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CALCUTTA
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PREFACE.

THE fancy for Speaking Parrots not only dates from very ancient times, but in the present day it is extraordinarily ardent and widespread. Doubtless, no other bird kept alone as a speaker will take in a higher degree the position of friend and companion to man than a parrot.

Parrot lovers—as well as fanciers and breeders of other families of birds—may reasonably desire to have offered to them a source whence they may obtain advice as to purchase, care, training, &c. To supply such need I have undertaken the present work. Professional critics must judge whether I have succeeded in satisfying the just expectations and demands of the friends of these birds.

Whoever ventures upon the production of such a work must, before all things, be furnished with the requisite knowledge founded upon experience, otherwise he will only lead his readers into error and exhibit his own deficiencies.

It is probably well known that for some decades I have been exclusively occupied with the practical rearing of birds, and have, during that time, kept most of the species here described, and therefore I am acquainted with them, not merely in their outward appearance, but in their whole nature, their peculiarities, necessities, and capabilities. The abundance of information collected for my larger work, "The Foreign Cage Birds,"* has proved extremely useful for the purposes of this book. Under any circumstances, in a work of this description practical directions on all points should be considered the chief object. Anyone glancing over the extremely rich and abundant descriptions and varied records of almost countless keepers of Speaking Parrots, which have appeared in my journal, *The Feathered World*,† during the course of the last ten years, and

* "Die fremdländischen Stubenvögel," Band III., Die Papageien.
† *Die gefiederte Welt* (Berlin, Louis Gerschel).

trusting to my having used the same in conjunction with my own experiences, conscientiously and intelligently, may be able to judge whether I could venture, with perfect confidence, to fulfil the task before me.

In accordance with its title, this book deals exclusively with those Parrots which have, up to the present time, been clearly proved to be gifted with speech.

Considering that such a work as the present must assuredly attain a certain international value, I have not only treated of the conditions of the bird trade in its entirety, but also have added, as fully as possible, the names of the birds described, in the languages of the four countries (England, Germany, France, and Holland) into which the importation of Parrots chiefly takes place. In this, as in all my other writings, I have avoided mentioning names which have been arbitrarily or unsuitably applied, preference being given to the already existing appellations, so far as they prove suitable. Where it has been deemed advisable to introduce new names, I have also given the scientific appellation; and if this was not practicable, such an one has been chosen as best agrees with the peculiarities of the bird, or a name given by means of which the merits of some eminent explorer, connoisseur, keeper, or breeder, may be honoured.

In the practical use of this manual, I would suggest the observance of the following direction: The name by which the bird is known to the reader should be sought in the Index, and then also all those parts in which it is mentioned by that or its other appellations should be carefully perused. The chapters on "Purchase and Reception," "The Cage," "Food," "Taming and Training," "Preservation of Health," and "Diseases" should be attentively studied, as only by this means can guidance and advice in any case be found as desired.

Among the numerous works which have appeared of late upon bird fancying, treatment, and breeding, the present is probably the only one which concerns itself particularly and exclusively with the subject in hand. I therefore wish all the more earnestly that it may entirely fulfil the expectations which all lovers of Speaking Parrots are justified in entertaining with regard to it.

THE SPEAKING PARROTS

PART I.—GENERAL.

CHAP. I.—INTRODUCTION.

Natural Endowments of the Parrot—Power of Imitating Speech—Various Species—Physical Characteristics of the Talking Species—Mental Endowments—The Parrot in Confinement—The Parrots in their Native Countries—Trade in Parrots——Ill-treatment—Taming—Training.

THERE are many advantages which the Parrot enjoys over all other creatures, and even over man.

We envy it principally on account of its wings, the splendid gift with which kind Nature has endowed it, the power of soaring upwards into the ether, and hovering there, high above all other living creatures. Its fellows in the animal kingdom are behind it also in many other respects, and especially in the power of imitating human words. This capability of speech is not known to exist amongst any of the other animals, except birds; even those quadrupeds which stand highest—the dog, the elephant, the horse, and others not unfrequently displaying a truly human sagacity—are denied this gift, though they may sometimes surpass the talking birds in mental power. Of course, not

nearly all birds can learn to speak, but only those of some species—very few in proportion to the whole.

We are accustomed to regard speech as the most important advantage which man possesses over the inferior creation. It is speech which distinguishes him, under all circumstances, from animals, and its absence which causes even those most nearly allied to him to rank much lower.

Beasts have, indeed, a language of their own, sounds and signs of definite meaning. He who doubts the truth of this assertion needs only go out into the fields and observe Nature. For a flock of any species of birds, let us take as an example the most common of all—sparrows. Harmlessly cheerful, they follow their occupation, hopping about in search of food, yet one note of alarm only is necessary to inform them all of an approaching danger; moreover, their cry is varied according to the kind of danger which threatens. If a sparrowhawk come in sight, a "t-i-r-r-r-r!" of horror puts the whole flock to the hastiest flight; when the cat approaches, a "tihrrr!" of quite another style causes only a few of the most timid to fly to a safe distance; but if a boy with a pea-shooter or a sling pass by, then a slight "tirr!" merely warns the company to be attentive and cautious, and for the time being no timid fugitive hurries away. Then water is thrown out into the yard, and a joyful "tweet, tweet!" assembles the troop to pick up eagerly the bread crumbs, potato parings and other refuse which have been thrown out with it. A flight of rooks have settled for the night on the tops of the tall poplar trees, below which many people walk and drive along the road; even a sportsman with his gun over his shoulder and his dogs on a leash are scarcely noticed; only a few of the most timid fly away. Then a youthful marksman appears, who leads by a chain a tamed fox, for the support of which he must occasionally kill birds. As soon as this individual approaches, though under cover of a high fence, an old experienced rook utters an angry "Caw!" and with great rustling the whole flock hastens away. These are examples from Nature, proofs of the language, and, at the same time, of the power which birds possess of imparting information to each other. Indeed, we have instances of this among the lowest and smallest animals. If we scrape with a stick at the outer edge of an ant-heap, we see immediately that not only do numerous ants hasten thither, but suddenly a movement from that direction goes through the whole habitation,

and excitement prevails from the centre to the boundaries. We see, therefore, that the creatures are able at once to inform each other of the event which has happened.

If we consider in how comparatively small a degree the power of speech differs in mankind, from the most highly cultivated down to the savage scarcely capable of civilisation, then we must allow that the examples of brute speech quoted—and natural history has many such—should fill us, on nearer acquaintance, with admiration. Human speech, however, the sonorous, harmonious enunciation of thought and feeling, the clear expression of varied emotions, must always be considered the highest; and, if an animal be able, though only partially, to imitate human language, it must decidedly belong to higher ranks of creation even than those which appear most to resemble man.

With perfect justice, therefore, a lively and widespread love is entertained for creatures which can speak, that is to say, for birds gifted with the power of speech and trained to use it.

Many a one may remember, in his youth, as an important event in his native town, the arrival of a talking bird. It was, say, a white cockatoo, which sat lazily and sleepily in the ring it was chained to and was carried about in, and now and then it would erect its brilliantly-coloured crest, and, nodding its head comically, and clapping its wings, would cry, with a shrill voice, "Cockatoo! Cockatoo!" Young and old ran to see it, and, when it pointedly added, "Pretty Cocky is hungry!" not only were cakes and sweets brought to it in abundance, but halfpence rained upon the itinerant showman and his wonderful bird. The newspapers relate a good story about a talking bird. A newly-enlisted soldier in Vienna was one day gazing at a great macaw perched with the quiet dignity of a philosopher. When the man had walked round it several times, the bird suddenly exclaimed, "Blockhead!" Hastily the young defender of his fatherland grasped his cap, made a hurried bow, and stammered, "I beg your honour's pardon, I thought you were a bird!" Thus, to a certain extent, the feathered speaker unites the whole race of birds with mankind, and stretching back into our youthful recollections, follows us through the whole course of our lives. In the present day a talking bird is no longer a rarity, for everywhere, even in villages and country houses, parrots are to be found—indeed,

in countless variety—among which there are almost more talkers than plumage birds.

It is not parrots only that are capable of learning to pronounce human words, but a considerable number of other foreign and native birds, which, however—as far as our present knowledge extends—are limited to the members of certain families. Nevertheless, we must not maintain the latter opinion as an invariable rule, for of late important exceptions have come to light. Until lately, the birds acknowledged to be gifted with speech belonged only to the ranks of the parrots, particularly the larger species, besides the crow species, the raven and the starling; but lately finches have been added, while, in several cases, canaries have learnt to speak. The parrot tribe is certainly the most noted and important of talking birds, and it is also true that besides the well-known clever talkers, some individuals related to most of the remaining species—even to the Cockatiel, or Wedge-tailed Cockatoo, and down to one of the smallest of all, the well-known Undulated Grass Parrakeet—have proved themselves to be gifted with speech.

Here I would wish to give a general description of all parrots, only the space which I have at my command would not nearly suffice. I, therefore, respectfully refer the reader to my work, "The Foreign Cage Birds," vol. iii. (the Parrots), and "Manual for Bird Fanciers," vol. i. I will only notice here the chief peculiarities of these extremely interesting birds; but, of course, I shall enter more fully into particulars concerning their care and training.

At present there are upwards of 400 kinds of parrots known. A fixed and exact number I am not able to state, because, on the one hand, newly-discovered species come daily under our notice, and, on the other hand—and chiefly—because there are a great many about which ornithologists do not agree whether they belong to a real species, or whether they may only be reckoned as varieties peculiar to certain localities, or merely as chance diversities. The home of the parrot extends over all quarters of the globe with the exception of Europe; but it is chiefly in tropical countries. So large a family of varied and highly interesting birds must naturally, from ancient times, have offered manifold charms to the savant, and it is not surprising, therefore, that we have numerous works on the subject. Among all the writings which deal with it,

the monograph of Dr. Otto Finsch (Leyden, 1867-68) stands most conspicuous as a source of scientific knowledge. In my before-mentioned larger work I have confined myself to the researches of this, the most eminent of authors in this department, and, as far as such information was necessary, I have done the same here.

Glancing, from this point of view, at the very many varieties which now chiefly demand our attention, I must first state, as a fact in my experience, that almost every species of parrot produces individuals in which the gift of speech evinces itself. We have talkers from the following kinds: True Parrots, or Grey and Black Parrots (*Psittacus*, L.), Amazon Parrots (*Chrysotis*, Swns.), Noble Parrots (*Eclectus*, Wgl.), Long-winged Parrots (*Pionias*, Wgl.), True Cockatoo (*Plectolophus*, Vgrs.), Macaw Cockatoo (*Microglossus*, Gff.), Cockatiel (*Callipsittacus*, Lss.), Sharp-tailed Lories or Lorikeets (*Trichoglossus*, Vgrs.), Broad-tailed or True Lories (*Domicella*, Wgl.), Macaws (*Sittace*, Wgl.), Noble Parrakeets (*Palæornis*, Vgrs.), Wedge-tailed Parrakeets (*Conurus*, Khl.), Thick-billed Parrakeets (*Bolborhynchus*, Bp.), Slender-billed Parrakeets (*Brotogerys*, Vgrs.), Flat-tailed Parrakeets (*Platycercus*, Vgrs.), Singing Parrakeet, or Undulated Parrakeet (*Melopsittacus*, Gld.). Up to the present, no speakers have been discovered among the hereaftermentioned species: *Mascarenus*, Lss.; *Dasyptilus*, Wgl.; *Psittacula*, Khl.; *Nasiterna*, Wgl.; *Stringops*, Gr.; *Coryllis*, Fnsch.; *Psittacella*, Schl.; *Euphema*, Wgl.; *Pezoporus*, Ill. But, as has been said, we must on no account determine, or even suppose, that there are no speakers at all among the ranks of the last-named parrots; for as the Undulated Parrakeet made itself known all at once as a talker, so may we as reasonably expect this to take place with some species or other of the *Euphema*, *Psittacula*, *Coryllis*, &c.

