

The lady who had first spoken smiled.

"I shouldn't think that mattered much," she remarked; "however, as you say, it may succeed."

And thus the world judged.

The next day I went to the church where, in the quietest and most private manner possible, the marriage was celebrated. As the new husband and wife left the sacristy together, I remarked them well, and thought I saw that upon the face of each which made me augur well of their future.

Claire was, as I was told, to leave that night for Algeria, whither she accompanied her husband—a sharer in his toils and dangers, in his joys and success—a true, brave soldier's wife.

A bright grave light shone in the eyes of both, an earnestness of purpose sat upon the brow of each, and as they went forth I thought I saw a promise of happiness that would not deceive; and as they passed me by, I murmured from my innermost heart:—

"God speed them! they have been in the thick of life's battle, and know that *that* fight never ends, but must be fought on always unto death."

#### NOTES ON PARROTS.

MR. DARWIN, in his recent work on *The Variation of Animals and Plants under Domestication*, devotes a good many pages to prove that animals and plants, when removed from their natural condition are often rendered more or less infertile, and that the former often altogether cease to breed when in captivity.

Amongst the many illustrative cases which he brings forward in favour of this view is that of the parrot. Many as are the parrots that have been kept in Europe for some centuries past, they breed, he observes, so seldom that the event has been thought worthy of record in the gravest scientific publications, such as the *Reports of the British Association*; and in the nine years' report which Mr. Darwin obtained of all the little strangers who appeared in the Zoological Gardens, no parrots, excepting three species of parouquet, are reported as having produced young. Sir R. Schomburgk informs him that in Guiana parrots are taken from their nests by the Indians, and are reared in large numbers, becoming so tame as to come to be fed when called; yet he never heard a single instance of their breeding. Mr. Hill gives similar evidence regarding the par-

rots of Jamaica, and asserts that "no instance of a parrot breeding in tame life has been known."

Mr. Charles Buxton, M.P., in a very interesting paper on the acclimatisation of these birds (which he read to the British Association excursionists to Northrepps Hall, Norfolk), has shown that with due care parrots may be bred in this country, notwithstanding Mr. Darwin's views to the contrary; and some of the facts recorded are so interesting in more than one point of natural history, that they deserve a wider circulation than they are likely to obtain in the valuable pages of *The Annals of Natural History*. At one time nearly fifty parrots might be seen about the grounds of Northrepps Hall; the number is now reduced to twenty-four, the reduction being mainly due to the guns of their enemies whenever they left home. Unfortunately, they are occasionally seized with a desire to see the world, and will then take flight to a distance of ten or fifteen miles, or even more, and from these flights the flock seldom returns in its original force. In one case a flock flew to a place full twenty-five miles away, and eleven of them were shot. The history of their breeding is thus graphically described by Mr. Buxton:—"A pair of cockatoos led the way by most unsuccessfully attempting to make a nest in one of the chimneys; before it was half-finished it gave way, and the nest and cockatoos fell to the bottom. It being summer-time, they were only discovered after spending a day and a night amongst the soot, and when they were brought out they looked like two dwarf chimney-sweepers." Nothing daunted by this catastrophe, they made a next attempt in a box which had been hung outside the gables of the house, with the hope that it would be thus used. Two eggs were laid and carefully sat upon; but, alas! the eggs turned out addled. Then came a pair of green parrots which, making their nest in a box, succeeded in bringing up one young one; but long before it was fledged it was cruelly murdered by a cockatoo. "The year after," says Mr. Buxton, "this pair brought up two children, and it was really a beautiful sight to see the family party flying about, always together, and living on the most loving terms. But the mother and her eldest son were both, unhappily, shot." This must be regarded as the first real success. Afterwards a common white cockatoo, who had selected a very large rose-coloured cockatoo of a different species for his bride, scooped out a nest in the rotten branch of an acacia-tree, and this pair brought

