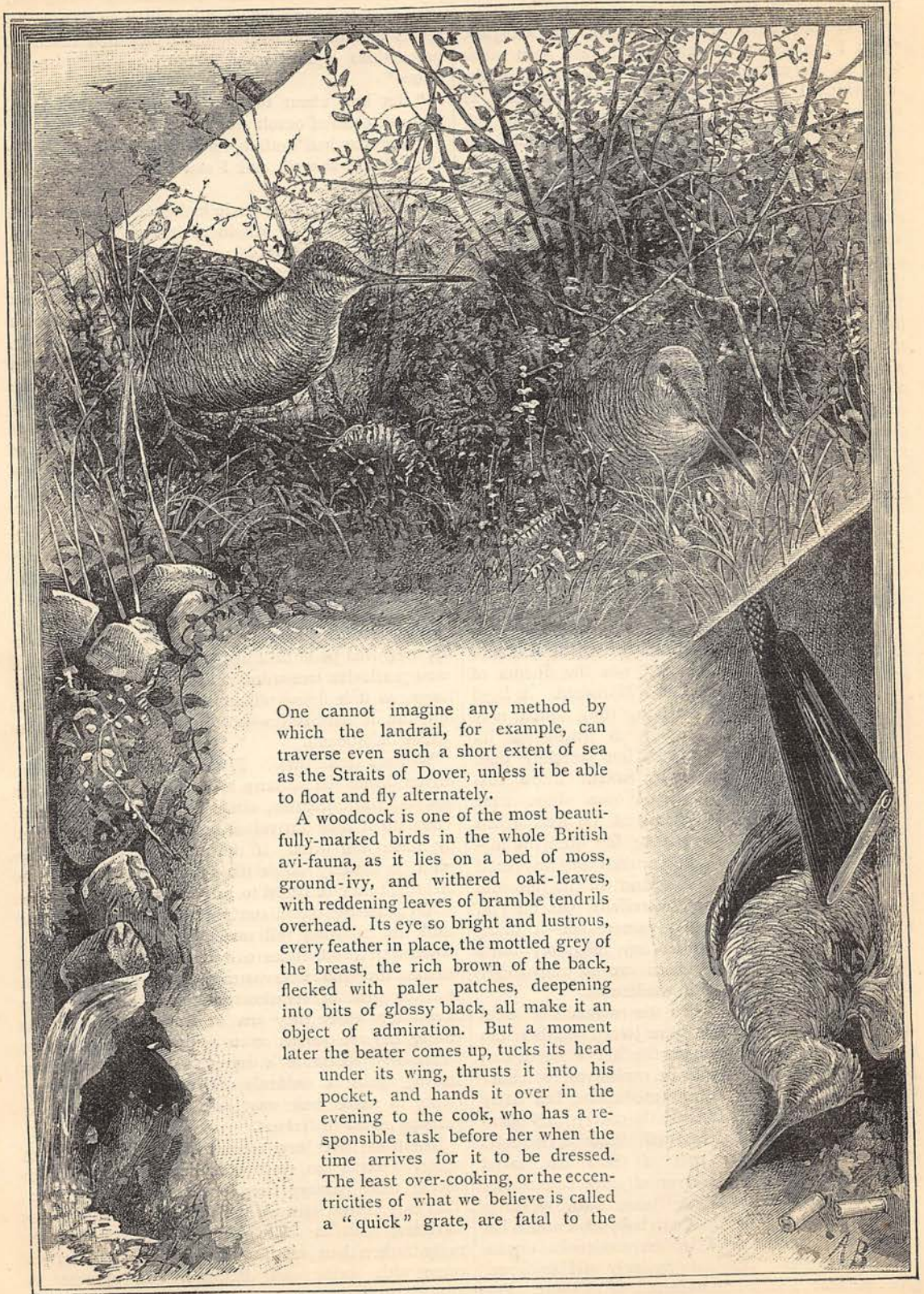
if not the first of February, mercifully puts an end to their troubles, they suffer persecution—it being a difficult matter to mention any migratory birds which on all possible occasions are so unsparingly destroyed as is the case with woodcocks.

They arrive at a time when the remnants of once-strong coveys of partridges have joined together into parties, having off and on, since the first of September, gained sufficient experience in explosives to render them wary and shy. Pheasant-shooting has lately begun, but it is full early to enter the coverts, and pheasants may nowadays be regarded almost as domestic creatures. The greater part of them are reared under hens, so that a preserver of game cannot feel any great enthusiasm at killing "tame birds," which he has very likely watched in their babyhood under his coops. But the coming of the first woodcocks is quite a different matter. They are genuinely wild birds, and give the most difficult and uncertain of all sport. For

in what manner a woodcock, when flushed, intends to fly, over what point in a hedge it means to flip, round what particular tree-trunk it has made up its mind to lunge, as it is flying off, apparently so guileless and ignorant of aeronautics—are things which no one can decide beforehand.

Whence come they? From Sweden and Norway, driven before the severity of an early winter, to seek less inclement quarters, where food is more abundant. The date of their arrival on our shores is determined by moon and wind. If the moon be full and the wind be easterly about the middle of October, the first flight may be timed to arrive almost to a day, but in any case the second and larger flight does not occur until the following full moon, in November. They would appear sometimes to overshoot the mark. Either because the wind is very strong, or because their flight is at too great an elevation to admit of their observing accurately where they are, or from some unknown cause, they are carried on to Scilly in large numbers, where they remain for a day or so to take rest, before leaving again as suddenly and unanimously as they came, to make their way back to the mainland, or perhaps across to Ireland.