A physical description of parrots, concerning the structure of the body, and the nature of all the organs, would here be superfluous; while, of course, the plumage and its colours in each species must be stated for the purposes of determination and recognition. I would, however, on no account omit a detailed description of the tongue — the most characteristic physical feature of the speaking bird. "As a rule, it appears thick, fleshy, blunt, with a point formed like an acorn, but more frequently covered on the foremost end with countless threadlike warts, which consist of somewhat

flattened cylinders of elastic fibres, placed in layers, above which the pituitous tunic of the tongue lies in several hard, horny strata."[1] In most varieties the tongue is of the former nature; only in a few—the great macaws and macaw cockatoos—does it end in the horny point; while in the lories and lorikeets the latter peculiarity, as described by Dr. Weinland, shows itself. It is not yet fully determined whether the bristled tongue really serves, as has been asserted, for the purpose of sucking up honey and flower juices. It must be most particularly noticed that those kinds which have the thick, fleshy, smooth tongue, *i.e.*, the true parrots, show themselves best suited for imitating human words; but of the other families also, including the lories or lorikeets, many have learnt to talk.

Regarding the mental endowments of parrots, the opinions of ornithologists, as well as of bird-fanciers, are extremely diverse. While one, in amiable partiality, and probably also in confusion and involuntary exaggeration, classes the speaking birds as nearly allied to man, not only ascribing to them cunning and quick comprehension, but also reason and warmth of feeling, another considers the utterance even of a notably gifted and instructed bird solely as a mechanical imitation speech, a mere chatter, undirected by any conception of the sense of the words.

I shall not here enter particularly into the habits, &c., of parrots in a state of nature, as I have already done so fully in my before-mentioned larger work. But this knowledge is necessary for the treatment of these birds in the cage. How could we know in what way we should feed and tend them, and, above all, successfully breed them and satisfy their wants, if we knew nothing of their natural life and habits? The parrot in the aviary appears before us as in freedom, or, at any rate, in a half-wild condition; the speaker, on the contrary, appears to us as a completely captive bird. In such a state it is deprived of everything which freedom bestowed on it. It can neither have its normal life nor sufficient motion. Air, light, temperature, and especially food, are all changed, and the conditions of its dwelling are only too strange. Here we must not act as in breeding time, not imitate nature as faithfully as possible, and supply what fails in as natural a manner as practicable; but on the contrary, we must create new circumstances, and satisfy needs in a totally different manner. It must, however, be thoroughly understood that it is not a matter of indifference in

what way caged parrots be fed; rather have many years of experience fixed certain rules according to which nourishment must be given. Every transgression of the principles which I shall further lay down on this head, in the chapter about "Food," will be severely visited by the sickness, or even loss, of more or less valuable birds. First, we must notice that all parrots feed chiefly upon plants, upon fruits, seeds, blossoms, shoots, or other soft and delicate parts of vegetable growths. Many—for instance, the smaller species—need animal food for their own support and the rearing of their young, and thus probably devour insects when in freedom.

All parrots are very destructive, for they gnaw and mangle much more than they need for food. They may, therefore, cause extraordinary damage to useful plants. They are on this account exposed to frequent pursuit wherever they appear in large flights, or at all numerously. Moreover, they are killed for use; as, for example, for the plumage as an ornament, or for all kinds of feather work; also to prepare the whole skin for collections. And, finally, many parrots are eaten as game.

The fancy for speaking parrots is known to be very ancient. In all parts of the world, when Europeans first entered into communication with the natives, they found the latter had tame parrots — in India, in the islands of the Malay Archipelago, in America, and in Australia. When the discoverers of America landed in the New World, the Indians came to meet them with large tame macaws. In the villages in Guiana one never sees children playing about without parrots and monkeys with them; and in Africa one finds round the huts of the negroes many Grey Parrots, which have been taken while young from the nests, reared by hand, and which now climb about on the straw roofs and trees with clipped wings. A popular superstition there says that there is so much heat in the nest of a Jaco that whoever thrusts his hand into it will be burnt, and that the white spots which many negroes have upon their hands have been caused by such indiscreet attempts. These marks, however, are the result of skin disease, and the whole fable has been invented merely for the purpose of frightening away others from plundering the parrots' nests—invented, that is to say, by those who themselves carry on this business. In South America, in the present day, the immense trees in which the large and splendid macaws build their nests are regarded as family

property, which descends from father to son. The feathers of these birds formerly served for the decoration of their chieftains, and in the present age they adorn the hats of our ladies. Therefore, the feathers of the macaw, as well as the birds themselves, form an important article of commerce.

Many thousands of live parrots are imported annually, and all find ready purchasers. In this bird trade, which has increased so enormously, especially during the last century, there is one very unpleasant side—the constantly prevailing diseases and death of the imported parrots, notably of the Grey Parrots, and also of many kinds of the smaller feathered tribes. It must on no account be thought that this melancholy fact arises from any delicacy of the birds; on the contrary, in spite of all the terrible severities and sufferings which they must pass through, the greater number reach here alive, and of those which have become sickly the majority recover, live, and become perfectly healthy. In this we surely find a proof of the astonishingly strong hold on life with which most of these delicate-looking creatures are endowed.

I will detail more circumstantially this much-to-be-regretted state of affairs. Mr. F. Connor writes from Brazil, in my periodical, "The Feathered World": "The natives, Indians and negroes of mixed race, bring the parrots in a miserable condition to the seaports, feed them with fruit and rice, and sell them to the traders at the average price of 2 milreis (4s.) a head. Parrots are most frequently obtained inland by barter for about half this price, and then taken in one of the numerous steamboats which ply upon the rivers Para and Amazon to the seaport towns. The purchasers keep them in large cases, in which some perches have been fixed, and which have laths nailed across the front, so that the birds have but little air and less light. Imagine such a dirty place as this, with no kind of provision for cleanliness, into which the food, consisting of bananas, oranges, and potatoes, is thrown, and in a climate where everything so soon decays in the terrible heat! There the unfortunate birds become covered with dirt and vermin; it is no wonder that their health is undermined and that incurable diseases attack them. Here they must remain until they are sold and transported to Europe in a steamer or sailing vessel. The treatment of the Grey Parrots in Africa is similar. The negroes bring

them to market in long, reed-shaped baskets, which they carry upon their shoulders; one after the other is seized from behind and dragged out so that it cannot bite. The treatment on the part of the purchasers is, according to unanimous information, everywhere the same. In this, as in every part of the world, living birds are merely regarded as an article of commerce, and each one endeavours, with the least possible trouble, to get the highest possible gain."

The parrots suffer much more on the steamboat than while in the hands of the buyers. They are pent in great numbers in proportionately small cases, which have bars only on one side, stowed in the lower hold of the ship, where they must suffer in the hot, steamy, smoky air, yet more from the fact that, whether it be from prejudice or necessity, they are denied drinking water. In spite of all such irrational treatment, the astonishingly greater number continue, as has been said, not only to live, but they appear—which must strike us as equally wonderful—as a rule well fed and strong, and do not show signs of any kind of sickness. Thus they arrive in Europe. They are now obliged to pass through another severe struggle for existence—a raw climate, change of food, in short, totally different circumstances, and at the same time all sorts of disquiet and terror. Here they usually strive to live for one or two weeks, sometimes for six, and in rare cases for eight, but then they are, with very few exceptions, hopelessly lost. It is noteworthy that the disease may show itself, in a few days or hours after water has been given, in a parrot which up to that time appeared quite healthy.

The Grey Parrots, as I said before, suffer most from these evil influences, and they are lost most frequently from blood-poisoning, as has been proved by the examination of numberless birds which have died immediately upon importation. Cure has been found impossible; certainly, in spite of many and varied attempts, no successful treatment has as yet been discovered; moreover, this disease is very dangerous, threatening other long since imported and healthy birds, through contagion. For these evils there are two remedies: either the wholesale dealers must arrange that the purchase of Grey Parrots be so looked after and regulated in their native places that the birds shall be no longer, from mere avarice, packed in masses together, and through shameful neglect given over to destruction; in other words, the wholesale dealers must see that the parrots are

treated reasonably and suitably, so that these birds, which have so strong a hold on life, may remain healthy and reach us in that condition; or the entire trade in Grey Parrots must be brought to an end by the fanciers abstaining unanimously from purchasing until other arrangements are made. It is to be hoped that if the object cannot be attained by fitting arrangements as suggested, it may be brought about by the latter resource.

The parrots brought over in sailing vessels are for the most part more sensibly kept and better cared for, and, therefore, mostly prove more capable of surviving their hardships. This cannot, however, be stated as a rule without exception, for the opposite also is known to occur. In conclusion, I may state that most parrots, like foreign birds in general, if they are not attacked by the incurable blood-poisoning after they have endured the long severe sea voyage, recover completely, and do not break down under other trials.

Very many parrots, especially the Green Short-tailed, or Amazon Parrots, from America, also a considerable number of others from Asia and Africa, come to market already tame, or at least half tamed. Many of these have been old birds when caught.

Scarcely anything is ascertained as to the mode of catching parrots. It is well known that the small parrots are caught in swarms with nets, birdlime, or snares, when they come to the drinking places, or on similar occasions. We can only suppose that the great talkers are usually captured in the same way. Concerning the taming in their native place, travellers relate that old Indian women have the astonishing art of making a wild, untractable, and vicious parrot in a short time so tame that after a few days, or even hours, anyone, even a stranger, may take it on his hand and stroke it. Many exaggerated stories are told as to this, but the fact is incontrovertible; only the mode of procedure is not clear; for some maintain that the Indian woman only dips her hand in water, and then strokes the bird over its back; others are of opinion that she pours over it the juice of a narcotic plant; while, according to another account, the bird is tamed by the injection of human saliva into the mouth. The greatest number of the parrots, however, which come to market tame, are those taken out of the nest and fed from the mouth with chewed maize and similar food, and which have already passed through several hands—from

the natives, Indians, or negroes, to the dealer; from the latter, or, perhaps, directly from the first-mentioned, to the seamen, sailors, or ships' officers; from them, again, either to the wholesale dealer or to the parrot trainer in the seaports; from one of these latter to the retail dealer; and from him, or it may be from the wholesale dealer, finally into the hands of the amateur bird fancier. On this route the parrot, as may be supposed, has learnt many good, but also many bad, habits and lessons. The trainers in the seaport towns, who are called parrot teachers, are small publicans, keepers of seamen's taverns, barbers, discharged sailors, &c.—mostly uneducated men. They deliver the parrots, especially Amazon Parrots and Grey Parrots, usually when they are tame enough to perch on the finger, and to speak more or less, so that in these, of course, the amateur has valuable birds most thoroughly suited for further instruction. One unfortunate circumstance—and it is certainly very disagreeable—here presents itself, namely, that of an uncouth, broad and unpleasant accent, and all sorts of disgusting habits; for example, many such parrots have learnt abusive words, vulgar speeches, and annoying sounds, such as imitating a consumptive cough, snoring, rattling in the throat, spitting, and so forth, and of these it is extremely difficult to break them. Nevertheless, such birds must not be considered worthless; on the contrary, they are valuable by reason of their capability, and if one does not mind the trouble of careful training, they may be weaned from all bad habits, as instruction in good manners advances. Of late, the large bird-shops often offer trained or even speaking parrots. This is because they select from their supplies the best untrained birds, and give them over to the above-mentioned trainers. Such a proceeding is commendable, and will, it is to be hoped, lead to the price of feathered speakers, which is much too high, being lessened by degrees so that they may be accessible to the less wealthy amateur.