up two live young birds; and the following year they repeated the experiment even more successfully, and brought up three young ones, thus making up a family party of seven. Unfortunately, when the next breeding season occurred (the past summer), the old birds found their nest preoccupied by a pair of gray parrots, which kept possession and brought up two young birds. These are the only cases of breeding mentioned by Mr. Buxton, and probably all that occurred in his large number of parrots, and they may be summed up as follows:—one pair produced one young bird on one occasion, and two the next year; another pair brought up two and three young birds in two successive years; and one pair produced a couple of young—the sum total being ten young parrots.\* This must be regarded as a great success as compared with the observations made by or communicated to Mr. Darwin. The reason why a young parrot is a prodigy in the Zoological Gardens, and is of comparatively frequent occurrence at Northrepps Hall is probably due to the fact that the birds enjoy a far more natural life at the latter place than at the former; and as a somewhat parallel case, it may be mentioned that while tame elephants never breed in India, their breeding is of daily occurrence in Ava, not very far eastward, “where the females are allowed to roam the forests with some degree of freedom” (Darwin, *op. cit.*, vol. ii., p. 150). For the free and unconstrained life which Mr. Buxton's parrots enjoy, they are indebted to a large Amazonian parrot who has been at Northrepps Hall for twenty years. Having escaped from his cage he remained in the oak and beech trees for nearly three months, and only came back when the winter came on. He looked so magnificent on his return that it was resolved that the effects of liberty should be tried on the parrots generally. As long as they are well-fed, the dense mass of down beneath their feathers seems to protect them sufficiently against our cold winters. There is a house of shelter provided for them, but, excepting the gray parrots, none use it, and they prefer living in the woods throughout the whole year. These gray parrots are able to foresee a storm, and often take refuge in this house before it comes. Like man, the parrots have their vices, virtues, friendships, and delusions. Two cockatoos are recorded as guilty

of murder, two young birds are described as having “awful tempers,” and they all seem to fight over their food. As a set-off, we are told of an old cockatoo who befriended a young bird with a broken wing and leg, and treated him as her own son; and of a magnificent parrot who devoted himself to a Carolina hen-parrot who had lost both her legs by frost-bite in the hard winter of 1860, defending her from the attacks of other parrots, cleaning her feathers, and making a regular pet of the old cripple.

The cockatoos which for two years made their nest in the acacia-tree were objects of great interest during incubation to the cockatoos at large, who used to sit on the branches just above the nest, and to accompany the parent bird when she flew off, “screaming horrible exclamations in her honour.” Whether they were applauding her as a benefactor to her species, or what their views on her conduct may have been, is hard to decide; but the pair of birds who, not having a family of their own, adopted some kittens, and kept a perpetual watch on them even when the mother was at home, must have been harmless monomaniacs. Mr. Buxton notices the curious friendships which some of his birds formed. A paroquet and a green parrot were perfectly inseparable, and when, out of a flock of eleven gray parrots, there was only left one survivor, he took to associating with some cockatoos, and for the last few years he has never left them.

It is to be regretted that more information is not given regarding their food. We are told that “in the morning and evening they come to feed on hempseed and bread and milk, which is hung in a basket from a tripod,” and in the next page we read that “variety of food is not less essential to them than quantity.” Seeing that some parrots live upon the nectar of flowers, others on grain, and others on fruits, both soft and hard, it is not possible to supply all kinds with their natural food. Some, with their powerful jaws, can crush to a pulp palm-nuts which are so hard as to be difficult to break with a heavy hammer (see Bates, *The Naturalist on the Amazon*, 2nd ed., p. 80), and, if such birds as these are kept on a soft food, the upper mandible has been known to grow to such a length as to begin to penetrate the throat.

Mr. Wallace, whose explorations of the River Amazon and of the Eastern Archipelago are known to all naturalists, describes certain ingenious methods pursued by the Indians for improving and modifying the colour of their

\* It should be mentioned that Mr. Buxton's success has once been exceeded. A case was recorded in the *Field* newspaper, a few years ago, in which eleven Australian paroquets (grass warblers) were hatched in one season at Fareham from a single pair. This instance seems to have escaped the eagle-eye of Mr. Darwin.

parrots. The natives of the banks of the Amazon feed their common green parrots with the fat of certain fishes, which renders the feathers beautifully variegated with red and yellow colours; and this fact has been confirmed by Professor Agassiz, who has more recently explored that great river. The effect is not transitory; they become "beautiful for ever," and in an analogous manner certain Malays can obtain King Lories from the Talking Lory. We conclude with a single fact, more singular than any of the rest, for which we are also indebted to Mr. Wallace. Certain South American Indians change the colour of many birds by the following curious process:—They pluck out the feathers from the part which they wish to paint, and inoculate the fresh wound with the milky secretion from the skin of a small toad. The feathers grow of a brilliant yellow colour, and on being plucked out grow again of the same colour without any fresh inoculation.