Instances have been recorded of these birds being observed out at sea, resting on the water, presumably during their passage from one country to another. This may throw light on the manner in which little warblers, such as chiff-chaffs, who are seldom seen to fly further than just from one bush to another, yet come with spring and disappear with autumn in annual regularity, are enabled to cross the Channel.



One cannot imagine any method by which the landrail, for example, can traverse even such a short extent of sea as the Straits of Dover, unless it be able to float and fly alternately.

A woodcock is one of the most beautifully-marked birds in the whole British avi-fauna, as it lies on a bed of moss, ground-ivy, and withered oak-leaves, with reddening leaves of bramble tendrils overhead. Its eye so bright and lustrous, every feather in place, the mottled grey of the breast, the rich brown of the back, flecked with paler patches, deepening into bits of glossy black, all make it an object of admiration. But a moment later the beater comes up, tucks its head under its wing, thrusts it into his pocket, and hands it over in the evening to the cook, who has a responsible task before her when the time arrives for it to be dressed. The least over-cooking, or the eccentricities of what we believe is called a "quick" grate, are fatal to the

flesh of a bird which, to preserve its flavour, should be a trifle under-done rather than otherwise, and is no fit subject for cremation.

On first arriving they take shelter in open furzy commons, rivulet-watered ditches, and small copses. If, as is often the case, they are then thin from their recent long flight, they rapidly get into condition, and continue plump and tender (unless protracted frost should deprive them of sufficient food) until the end of January, at which time their flesh becomes less delicate, in consequence of their feeding upon frog's-spawn or some other coarse nutriment. As soon as the leaves are off the trees they enter the large woods, in which they remain till towards the end of the season, when they again prefer more open situations. They are sensitive and capricious creatures. A wood which to-day contains as many as twenty of them or more, may to-morrow, should the wind shift a point or two, be without one. They do not choose a spot, for the purpose of sleeping through the day, without being satisfied that it is warm for their feet, sheltered from the wind, shaded from the sun, and yet sufficiently free from undergrowth to enable them to move about, and easily rise. Also, it is freedom from intrusion into their haunts of human beings, cattle, and dogs, that they strive to obtain, rather than mere absence of noise. We have often flushed them in a valley under a railway viaduct, within stone's-throw of a boiler-yard, where the constant riveting of huge boilers produced a clatter that mingled with the falling waters of a rapid rocky stream, and drowned all sound of speech.

Recruited by the day-time sleep, all of them with one consent leave the covers at the approach of night. After the rooks and jackdaws have passed overhead in one long clamorous line towards the tall woods which form the assembling-place for all the communities of these birds for many miles round; after the sun has set, and before the evening star has made itself visible; when the weary labourer shoulders his tools, empty dinner-bag and can, and leaves his work; when the cock-pheasants are disputing for precedence before dozing, and the last lingering village boy, having reckoned up his after-school revenue in marbles, with

thoughts of tea-time wends his whistling way; in that half-hour when light and darkness meet, and the quiet evening hush is over everything—then it is the woodcocks are seeking the moist meadows in which cattle have been feeding. If the evening be fine and calm, they generally fly low, in a leisurely, careless way, although they are wide awake and hungry, and might be expected to be in a hurry to reach their feeding-ground.

Then again, at the return of dawn, when the dull grey of the eastern sky is first tinged with the ruddy foretaste of sunrise, and the sheep-dog calls his master to go and feed the flock and fetch back the cows; when the blackbirds fly into the field, and finding it yet too soon to pick up the early worm, fly back once more to the hedge, to wait a while longer—then the long-bills are returning to the woods, flying rapidly and cautiously, and showing that they are on the alert and anxious to avoid danger. This is a curious peculiarity, sleepy and gorged as they must then be from their nocturnal banquet.

At the "roading"-time probably the same bird takes the same line evening after evening. Perhaps the reader may know that one or two usually at this time pass over his house, and may be desirous of enjoying the novelty of saying he has killed a woodcock in his own garden. In this case, his best plan will be to stand facing the horizon whence the birds are expected, at dusk, taking care to have a clear space behind him. Probably he will see a bat wobbling backwards and forwards, then a belated thrush will pass over, and then, when his patience is almost gone, and he is least looking out for it, a woodcock, looking in the uncertain light nearly as large as an owl, will appear above his head. It comes into view without any warning of approach, catches sight of its enemy, and before the latter has time to wheel round and prepare for action, it has given one long flip round a corner of the house-roof, or behind a tree, or comported itself in some other puzzling way such as to render a fair shot out of the question. The only encouragement, then, must come from the thought that a cock that's missed and flies away, will live to be shot at another day.

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HOW LOCOMOTION IS EFFECTED.

BY PROFESSOR W. STEADMAN ALDIS, M.A., COLLEGE OF SCIENCE, NEWCASTLE-UPON-TYNE.



CORRESPONDENT has drawn my attention to a sentence in an article in CASSELL'S FAMILY MAGAZINE of July, on "The Search after Perpetual Motion," in which it is stated that when a horse draws a cart, the cart pulls the horse backward with just as much force as that with which the horse pulls the cart forward. My correspondent intimates a doubt as to whether, if this were true, the cart would make any progress, and more than insinuates that there must be some mistake somewhere.

The particular illustration of the general law of mechanics that action and reaction are equal and opposite, which excited the criticism of my correspondent, happens to be due to no less a person than Sir Isaac Newton. It may fairly therefore claim respectful consideration before being condemned as either foolish or untrue. No weight of authority ought, however, to cause us to receive a statement on a matter of science, unless its truth can be made manifest to our understandings after a fair examination, and even the evidence of a Newton will be invoked in vain in favour of a falsehood or an absurdity.