CHAP. II.—PURCHASE AND RECEPTION.

Tokens of a Desirable Speaking Parrot—Signs of Health—Precautions in Buying—"Acclimatised" Birds—Transport—Treatment on Acquisition.

The species of parrot to be bought must be regulated by personal taste, special circumstances, locality, &c. Such an account as I here offer, superficial though it be, should afford the amateur with little or no knowledge of parrots sufficiently reliable information; but hereafter I shall enter upon a full account of the different groups under notice, give a thorough description of all the varieties of the species treated, and exact information concerning all their peculiarities. Here it is only necessary to glance at the general tokens which denote a desirable speaking parrot.

As in all other birds, there are in parrots certain signs of health, which one should never fail to notice at the time of purchase. Each bird must look bright and cheerful, be in possession of its natural liveliness, have smooth neatly arranged plumage, especially on the belly; the eyes must be clear, lively, not dim and dull; nostrils not wet, dirty, or stuffed, and the breastbone not sharp and prominent. The bird must not appear melancholy, sitting motionless, with disordered or puffed-out plumage, breathing short while quiet, or opening the beak to take breath. Moulting plumage, the absence of the tail, and dirty feathers, are, on the contrary, especially in excitable birds, not to be regarded as dangerous symptoms. Most parrots, on importation, have their wings clipped more or less, on one or both sides. This is certainly a great evil against which it is vain to struggle, because the clipping of the wings is done either in their native place or on board ship to prevent the escape of the birds. It is all the more to be regretted in the large speakers, for, on the one hand, it often takes years before the stumps are replaced by new feathers, and, on the other, the parrots, thus deprived of their feathers, require especially careful, and, above all, competent treatment. Only when such a bird appears perfectly healthy and fat may it be bought without anxiety.

There are various methods of setting about a satisfactory pur-

chase; nevertheless, whichever one may be selected, caution and, at least, some knowledge will be necessary, for the trade in live animals has its shady side, which may only too easily involve deception and consequent annoyance and disgust with the whole transaction.

He who possesses a slight knowledge of these birds, and chiefly wants experience, may do best to buy a trained parrot, or, at least, one which is already acclimatised, and, if possible, half tamed. In the first place, the price must be considered, but, if the outlay of £5 and over is not a matter of much account, it is advisable to obtain a parrot which can speak, for, by this means, not only is one spared the trouble of training, and the chance of getting a useless or stupid bird, but one need not fear that the parrot may die during the process of training and acclimatisation. It must not be forgotten that in such a purchase it is necessary to have a guarantee that one has to do with a decidedly honest dealer, otherwise there will always be danger of being cheated. The value of such a speaker is, indeed, entirely fanciful; one often hears the remark—it has even been found really to be so with the old Indian women in the forest—that a speaking bird is invaluable, because the owner will not part with it at any price.

Inasmuch, however, as well and properly treated parrots are, as a rule, able to bear many vicissitudes and live to a great age, the danger of a loss does not easily occur with an acclimatised bird, and as a good speaker finds at all times a ready sale at a moderate price, I cannot advise against the purchase of such a bird. In this there is really only the following to be attended to: First, get from the dealer the most exact information as to what the bird can do. Let this be obtained with certainty and with the understanding that the promise of what may be expected is rather less than more. Further, the seller should give full information as to former treatment, food, care, &c. This should always be required in the purchase.

It is more advantageous, if circumstances permit, to buy a quite untrained, or only half-taught parrot, and personally undertake the further instruction and education of the bird. A low price, however, incurs the chance that one may get a sickly bird, which dies in spite of the most careful nursing, or that one may buy an unmanageable old screamer which

can hardly be taught anything. Whoever has opportunity, and knows something of the birds, will do well to select a Grey Parrot at the dealers'. Otherwise one must depend on the honesty of the seller. The first method certainly requires somewhat strong nerves: for one must have heard the screeching which a number of Grey Parrots—say from eight to twenty—utter when packed together in one case, in order to be able to estimate what a great amount of affectionate interest is necessary if a novice is not to be frightened away for good and all. In the treatment, care, and training of such an untamed bird experience is needed, as I said before, from the want of which one may be exposed to annoyance and loss. Above all, knowledge of the previous management is necessary. When the parrots—mostly very young ones—have passed through the difficulties and dangers of the journey, and begin a hard struggle for life in becoming accustomed to our raw climate, the change of food, and the usage, which must terrify them greatly, and if they are not protected from draughts, changes of temperature, and other hurtful influences, yet nevertheless continue to thrive, there is certainly in this a proof that they possess an extraordinary and astonishing constitution. Of course, many are lost in this process, and in order to avoid this the greatest attention must be paid to the golden rule that every bird, like every animal, may be brought to exchange one kind of food for another without difficulty or danger, if it be done gradually; but every sudden change works destruction, almost without exception. The bird, must, therefore, be managed at first exactly according to the directions of the dealer, and then accustomed, as its health may permit—perhaps after some weeks—to more suitable food, about which I shall give further details later on. This must be done in the following manner: The former food must be given in gradually lessening quantities, and the difference made up by the new. In case of necessity we must try to force the bird by hunger to take the latter. The example of a comrade which has long been accustomed to it is a great help, if placed beside the new arrival.

In every transaction in living animals there are on the one side self-deceptions which are very difficult to avoid, and on the other, more dishonesty than in most bargains. It is a melancholy, but nevertheless undeniable fact, that only too often one party seeks to overreach the other, and that real or sup-

posed, unintentional or planned, dishonesty is in such a matter to be found in persons otherwise thoroughly respectable. Anyone possessing a favourite bird, a talented creature, obtained, perhaps, after several failures, and which knows one or more speeches, is apt to consider it as a notable talker, and, in perfect conviction of the truth of this, declares it to be such. Now, circumstances occur which make a sale either desirable or necessary; and then, without any evil intention, there is much more promised than the facts justify. On the other hand, many a buyer deceives himself with false hopes. He wishes to obtain an excellent bird for an extremely low price. Thus there are mutual deceptions, and consequently unavoidable quarrels and strife. Undeniably there are very many men in this trade who speculate in an unjustifiable manner upon the simplicity and credulity of others, cry up speaking parrots above their capabilities, and sell them much over their value. Indeed, surprising cases of deception come under my notice, in which quite untrained or old unintelligent birds have been sold as excellent speakers.

A greater and more extensive evil, which under some circumstances becomes suggestive of misdemeanour, arises out of so-called "acclimatised" birds. Under this title many parrots are put up for sale, which the inexperienced purchaser is made to believe, and even often feels fully convinced, offer the best guarantee of good quality in every respect. Now it is astonishing how much is included in the term "acclimatised," or rather, how much it is made to include. Strictly speaking, a bird can only be regarded as acclimatised when it is not only quite accustomed to the country, but has moulted at least once, appears in full plumage, with all the other signs of health, and, above all things, is fully accustomed to the new diet and management. The vendor, especially the dealer, may, on the contrary, declare a parrot to be acclimatised when it has only in some degree become used to the change of climate and diet, and has only been imported a few months, or even weeks, no matter its condition. The slightest misadventure, especially the trials of a journey, may then cause sickness or death. The safeguard of such a guarantee of "acclimatisation" is therefore nothing but an empty form of words.

The next point which, indeed unnecessarily, gives rise to quarrels, is a want of knowledge and patience on the part of the buyer. One must be prepared, even in the case

of an excellent, gifted, and well-taught parrot, to find that it will not, for the first few days, or, it may be, weeks, utter a word. Therefore, we may consider that these birds only speak or show off their powers in any direction when they feel physically quite well, safe, and comfortable. A proof of the mental endowments of the bird lies in the fact that with sharp wit it notices the alterations of its surroundings, becomes used by degrees to the new circumstances, and then begins to feel at ease. I would beg my reader to turn for further information on this point to the section upon "Taming and Training."

All parrots are conveyed wholesale in wooden chests, which are only wired in the front. As a rule, we find the recognised practical arrangement that the front wired side is so sloped off that one can see where to throw the food, and, at the same time, the shy birds can withdraw to the background. The door is either placed in front in the bars or in the boards at the back, and is usually only just large enough for a bird to get through. There are no vessels for food, which is simply thrown on the floor. The large parrots mostly, as before mentioned, get no water at all, or it is only put in for them in earthen jars once or twice a day. In the cages of the lesser and smallest kind there usually hang simple jars or pots, which, unfortunately, are almost invariably fixed, so that they cannot be cleaned during the whole journey. Most cages are not even fitted with an arrangement for cleaning, so that the dirt, husks, and other refuse, as well as the excretions, lie rotting and infecting the air. Of late the cages sent out by the wholesale dealers for the sea voyage are so arranged that there is a movable border of about 1in. to 1½in. in width set in the front edge, close to the floor, through the opening of which the dirt is drawn out every day by means of an iron hook. Miss Christian Hagenbeck and others send out with their buyers very practically arranged cage chests, capable of being disjointed; therefore I may with pleasure mention that there is on the part of many an earnest endeavour to abolish, or at least to mitigate, the evils mentioned. Naturally, there is still much left to be desired in this respect.

For carriage inland, whether it be from the dealer to the amateur, or *vice versâ*, the cages generally used are very suitable, but otherwise appear very rough. They consist of a

simple, oblong, wooden case, the front and upper side of which are barred, and the rest usually lined with thin zinc when intended for the larger parrots or for those much given to gnawing. The top slopes off to the back in proportion to the height of the bird, so that the back is only about two-thirds as high as the front. Either the top or the back forms a movable lid or door, through which the bird is taken in and out. In front, below the bars, this case has a space for food, separated from the floor by little boards or wooden laths; and, further back, a thick perch, immediately above the floor. Most cages contain no water vessel, and often they are without a food trough or perch. It is rightly supposed that a parrot can do without drink for a short journey of three or four days, whereas a water vessel might be injurious to it, for in cold, cheerless weather the water sprinkled over it by the motion might cause it to take cold or some similar illness. Sometimes the endeavour has been made to prevent this by means of a sponge; but, as a rule, the parrot pulls this out, and gets much more wet, or swallows it, and thereby brings on worse illness. English dealers fill the drinking vessel with bread, steeped in water, but this is not judicious, for it becomes sour and causes diarrhœa and the like. The pneumatic drinking vessel, which has lately been much used, may be recommended for parrots which have to travel a distance, but it must be entirely of metal, either zinc or tinned iron; the cage, also, must be much larger than the customary ones, so that such a vessel may be put into it without cramping the bird too much; the longer the journey the more space is required. For short distances it is best, as said before, that water should be left out. For conveyance in cold seasons, special winter travelling cages are manufactured, the outer part of which consists of a double case with a wired window, while the inner cage is a common travelling cage.

Reception.—For every parrot ordered, or expected, the cage or stand should be in readiness so that on its arrival it may not require to remain longer in the travelling case. In taking it out of the latter, and placing it in or on the former, especial care is needed. If possible, forcible means should not be used, but, if it be found absolutely necessary, this part of the work should be done by someone who is entirely a stranger—remembering that the parrot will not forget it for a long time, and is

always shy and frightened or distrustful of anyone whom it supposes guilty of an offence of this kind towards it.

On the arrival of many, indeed of most large parrots, it may be noted, an extremely disagreeable surprise is in store for the recipient, especially if he has no previous knowledge of the character and behaviour of such a bird. The anxiously expected Grey Parrot having arrived by the carrier, proceeds to fill the whole house with horror, for it screams "like a stuck pig;" it can be quieted neither by kindness nor by anger, and behaves like a wild, untaught, unmanageable creature which cannot be treated by gentle means. Hence many an amateur has had his pleasure spoilt for ever, and only the connoisseur understands that it is exactly such birds which promise the best results, because they have the best talent. The great truth, "The beginning is always difficult," must be recognised and remembered, especially in the fancy for parrots, for in hardly anything else do such splendid results and future pleasure repay the first difficulties.

As soon as water and food have been placed in the permanent cage, the travelling case, with open door, should be placed directly opposite the open door of the former, so that the bird without any force may come out of the one and enter the other, and, if this should not take place quickly, patience must be exercised. If the parrot be so shy, and at the same time so stupid that it will not voluntarily leave the case, then a stranger, an entirely indifferent person, as said before, must catch it and take it out. This person, having drawn strong doeskin gloves on both hands, must wind a coarse linen towel round the right hand, and then, boldly and quickly, seize the parrot from behind by the head and neck, so that it cannot bite. This must be done with skill and caution, so that the valuable creature may not be in the least hurt. With the left hand it must be pushed at once, without delay, into the permanent cage, of which the door must be shut and the parrot left as long as possible to itself.

If instead of a cage it is preferred to keep it on a ring or stand, it is most advisable that the inexperienced amateur, when giving the order to the dealer, should request him to put on the ring and chain in readiness. If it be necessary for the owner to have it done on arrival, then the bird should be seized as described above, but the beak should be held shut, and the head wrapped loosely in a cloth; then it is best to draw forward

the left foot and firmly screw on it the ring, which has been placed open and ready, while the other end of the chain must previously have been fastened to the stand. When letting the bird loose, as well as on approaching it afterwards, great care must be taken that it may not spring suddenly forward in wild anxiety, plunge down, and break or dislocate the leg.

The small Long-tailed Parrots, or Parrakeets, as well as the smaller Short-tailed species, do not occasion so much trouble; they must simply be left to come of their own accord out of the travelling cage, and go into the permanent cage when hunger induces them to do so. They are very rarely kept on stands or hoops.

Unfortunately, it is often a long time before the terrified parrot regains its tranquillity after being dragged out by the dealer, and making a long journey in a narrow space; a long time must elapse before it can summon courage, and not flutter violently, and give vent to the most deafening shrieks when anyone approaches it to clean the cage or give food. It is often weeks before it gradually becomes quiet, intelligent, and trustful, and soon afterwards teachable.

If one has to deal with an untamed parrot, which is still quite wild and uncontrolled, it should not at first be placed either in the spacious permanent cage nor with a chain on a stand. In the former case, it will need a much longer time to accustom it to the new circumstances, and in the latter there is great danger of its suddenly plunging down in anxiety or fear, and injuring itself, as described above.

CHAP. III.—THE CAGE.

Requirements of a good Parrot Cage—Square Cages—Cage of the Ornis Society of Berlin—Perches—Ornamental Cages—Open Stands—Chain and Leg Ring.

THE choice of a cage is important for any bird, but it is much more so for the members of the parrot family than for those of any other kind. This result of my experience, which I have already noticed in my work, "The Foreign

Cage Birds," vol. iv. (Manual for the Management, Training, and Breeding of Cage Birds), I must here emphatically repeat, for it is especially of consequence for those parrots which are kept as speakers.

Even fully acclimatised, well trained, and excellent speakers, get out of sorts, excited, and even ill, if obliged to change the habitation, and if the new one is not perfectly satisfactory. A newly-acquired parrot, again, needs a much longer time to settle down, and is much more difficult to tame and teach, if not provided from the commencement with a thoroughly comfortable cage.

A good parrot cage should fulfil the following requirements: 1. It must afford abundant space for the bird to have the necessary motion (this will be discussed more fully later on). 2. The best shape is a simple square, slightly vaulted at the top, without any projections, curves, flourishes, or such like decorations. 3. The cage for every parrot, but especially for every large parrot, should be entirely of metal.

The most ordinary form of cage for single speakers is the simple square, not even vaulted at the top, and only slightly rounded at the sides, made of strong tinned iron wire; mostly with wooden socles, and over the floor, at about an equal level with the socle, a grating also of strong wire. This cage has many defects. First, it is, as a rule, too small; then the food and drinking vessels must be hooked inside, which, in the case of a parrot given to biting, is very dangerous; finally, the wire grating and socle, together with the drawers (both the latter being usually of wood), are worse than useless. The "Ornis" Society of Bird Fanciers, in Berlin, had cages made for the accommodation of the parrots at its exhibition, which I may recommend as model cages (Fig. 1). Such a cage gives abundant room for movement, for it is 2½ft. high, and always 17in. in length and breadth for the Grey Parrots, the Amazons, Cockatoos, and all parrots of similar size; while for the larger species, up to the Macaws, it must naturally be increased proportionately in size; and for the smaller down to the Brotogerys and Undulated Parrakeets, it must be made smaller. The upper part is made of strong tinned wire, ⅛in. in diameter, and 1½in. apart. The socle, drawers, and floor, are made of tinned iron plate; the latter may consist, for greater convenience in cleaning, of a wire grating. The above-mentioned wire grating over the floor is

abolished, first of all because the bird may break its leg in it, also because the dirt gathers in it in an offensive way; but chiefly, because every parrot feels the need of stretching itself upon the ground, and bathing in the sand. The zinc drawer must also be easy to push in and out, so that the excretions may daily be scraped off, and the floor freshly strewed with dry,

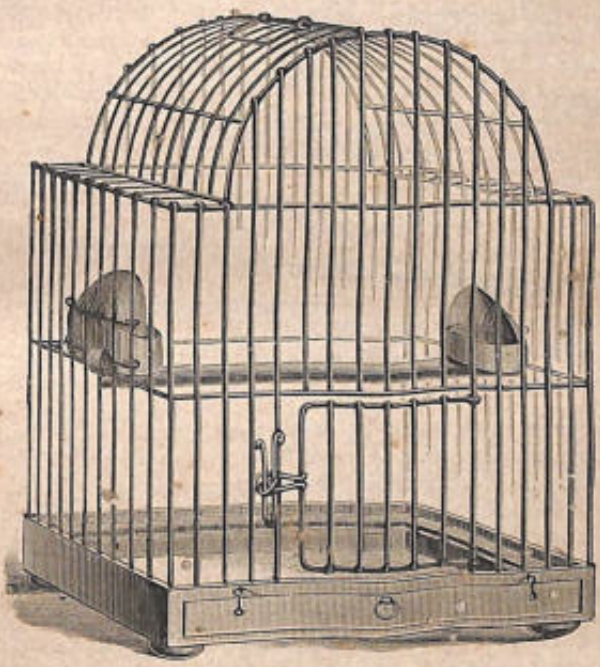

Fig. 1.—Cage of the Ornis Society of Berlin.

clean sand. These movable drawers must be fastened outside with holdfasts or strong hooks, so that the mischievous parrot cannot open them. The socle should always be of a good height, at least 2¾in. broad, otherwise the parrot will make the room very dirty by scratching out sand, &c. The door must be wide enough to allow of the bird being taken in and out easily,

about 6in. or 7in. in width. It is mostly constructed to fall down from above; but, as this is very inconvenient, it can also be made to open sideways; in any case, it must fasten securely with a long hook, or a spring holdfast. Almost every parrot, especially the larger ones, whether it be from weariness, wantonness, or mischief, employs itself busily in breaking off anything that is not firm and secure in the cage, and particularly in bursting the fastening of the door.

The perch needs much attention. In order that it may not be gnawed, it was formerly the custom to cover it with thin iron plate; this, however, caused the bird much suffering, for, in the first place, it soon became so smooth that the parrot could with difficulty keep its position, often fell down at night, and suffered much from the continual exertion of holding fast; secondly, it brought on corns and blisters to the feet by the pressure of the hard metal; and thirdly, being a good conductor of heat, it gave the bird cold in the feet and stomach, and thus caused disease. By a suitable arrangement there is now introduced, on each side of the cage, below the food and drinking vessels, an iron ring, or a socket of strong zinc, and in this the perch is firmly wedged. For the perch, a piece of fresh stick, of not too hard wood, with the bark on it, should be chosen, and, as soon as it has been gnawed, it can, without difficulty, be replaced by another. If a stick without bark should be chosen, it must not be too smooth, but somewhat rough. A practical arrangement has lately been adopted for the food and drinking vessels; an arched or hollow cover is soldered on, which encloses the food, so that the parrot cannot throw out and scatter the seed, &c., nor sprinkle the water about, as it can from the open vessels. These are pushed in, and, at the back of each, there is a wire grating, which prevents the bird escaping when the food and water are being changed. A perfectly satisfactory parrot cage should not be wanting in one particular which I consider most important, that is, a short comfortable perch in the upper part of the cage, to which the bird, when enjoying itself, can climb, on which it can sit comfortably and stretch out its wings. One unpleasant result of this is that it dirties the bars of the cage from this position; this must either be at once cleaned, or a convenient drawer, with sand to catch it, must be introduced below the high perch. The ordinary much-used swing in the cage is, in my opinion, not only super-

fluous, but even injurious, because it disturbs the comfort of the parrot and lessens the space necessary for it to stretch its wings.

Cages for the lesser and smallest of the parrots, which are kept singly as speakers—also for the Alexandrine Parrakeets and the Undulated Parrakeets—should resemble in all the arrangements the pattern cage of the "Ornis Society," of which an illustration has been given, with this difference, that the smaller the bird, the lighter should the wire frame be, the narrower the space between the wires, and the thinner the wire used; also, for those kinds which do not gnaw, the socles and the drawers may be of wood, because parrots are known to belong to those birds which do not make much dirt. On the other hand, the wooden drawers are inconvenient for the bathing, and, therefore, a close grating must always be placed under them, instead of a floor, upon which the bath should be placed while the drawer is taken out. The space left open by the absence of the drawer must be closed by means of a trap door. In these cages it is more convenient if the door closes by sliding down along the wire bars. The drinking vessels should always be of glass or porcelain. The ordinary flower-pot saucer of stone ware, or, preferably, of porcelain, is the most suitable bathing vessel for all kinds of parrots; or a common spittoon may be used. As these parrots do not alone climb, but, as a rule, like to fly and hop, the cage must have three perches, one high up, and the other two in the middle.

Many amateurs wish their speaking bird to appear as an ornament in the household decoration, and have, therefore, the most splendid cage possible. In consequence, one sees many thoroughly unpractical cages, either round or of cylindrical, conical, or turreted form, made of brass plate or wire. Apart from the fact that such cages cramp the bird, or, at least, give it by no means sufficient space and comfortable quarters, many dangers lurk in them. The metal, as is well known, forms verdigris if not kept most carefully cleaned and dry; and further, the stuff used for cleaning endangers the health and life of the bird.

Cages of iron wire, either tinned or overlaid with zinc or other metal, may also form a pretty ornament for the room, and may, if wished, be painted according to fancy. Care must, however be taken to use a hard and quickly drying lacquer, and that the bird is not put into the cage until the colour,

which must, of course, be quite free from poison, be perfectly dry. Of late a colourless lacquer has come into use, with which the shining brass may be washed over, and then dried so hard that the parrot's beak is not able to scratch it off, and, at the same time, the brass cannot form verdigris. If the unnatural round shape be set aside and the cage be built in the "Ornis" or some other practical shape, brass may be chosen as the material. If this metal be used without the lacquer and the cage requires cleaning, the bird must always be taken out during the operation, and not put in again until the polished bars have been thoroughly rubbed dry and clean with a soft linen cloth. Most cleaning stuffs, especially the so-called oxalic acid, are very poisonous.

Many amateurs prefer, instead of a cage, to have the parrot kept on an open stand in a ring or hoop. The arrangements of this kind known at present are, unfortunately, on the whole, quite as unpractical and useless as many cages; indeed, they may, as a rule, be considered an article of luxury. They are to be had of different kinds, and the worst of them are made entirely, even including the perch, of the hardest polished wood. What was said before on this point may here be repeated—the perch must always be easily replaced.

The simplest parrot stand is a frame of about the height of a man, consisting of a column of hard polished wood, with a knob on the top, and below, above the foot, a contrivance about twenty-six inches long and twenty inches broad, in which is placed a movable drawer, the floor of this being thickly strewn with sand, as in the cage. On the sides of this are fixed the food and water vessels, while on the column a stair-like climbing pole of about six inches in width is attached, reaching up to the upper perch, about twenty inches long. The perch must not be too high, but passes at about the height of 5ft. 6in. through the column. At the ends of this perch the food and drinking vessels may be placed more conveniently than below. The vessels must always be most securely fastened, because the parrot sitting free thus employs itself all the more busily with them. They are most suitably arranged as drawers pushed into a leaden case, open at the top, the projecting edges of which, bent inwards, hold them firmly.

More frequently one sees parrot stands with hoops or rings (Fig. 2). With the exception of the perch, they are, as a rule, made entirely of metal. Respecting the material and the

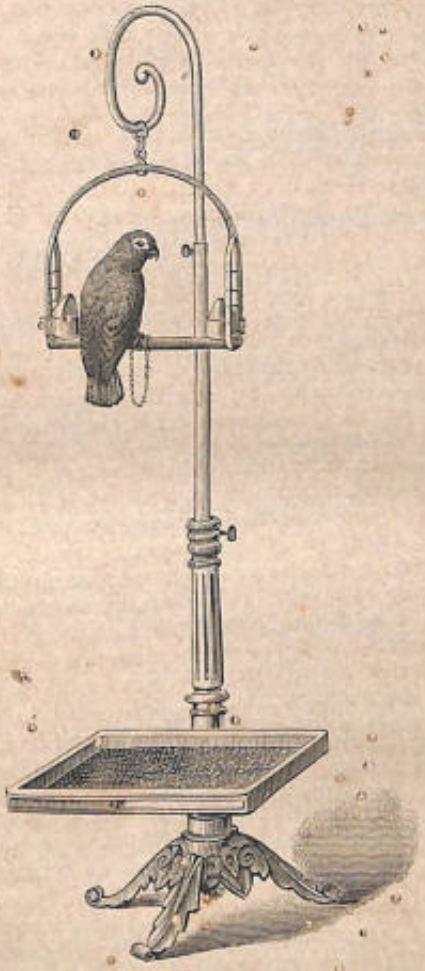

FIG. 2—PARROT STAND.

form, taste and fancy may here reign supreme, so long as two chief conditions are fulfilled—firstly, that the hoop is roomy in proportion to the size of the bird; and, secondly, that the drawer (as described above) is arranged below the perch. The parrot stands which do not satisfy the two last demands I exclude as altogether useless. Those luxurious stands which, instead of answering these practical requirements, are furnished with fish globes, and even a cage for a smaller bird, are not only far from comfortable for the occupant, but, on the contrary, really involve cruelty to animals. The hoop for a parrot of the size of the Jacko must have a perch 2ft. long, and the arch must be about 20in. At the sides are placed the food and water vessels, concerning which and the perch the previous remarks hold good. I must mention the following advantages which I consider as essentials, although they are often neglected: First of all, every such stand should have an arrangement for climbing, by which the bird can get down to the drawer, so that it can, daily, for at least an hour, paddle about in the sand, and satisfy an instinct of which I shall speak again later on. If such a contrivance be wanting the bird is made miserable, and it is by no means sufficient for it to have a firm seat above the hoop, for I consider this to be absolutely necessary in all cases, even when the hoop does not swing so loosely as to be set in motion by a slight touch. The natural motion of climbing is always much missed, and by the introduction of the upper perch an endeavour should be made to supply it as far as possible. The parrot stand shown in the illustration is so arranged that by means of two screws it can be lowered even to the foot, in order to render it possible for the bird to reach the drawer with the sand. The chain may also be lengthened by half, if it be made from light metal, so that the parrot may not be hindered in any way from walking over the whole space of the floor of the drawer. This stand has no special upper perch. If the bird wishes to climb, and the chain is long enough, it can easily clamber on to the upper arch of the stand. The chain, then, must be not only long enough, but it must have a swivel in the centre, so that the bird may turn in any direction and not get entangled. There may also sometimes be a perch screwed on to the arch at the top, and, finally, the chain may be so arranged that, when the parrot is again seated quietly in the hoop, the half may be removed, so that the foot has not to bear the whole weight continually.

The owner, according to his judgment, may take off the hoop and hang it in the open air, or on the branch of a tree; but there must always be a spring fastening on the hook, so that the parrot may not itself loosen the hoop and fall down with it.

The most important, and, at the same time, the most difficult matter, is the chain and the leg ring by which the parrot is fastened to the stand or hoop. All the parrot chains at present known in the trade are unsuitable. The choice of metal for it is, above all things, critical. Copper, brass silver, and others are dangerous, owing to the formation of verdigris, and, like iron, are almost too heavy, so that such a chain annoys the bird by its great weight on the foot. Aluminium, which has lately been introduced, offers too slight a resistance to the beak, and would be cut through by it as by pincers. Upon these rocks are wrecked the hopes of finding any other suitable metal. There is yet a greater difficulty with regard to the foot ring, for it presses with the hard edge on the place where it is fixed—that is to say, on the side of the foot where the chain hangs down—and causes painful indurations of the skin, or else rubs it sore, and the fastening can scarcely resist the restless activity and really artist-like skill of the parrot in the use of its beak. Moreover, until the bird has become accustomed to the stand, it is likely to free itself, and do all sorts of mischief in the room, or, perhaps, escape, never to be seen again.

There is nothing further to be said now than repeat the invitation which I have already addressed, in my above-mentioned "Manual of the Care, Training, and Breeding of Cage Birds," to those who are skilled in this matter, to consider how to obtain suitable foot chains and rings in which all these evils are avoided, which are thoroughly firm and secure, and, at the same time, so light that they do not painfully burden the bird. It is certainly best, when a speaking parrot is accustomed to the hoop and ring, that it should never designedly be left unchained. For this there are many reasons, and there is, at least, always the danger lest the bird, getting a sudden fright, or otherwise being disturbed from its rest, might fly away through the open window, even if it had sat in the same room for ten years or more.

CHAP. IV.—FOOD.

Improper Feeding by Wholesale Buyers and Importers—Natural Food of Parrots—Corresponding Food in Captivity—Evils of Careless Feeding — Dietary Requisites — Lime — Drinking and Bathing Water.

SUITABILITY of food, always of surpassing importance, is obviously imperative in the case of the more valuable speakers. With reference to what I have already stated in a previous chapter, I will, first of all, once more point out that the wholesale buyer and importer have, up to the present, acted wrongly in this matter, and thus from the beginning sown the seeds of sickness or death. The large speakers are fed in their native places, after they are reared, with chewed maize, either with the same grain in a dry, hard condition, with or without the addition of ship-biscuits, or with bananas and other tropical fruits, as well as with boiled maize, boiled potatoes, &c., and many kinds—especially the lories—get soaked East Indian rice. Everyone who brings over parrots feeds them according to his own notions and knowledge, and it may well be imagined that one and the same species is frequently managed in many different ways. In this lies the cause of manifold evils, and there is, indeed, a most pressing necessity that the entire import trade in parrots, and their management on the way, should be regulated with uniformity. The wholesale dealers must make an effort in this direction by demanding strong, healthy birds, and this can only be obtained by having the food and management from the first arranged suitably and naturally. It may be objected that this is not possible until the mode of life and sustenance in a state of freedom is fully known. The attainment of this object would require considerable travel and exploration, which, unfortunately, would have to extend to very distant regions. I can, however, most decidedly—as it is—express the opinion and repeat it, that the present modes of importation of all—and especially of the larger parrots—are, without exception, more or less pernicious.

It is unquestionable that all the last-named birds, when in freedom, live chiefly on farinaceous seeds, to a slight extent on oily seeds, and partly, also, on the fresh and delicate parts

of plants. Therefore it is right to feed them in the new condition mostly with maize, together with some oats and the addition of some well-baked wheaten bread, not sour. The maize may be given either raw or boiled. The latter must be done in the following way: It must be soaked until a grain taken out will receive the impression of the finger-nail; then the water must be poured off, and the grains rubbed dry with a coarse linen cloth. The wheaten bread, say, French bread, or Vienna rolls (not milk bread), must be stale and dried till hard, then broken in pieces and moistened with the smallest possible quantity of water. When it is perfectly soft the crust should be taken off with a knife, and the crumb alone squeezed, so that the whole is soft and crumby, but not sticky or doughy.

Mr. Karl Hagenbeck was the first to point out, and I entirely agree with him, that all mashy food—that is to say, moistened bread, boiled maize, and the like—are injurious to these parrots, and their use, be it for a short time or for long, is dangerous.

They should, therefore, be accustomed to feed only on hard dry maize—horse's tooth in preference to pearl—and oats, both, of course, in the very best condition, also on well-baked, dry, not fresh, yet by no means old and dry, wheaten bread, which must on no account be mouldy, smell damp, or taste sour; instead of this, the well-known ship's biscuit may be given dry and unmoistened. The grains of maize, when they are given dry, must first be scalded with boiling water to kill any possible animal or vegetable parasitical vermin; of course, it is necessary, after the water has been poured off, to rub them with a clean cloth and put them in a hot place to dry well. With this simple food one may, in my opinion, keep the larger parrots constantly in good condition and avoid all evil or danger.

As soon as the parrot has become quite at home and thoroughly healthy and strong, one may begin to give it some refreshing additions in the shape of fruit. This should be carefully done with a cherry, grape, a piece of apple, of pear, or the like, according to the season, all, of course, in the best condition. One must, however, at first carefully notice the excretions of the bird, and, if they are slimy, watery, or, indeed, even loose, the giving of fruit must be at once discontinued. Maize in the head and in a half-ripe condition,

in a milky state, as it is usually called, may be given with equal or even better effect, the same precaution being used. As occasional tit-bits for the large talkers, hazel or walnuts, the so-called Brazilian earth nuts, or even sweet almonds, may be given, but a rule should be made that all such things should first be carefully tasted, to make sure that no bad, decayed, kernel or bitter almond be amongst them; the last-named is well known to be a poison, and it may here be incidentally remarked that parsley is considered poisonous for parrots. All southern fruits, such as bananas, dates, figs, oranges, &c., should not be given at all to the large speakers, or only with the greatest caution, each fruit being carefully tasted first. In the same way raw or boiled carrots, raw or roasted sweet chestnuts, melons, raisins, and different berries should be avoided, for one cannot be sure whether they may not be hurtful; on the contrary, perfectly ripe, fresh, or well-dried roan or service berries may be given without hesitation. Green food I consider superfluous for the members of this group; salad, or leaves of the different cabbages, are also dangerous. However, twigs to gnaw may always be given, at first of dry, moderately-hard, wood; when quite accustomed to this, the bird may have branches with bark, buds, or leaves, preference being given to willow, poplar, all kinds of fruit trees, birch, beech, and even pine woods. I consider the very hard woods, containing tanning acids, as less suitable. Every parrot needs wood to gnaw, firstly, as a natural employment for its beak, and, secondly, as a fresh and suitable nourishment. An experienced parrot keeper, Mr. C. Dulitz, has pointed out the true inclination for animal or vegetable fat, and, in accordance with this opinion, many amateurs give, every day, a little piece of bread not too thickly spread with butter. Mr. Hagenbeck also allows a small piece of light cake, not too fatty, but I prefer to give some good light dry biscuit; now and then a little piece of the best hard sugar cannot do any harm. It is probably well known that all the large parrots eat with avidity all kinds of human sustenance, roast meat, vegetables, potatoes, and, indeed, strange to say, not only sweet things, but also either salted, pickled, or peppery delicacies, and cases have been known where a bird, thus fed, has kept in excellent health and lived many years; but, as a rule, valuable parrots are lost by the use of such unnatural food. The first consequence is frequently a miserable ailing condition, in which the bird itself plucks out its feathers; of

this I shall speak further in the section "Diseases." In other cases various evils occur, only too often an illness in the whole body, so that the poor creature must die miserably of internal and external ulcers. It is not yet fully determined whether parrots which are kept separately in a cage really need animal food, such as mealworms or ant grubs. The African traveller, Soyaux, says that the Grey Parrots are known in West Africa as destroyers of the nests of other birds, and there are many examples of the different kinds of parrots in freedom being carnivorous; but who can positively decide whether this is a natural or an abnormal occurrence?

The above directions as to food hold good in general for the following genera: Grey Parrots, Black Parrots, Amazons, Noble Parrots or Eclecti (but for the last-named more fruit is advisable), all Cockatoos, and the Macaws.

All medium-sized parrots are fed with oats, hemp, canary seed, and millet; the smaller kinds solely with the three last-named seeds. No hemp should be given the latter, because it is said to be injurious to them; whereas for the former, as well as for the larger species, it is considered one of the best articles of diet, especially if they are very weak. As an addition, there are various other seeds—many kinds of millet (white, Senegal, and the different kinds which grow in the ear)—which may be given, as well as dry or fresh ears of corn, besides sunflower, dyer's saffron, and other seeds. With the exception of the oats and other grain, the latter, as well as all kinds of grass seeds, should rather be given in ears and panicles; also heads of maize, half ripe. Oily seeds should never be given before they are fully ripe, for they may thus be very injurious, hemp especially. Some species, such as the large Alexandrine Parrakeet, eat dry maize, like the great parrots. To most of these it is absolutely necessary to give some sweet fruit daily, not merely occasionally, as with the former. On the whole, the instructions given on p. 29 also hold good here; but there is less need to be anxious about giving southern fruits if only the precaution be taken to taste each separately. Green food is also a necessity for these species, and I recommend, besides the common chickweed, mignonette and tradescantia (spiderwort); cabbage and salad should never be given to these parrots. All green food must, of course, be in the best condition—clean, dry, not wet with dew or rain, on no account mildewed, or beginning to decay—and care should

be taken that no leaves in such a condition be among it. Many of these species are bred in captivity*, and then they require, in addition to varieties of seed and fruit, some animal food, such as ant-grubs and mealworms. When kept only as speakers they should seldom or never get this food. With respect to tit-bits of all kinds, and the gnawing of branches or sticks, the directions given for the large parrots may be exactly followed.

The genera to which the foregoing remarks apply are the following: Long-winged Parrots, Cockatiels, Long-billed Parrakeets (Henicognathus), Noble or Alexandrine Parrakeets, Wedge-tailed Parrakeets, Thick-billed Parrakeets, Slender-billed Parrakeets, Flat-tailed Parrakeets, and Undulated Parrakeets.

The members of the remaining group, the Lories, must be differently fed, in accordance with their food in freedom. It is less possible in their case than in that of any other species to give the natural nourishment, for they are said to subsist partly on extremely sugary tropical fruits, and honey from the blossoms, and partly on insects. Of the substitutes which have been given them, and, I am pleased to say, with the best results, I will speak at greater length when describing this genus fully. Here, however, I may state explicitly that many of the articles of diet given satisfactorily in hot regions, especially soaked Indian rice,† boiled potatoes, tropical fruits, such as bananas, &c., very often—indeed, almost invariably—cause sickness and death. On the contrary, experience has taught us that the Broad-tailed or True Lories, and the Lorikeets, can only be considered hardy in this country when they are quite accustomed to live on seed, principally canary seed, but also on the different kinds of millet and oats. Some, such as the Blue Mountain Lory, eat seed by preference. Besides the two genera mentioned above, the Cropped-tailed Lory, or Nestor, may be here included. Although it has been asserted that it must get raw meat, it has been proved that it will keep in perfectly good health on the same food as its fellows.

Having given so many directions upon this subject, it is only necessary for me to repeat now that all the articles

* Directions for the breeding of parrots may be found in Russ' "Manual for Bird Fanciers" (Handbuch für Vogelliebhaber," Vol. I.; Magdeburg).

† The rice should be soaked in water, and then parboiled, the water poured off and the pot with the half-cooked grains put in a hot place, and allowed to steam until fully cooked. Rice thus prepared is said to taste better, and to be more wholesome, than when wholly cooked in water.

of food which a parrot gets must be in every respect in perfectly good condition. All seed must be full grown and well ripened, free from dirt and foreign seeds; not too fresh (hemp especially), or it may cause diarrhœa; nevertheless, not dried up nor rancid. It is also important, with regard to fruit, that it should not have been plucked too soon, then ripened, and probably become sour, but well grown, and ripened on the tree. Nor must it be in a soft state, over ripe and "squashy," but fresh and well flavoured. Careful attention must be given that in winter it be not icy cold, but only given after it has been cut into several pieces, laid in a warm room, and acquired the temperature of the surrounding air. If white bread be given, it must be well baked, as said before, without leaven, and without, or with only the least possible quantity of barm, not doughy or unevenly baked, but spongy and porous. It is also as important that it be not moistened in too much water, or for too long, lest all the nourishment be taken away.

The directions hitherto given should serve as a general guide for the feeding of the parrots here treated of. Of course, I shall enter into fuller particulars of the special management and diet of each species when I speak in detail of each.

All birds, and therefore all parrots, the single speaker, as well as the breeding couple, need lime to eat. Animal lime, in the form of the cuttlefish shell, appears most suitable, is eaten with relish on account of the salt contained in it, and is very wholesome. It is necessary, however, to avoid giving it to newly imported parrots, as it may cause immoderate thirst, and the drinking of much water, to which they are unaccustomed, tends to bring on diarrhœa. A whole shell, or at least a large piece, should be wedged between the bars of the cage. The next best thing is calcined oyster shells; lime from old walls, and chalk, may also be recommended. Sand—good, clean, dry, fine sand, not dusty (silver sand is best) is—not only one of the best means of cleansing the cage, and keeping it clean, but it is also a necessity for health, as parrots, like other birds, swallow small stones to aid digestion.

I will return later on to the subject of the Grey Parrots, Amazons, and others, as I have already mentioned, being often kept entirely without water. I may, however, here incidentally mention that I consider such treatment to be thoroughly injurious, and would impressively warn anyone against buying a parrot which has been kept without water to drink. The common

custom of giving bread soaked in tea or coffee is, in my opinion, most mischievous, for, on the one hand, the small quantity of, it may be, warm fluid cannot satisfy the natural craving, and, on the other, mashy food overloads the stomach, disturbs the digestion, and thus either makes the bird ill, or is insufficient to maintain it in good health for any length of time, especially if, as is often unfortunately the case, it is entirely or even chiefly, fed on it, or if it lives on as much as it can get of this food, and refuses the more wholesome corn diet.

With regard to drinking water, there are special precautionary measures to be attended to. Just as a human being may become more or less seriously ill if he drinks water from a strange well, without becoming gradually accustomed to it, so is it with birds, particularly with parrots. They should, therefore, at first only be allowed cold water which has been boiled, and not too much at a time, at most five mouthfuls at once, and that about twice daily. By degrees the boiled water may be mixed with common water; it must not be quite fresh or ice cold, but should have stood about an hour, and have acquired the temperature of the room. Even when the parrot is fully acclimatised it should only get lukewarm water. The smaller species are mostly accustomed to an abundance of drinking and bathing water; they must, therefore, get it, but always with the precaution that it should be lukewarm.

CHAP. V.—TAMING AND TRAINING.

Susceptibility of Parrots to Teaching—Taming by Force—Aptitude for Taming and Teaching—Conditions to be Observed—Signs of a Talented Bird—Practical Directions for Training—Differences of Capability in Different Parrots—Mental Endowments of the Parrot—Understands the Application of Words.

THE predilection and capability of parrots for imitation are not limited to human words, but extend to all sorts of other sounds. With such gifts a bird may be extremely valuable,

but it may also become just as unbearable and worthless. It gives the owner pleasure when the parrot learns to pronounce or even sing words, to pipe or whistle airs; indeed, the songs of other birds are often repeated more or less faithfully; but how unpleasant is it when it imitates the screaming cries of all the other birds which it hears, repeats all sorts of shrill sounds, such as the crowing of cocks, the barking of dogs, the creaking of doors, the whistling of steam engines, the crying of children, &c.! It must, therefore, be the task of the trainer to divert its attention from all disagreeable, and to accustom it to pleasant sounds.

Although the love of parrots in all their varieties is surprisingly active and wide-spread, yet it would assuredly be much more extensive if many real or supposed drawbacks did not present themselves. Many people have a dislike to parrots on account of their "amphibious-like climbing"; "their deceit, cunning, and ill-temper"; "their dreadful noise"; in short, on account of many disagreeable habits; but, according to my firm conviction, founded on years of experience and exact observation, all such complaints rest solely on prejudice, ignorance, or on the fault of the owner. The case is yet worse if, as Mr. Dulitz says, the parrot keeper happens not to be a lover of birds. The beautiful bird, in its pretty cage, serves only as an ornament to the room. The talent of learning to pronounce words at first gives pleasure, but after the charm of novelty has worn off the bird only serves to amuse visiting friends and acquaintances. It becomes more and more indifferent or wearisome to its owner; its care is left to the servants, and its fate becomes joyless and pitiable, indeed it soon grows hateful to its owner. Almost every parrot, particularly if highly gifted and lively, wishes to love and to be loved—a fact which the amateur should never forget. Whoever cannot fulfil this chief condition of the parrot's well-being does very wrong in buying such a bird. All mistakes in training, instead of producing the good results which training ought, go, on the contrary, to bring out objectionable qualities. A grave truth is contained in the saying that "He who is not himself well instructed should not presume to instruct others"—be it man or animal. Nevertheless the training of our most favoured friends in the animal world, of our most intimate companions among domestic animals, is, as a rule, left in the hands of rough people, often not even good tempered, and generally incapable of doing their work well.

Thus we see domestic animals spoilt—dogs, good tempered and obedient by nature, changed into wicked biting curs; cats, deceitful and treacherous; parrots, stupid, ill-tempered, and insufferable screamers. This is the more to be regretted because a well-trained animal of any kind is undoubtedly an estimable companion to man, capable of being to him, under certain circumstances, a friend in the fullest sense of the word. I will, therefore, endeavour to give directions how to obtain this most desirable result.

Up to the present, experience has given us no tokens by which we may know at once with certainty whether a bird is more or less talented. Of course, the eye of a connoisseur may to some extent judge whether a parrot will turn out well, and prove gifted, easily tamed, and teachable; cheerfulness, quickness, a bright shining eye, attention to all that is going on &c., show the probability that we have "a good bird" before us; but we cannot be quite certain of it, because there are many examples extant in which these signs have proved deceptive, and the parrot has been stubborn and stupid; whereas another, which sat dull at first, has afterwards developed into an excellent speaker. Difference of sex may in this respect be regarded as unimportant, and, in spite of many opinions to the contrary, makes no difference in talent; certainly, up to the present, nothing is known in support of such opinions as regards most of the large kinds. It is probably very generally known that the larger parrots live to a great age; in a state of freedom probably all, with the exception of those which fall a victim to accident, and in captivity all those which enjoy suitable treatment. Naturally, the older a bird when caught, the more difficult it is to acclimatise and train, and the first thing to remember, in buying a bird which one wishes to teach to speak, is that the younger it is when purchased, the more amenable it is to teaching. Yet many cases are known in which the so-called "old screamers," that have little value in the trade, have become excellent speakers, though, of course, only after they have been years in captivity. As an example I may mention the Grey Parrot belonging to Mr. Neubauer, principal of the Grammar School at Rawitsch, which, when nearly twenty years of age, after being in his possession three years, began to speak, and learnt more than two hundred words, in three languages—German, Polish, and French. Every teachable and easily tamed parrot becomes naturally more and

more docile as it becomes more accustomed to its abode, and the more it learns the less frequently is the disagreeable cry heard.

Dealers in a small way of business tame parrots, as a rule, by force, in a similar manner to the Indian women. Equipped with strong doeskin gloves, the man seizes the bird by the legs, pulls it out of the cage, without heeding its screeching and biting, holds it firmly on the forefinger of the left hand, and strokes it with the right until it yields to its fate and becomes tame and quiet. For this courage is before all things necessary, besides skill, perseverance, patience, and indifference to the great pain which, in spite of the gloves, the bites of the bird cause. The pincer-like form of the parrot's beak produces, when it bites hard, bruises and bleeding wounds, which are very painful and difficult to heal. Great precaution must be taken against treacherous biting. It has been noticed that, as a rule, the small parrots bite much more frequently and more viciously than the large, for the latter really only bite when they are much enraged, but then, of course, very dangerously. In order to break them off the habit of biting they should be struck with the forefinger on the beak whenever they attempt it. I may here remark that almost all parrots, especially the larger species, are dangerous to other cage birds near them, or which may perhaps fly round the room in which they are.

Amateurs will also often follow the above mode of proceeding, because, although it requires great exertion, yet it leads to the desired end more quickly than any other course. Mr. Meyer, the Comptroller of the King's Household, in Berlin, relates how he has often done it; shutting himself up with a totally untrained Grey Parrot in a room, and treating the wild, struggling, screeching, and apparently uncontrollable bird in the manner described, for days if necessary, from morning till night, and even on into the night, until its timidity and defiance were at last conquered and it became tame and docile from weariness and hunger. Taming in this way must be regarded as one of the most difficult tasks in bird training, and I would not therefore recommend it to all amateurs. For if other modes of proceeding be slower and occupy more time, yet they have the advantage of establishing more friendly relations between the man and the bird, whereas this breaking in certainly cannot render the human heart mild and gentle. It also appears to

me that a bird which has been thus put under control by such forcible means must always have the impression of slavery; on the contrary, those which are trained in love and friendship are always naturally more attached to their master.

Taming and training can only be carried on without difficulty and with the best results when the teacher is really possessed of a certain aptitude for it. There are people who can perform a difficult task of this kind with astonishing ease, while others, on the contrary, although they may have greater experience and much more knowledge, find it always difficult.

When it is observed, however, that all kinds of birds are at once fearless, and even confident, towards the one, and with the other, even after years of intercourse, never become quite quiet and tame, one must involuntarily accept the supposition that it does not depend on the conduct nor manner of treatment, but from the very first must be founded on the outward appearance. It is said that parrots, like children, are frightened at a bearded man, whereas, at least in general, they show more affection to ladies and children. It is also said that male parrots are more amenable and loving towards women, and *vice versa*, females towards men, but conclusive observations with regard to such statements have not yet been made.

In order to train a bird rapidly and completely, the following conditions, dictated by experience, must not be forgotten. The seat must never be higher, but always lower than the position of the human eye. It must always be placed so that the caretaker, or trainer, be between it and the light. The bird must always (especially in the case of the larger parrots) be rendered as far as possible helpless, for the more it finds itself in human power, the more easily it will become tame, and at the same time the sooner amenable to instruction.

It should, therefore, at once be put in a very narrow cage, or chained upon a stand. Both proceedings, however, require caution; even the taking of it out of the travelling cage must be set about very carefully, and should never be done by the owner himself. This also applies to the putting the chain on the foot. (See *ante*, p. 18).

It must always be remembered, in dealing with even a perfectly tame parrot, that, as a tropical bird, it has many peculiarities which demand care and attention, lest it should suffer in some respect. A highly gifted parrot, more than any other creature, is liable to be made ill or even to die from the effects

of mental emotion; and this not merely from terror or fright, but also from longing after a beloved master, who petted it, and then sold it, or after a feathered companion. It may also arise from anger and rage in consequence of a quarrel, either with some person or animal. It is necessary when giving food, as well as in approaching at any time, to be quiet and friendly, and to avoid, before all things, frightening it by sudden and hasty entrance. In all intercourse with it, especially in the training, no violence or outbreak of temper should be allowed on the part of the teacher. Parrots may also be spoilt by excitement. They should never be teased in joke or earnest, nor unnecessarily threatened, or punished. Punishment, as an aid to education, should only be used under certain conditions, and by a trainer who perfectly understands their character, and who has extensive experience in these matters.

In taming, undisturbed quiet and an equable kindly temper are the chief conditions of success. At first, for a week or two, the bird should be left unnoticed to itself. Its natural sagacity will soon tell it that no danger to its life is intended, and as soon as it has left off its stupidly shy behaviour, and disagreeable screaming, it begins to observe its surroundings. As it becomes more acquainted with them it develops surprising sharpness of intellect. It knows each one who is friendly inclined towards it, and those who have offered it any real or supposed affront, and thus soon distinguishes between friend and foe. It learns to esteem its benefactor, and grows astonishingly fond of him. It is better not to use any forcible means; but to avail oneself of some knack in order to tame the bird rapidly and perfectly. After having taken away its drinking water for some hours, it should be held out to it, as well as some especial tit-bit in order to accustom it to taking food from the hand. It easily becomes used to this, comes voluntarily on the finger, allows its head to be scratched and stroked till at last the owner may take hold of it and caress it.

Dr. Lazarus, one of the most experienced connoisseurs and keepers of parrots, suggests the following somewhat unusual way: Whenever the newly imported parrot with constant gentle treatment (and often in spite of that it is only after the lapse of months) begins to be quiet and fearless, ceasing to screech at every approach, even coming to the bars and stretching out its head, though still very shy and nervous, then one may by degrees venture to stroke the beak or head cautiously with one finger.

Now the attempt may be made to scratch the head while saying a few words coaxingly, especially such words as it already knows; this should be done in the twilight, or in the evening by gas light; soon it will be pleased with such caresses, and will even put its head into its master's hand. These attempts should always be made through the cage bars, through which one should be able to reach easily (see *ante*, p. 21). The whole arm should never be put through the cage door, for this always makes the bird violent. Only after a long time, when it is quite accustomed to be stroked through the bars, and is no longer shy, should one begin to open the cage door and let it come out, and, then, not unless the room is quite quiet; it must also have plenty of time to make up its mind, even if it be some hours, before it comes out, and climbs on the roof of the cage. Very soon it will look for this freedom with impatience. While it is out of the cage the owner should devote a great deal of attention to it. If it be tame enough to take food from the hand, catch a finger in its beak without biting, or push its head into the hand while one scratches the plumage with the other, then it is time it should learn to perch on the hand. If it should take too long a time to coax it to do this voluntarily, the bird must be accustomed by forcible means to do it (see p. 37). In the course of a week it will certainly be got to do so of its own free will.

Before I enter upon the practical directions for training, I must first pronounce my verdict against an extremely improper, but unfortunately widespread, prejudice. This is the so-called "loosing of the tongue," which many people, however, consider absolutely necessary, and which others, for their own advantage, declare to be desirable. I had, in common with other writers on this subject, firmly believed that the idea that a bird's tongue must be loosed in order that it may learn to speak, only found favour among uneducated people, and, therefore, had supposed it to be unnecessary to speak at length about this superstition; whereas now I find that it is much more general than one could imagine. I even heard lately that it was taught in a young ladies' school of considerable standing. I also, from time to time, receive inquiries on this subject. Therefore, it must now be distinctly declared that it is not necessary to loose the tongue of any bird, but that it is great cruelty to animals, and only brings profit to those men who speculate on the simplicity of others.

The bird should be tamed and taught to speak at the same time. If it be already tame, it may be put at once into a roomy cage, but if not, this should not be done for a week or two.

Let us now turn our attention to the teaching, for which, above all things (besides the conditions spoken of on p. 38), a friendly footing with the parrot, and loving sympathy with birds in general, together with quiet, are necessities. Every morning, on first going into the room where the parrot is, and every evening, as well as several times during the day, one word first, very distinctly pronounced, should be said to it clearly and sharply, and, if possible, all drawling, lisping, or other mispronunciation avoided. A full-toned word, with the vowel "a" or "o," and also with a hard consonant, such as "k," "p," "r," or "t," should be chosen, and hissing sounds avoided. The trainers in the seaport towns and the sailors on board ship usually teach the parrots the words "Jacko!" "Cockatoo!" "hurrah!" "Polly!" &c., and afterwards "good Cocky!" "pretty Poll!" and others.

A Grey Parrot which I had had for a long time, which I considered valueless as a speaker because it would not learn anything, and with which I had determined to make an attempt at breeding, suddenly pronounced the words "The doctor!" which the servant had often used in announcing a stranger. Experience teaches us that every parrot learns more easily from a female voice, which probably sounds more melodious to it.

While the parrot is learning to speak it must be treated kindly, so that it may gain confidence, and, in particular, it must not be terrified, as it is apt to be at first on the approach of anyone, nor made nervous and shy, but kept quiet and attentive, in order that it may intelligently heed the teaching it receives. This should not, indeed, consist of merely training the parrot to repeat certain words, but everything said must awaken in its mind a distinct perception. For this it is necessary that it should have some conception of place, time, space, and other circumstances. "Good morning!" should be said early; "Good evening!" or "Good night!" late. "How do you do?" and "I am glad to see you!" on arrival, and "Good-bye!" on going away. One should knock, and then call out "Come in!" count out tit-bits to the bird. "One, two, three!" or names, "Nut, almond, apple!" Later on,

it should be praised when it is good and obedient, and scolded when it is obstinate or will not obey. An intelligent bird soon comprehends such things, and it is often really astonishing with what sharpness and certainty it learns to know and distinguish under such circumstances. In teaching the parrot to sing one or more songs, or to whistle airs, care must be taken that only one key be made use of, whether it be taught by the mouth or by means of a flute.

The parrot should at first be taught easy words, and progress by degrees to more difficult ones. Every day, or at least from time to time, all that the bird has hitherto learnt, almost from the very beginning should be repeated, and only when it is quite certain that it has all this by rote, or when it has been recalled to its recollection, should new words be repeated to it. In doing this, there must be no prompting while the bird practises, if it stop in the middle of a word, or a wrong double-syllabled pronunciation of the word may be learnt. One must wait always until it has ceased to speak, and then pronounce the word or sentence clearly once more. In breaking off the habit of uttering unpleasant or disgusting words and sounds, one must be careful not to laugh at them, for that would only incite the bird to pursue its evil ways the more eagerly, just as is the case with children. It can only forget them if they are never repeated in its presence, and a yet better plan is to interrupt it with some desirable expression the moment it begins to pronounce them. Constant practice is necessary, not only for the bird which is being trained, but also for finished speakers; and it must always be borne in mind that being at a standstill in any kind of learning means falling off, and that, therefore, with but scanty practice, the most highly gifted parrot is in danger of "going back," that is, of forgetting or confusing what it has learnt, or even of becoming stupid, and for this reason declining greatly in value. Teaching gradually step by step will certainly insure the parrot's becoming a good speaker.

Of course, the talent of different birds varies considerably. One may learn with difficulty and be able only after long practice to pronounce a word, but then may remember it and always retain what it has been taught; a second catches up words quickly, and even learns them at the first repetition, but forgets just as quickly; a third learns rapidly and also remembers; a fourth learns little or nothing; a fifth

may have no talent for imitating words, but may, nevertheless, whistle airs excellently; a sixth imitates cock-crowing, the barking of dogs, the creaking of the vane, and all sorts of extraordinary sounds with the most deceptive exactness, but cannot pronounce a single articulate word. It is most important that the teacher should find out betimes the peculiar talent of each bird, and in this train it to the highest possible perfection. As a general rule, it may be said that amongst all the different kinds of birds which learn to speak there is probably not a single one which is not capable of learning something, and, again, a parrot which learns some sentences soon, or even after some days' teaching, usually becomes a good talker.

But, apart from imitative talent, there are other considerations. Above all, every parrot which is to be taught must enjoy perfect health and strength and have careful management. Further, as said before, the greater or less degree of tameness must have much influence. It is said that some birds never learn to speak clearly, but always pronounce with a lisp or rattle, or hoarsely; but, in my opinion, this is always much more the fault of the teacher. There is no reason whatever to be discouraged if a parrot repeats the first words taught it indistinctly, in spite of their having been most clearly pronounced to it. This is always the case at first, with very few exceptions, and only after shorter or longer exercise is it able to pronounce words fully and clearly.

It must be remembered that even the fully acclimatised parrot is very susceptible of any change, whether it be in food, attendance, treatment, or habitation. It may from such a cause become so excited and vexed as to sit for a long time silent and melancholy. This may be the reason why most speaking parrots, when sold and passing into the hands of a stranger (as mentioned on page 16) do not at first give any signs of their valuable peculiarities. Hence also the unfortunate fact that at a bird show it is scarcely possible to give the premium to the best speakers. At least, there is always the danger lest the judge commit a great injustice; for while one accustoms itself rapidly to its new surroundings, another—and perhaps a much more valuable bird—obstinately refuses to utter a single word. Moreover, many highly gifted and well taught parrots never speak in the presence of a stranger, and as they naturally decrease greatly

in value in this case, great importance must be attached to teaching every parrot not to be in the least disturbed by the presence of a new comer.

Amongst the dealers and parrot trainers of the seaport towns a mode of proceeding is frequently adopted which I must at least mention, even though I can by no means recommend it. The cage is covered during the whole time of training with a cloth, so that the parrot—like young canaries in the box in which they are taught to sing—sits almost in complete darkness, and every disturbance and distraction being thus prevented, the whole attention of the bird is directed to its talking lessons.

I consider it much more advisable to place a tamed trained speaking parrot beside a wild and frightened bird. All large parrots, especially the short-tailed species, are really clever birds; they soon see that no harm happens to their companion, imitate its quietness, and often lose their wildness in an astonishingly short time. They also learn from it much faster than from the trainer to imitate human words, &c. Thus, a Mealy Amazon Parrot, which was clever in speaking and singing, taught a Blue-fronted Amazon to speak just as well. The Baroness von Siegroth gave a Grey Parrot a young Amazon to teach. It repeated words to its pupil for a time, and when the latter did not learn them the Grey Parrot cried out, "Blockhead!" and turned away contemptuously. Later on, when the Amazon had learnt several things, partly from its companion and partly from its owner, the two parrots held conversations early in the mornings, when they thought they were unnoticed. The lady heard the following conversation one morning. Rosa (this was the name of the Grey)—"Have you any money?" Coco (this was the Amazon), in a sorrowful tone—"No." Rosa—"Rosa comes from ——" Coco—"Africa." Rosa—"The Emperor William!" Coco—"Long life to him." Rosa—"Battalion!" Coco—"March." On the other hand, in opposition to this last recommendation, it is necessary at the beginning of the training to avoid placing two or more untrained parrots in the same or adjoining rooms, for they disturb each other, and encourage each other to scream.

Whoever has an excellent speaker, especially a Grey Parrot, a large Levaillant's Amazon, or some similar parrot, often becomes (it may be involuntarily) quite enthusiastic about the talented

creature. In this way many authors have allowed themselves to be carried away, so that they have given most extraordinary accounts of the accomplishments of these speakers. "Only too often," says Rowley, speaking on this subject, "has the endeavour been made to ascribe to the bird the complete and clear understanding of the sentence uttered, without considering that the partiality of the owner deceives him only too easily —for the wish is father to the thought." Such an exaggerated notion may be avoided by adhering simply to facts. It must always be recollected that the parrot has understanding, but not reason, that it can think and draw conclusions, but has not the power of perceiving, as we do, psychologically. It would be very unjust to maintain that the parrot merely chatters words mechanically, without ever having any idea of the meaning. How coaxingly it begs for some tit-bit, how angrily it can scold if it does not get it, how joyfully it chatters when its master returns after a long absence, and cries welcome to him. When anyone goes away, it will always say, "Good bye!" and not "I am glad to see you!" and when someone knocks it will say, "Come in!" When it wishes for something, it will say, "Please!" and "Thank you!" when it receives it. How attentively it heeds its lesson, and how well it can express its pleasure when it has learnt something new. These are facts which cannot be questioned, and which can be confirmed by everyone who has observed these birds closely. Indeed, it is true that the parrot is not merely raised by the gift of speech far above other animals, but that in mental talents—in which respect the dog alone can be compared to it—it is nearly allied to man.

I would also direct attention to the fact that as a parrot progresses in learning it at the same time increases greatly in value. A Grey Parrot, or one of the so-called Amazon Parrots, which may be bought in a raw condition, for 20s., 24s., 30s., 45s., to 60s., can be sold for double the sum when it speaks a word or two, and will fetch £10 when it can say some sentences, or even much more, say from £15 to £50, when taught many things.

One of the great advantages of parrots in general as cage birds is the small amount of attention which they need. All who have considered how simply and inexpensively these very valuable birds can be managed, must agree with me in this. A further peculiarity of parrots, especially of the larger

species, which naturally increases the value, is that they live to an extraordinary age. It cannot, of course, be known what age they attain in freedom, but in cages there are examples known, particularly amongst Cockatoos, Grey Parrots, Amazons, &c., in which they have lived much more than a hundred years.

No further directions for parrot training can be given, nor are they necessary; for whoever has the inclination and ability for it will certainly be able to teach any talented bird by following the directions I have given.

CHAP. VI.—PRESERVATION OF HEALTH.

General Comfort—Dangerous Influences—Effects of Draughts, Excessive Heat, and Foul Air—Overhanging of the Cage—Care of Plumage—Bathing—Moulting—Play of Wings—Attention to Feet—Description of Perch.

Every lover of speaking parrots should regard it as an especial problem how to obtain for such birds as comfortable an existence as possible, to procure for them pleasures of all kinds, and to protect them from all hurtful influences. For this not only a suitable cage is necessary, but sufficient food of the best quality, attentive and affectionate treatment, and also the most careful attention to health. The last requires, above all things, that the bird be protected from all dangerous influences, from draughts, damp, cold, rapid changes of temperature, too great heat (artificial warmth as well as burning sunrays), steam or dust, air filled with noxious gases, or otherwise rendered injurious, from bad or unsuitable food, impure water, uncleanliness, and neglect of all kinds. I also include tobacco smoke, although experience teaches us that a parrot may become accustomed to the atmosphere of a busy inn, impregnated with smoke and vapour, and live in it long.

A speaking parrot, even after it has been years in our possession, and is therefore fully acclimatised, should never be placed at an open window, even in calm warm weather, because there is always a draught under these circumstances, and this is invariably injurious to the bird. If it be desired to take it into

the open air—and this is indeed very beneficial—it must be gone about with the greatest prudence. In the first place, the weather must be warm and calm, and then a place must be chosen where the bird will be protected from currents of air as well as from the direct glowing rays of the sun. Moreover, night air and fog must be avoided. Often enough a bird falls ill with influenza or inflammation of the throat and lungs without the cause being in any way apparent. Then assuredly a cold draught has caught it, which has probably rushed in from an adjoining room when the door was opened, or which pours in through some unnoticed chink in the door or window, and blows straight to the spot where the cage stands. It has not been observed that the opening and shutting of every door produces a draught which often, at a considerable distance and quite unexpectedly, does much harm. Therefore the situation of the parrot's cage or stand in the room must be chosen with great care.

Parrots, like all cage birds, suffer most in the morning, while the sitting room is being cleaned, when they are exposed, not only to draughts, but to damp dusty air and rapid changes of temperature, when icy cold air streams in, and the bird is not sufficiently protected. Covering the cage even with a very thick cloth is not sufficient; the cage should always be taken, while the room is being cleaned, into another room of equal temperature. A cold, much more severe than one could suppose, and, from that cause, all the more mischievous, is often produced by some one coming out of the open air, or even from a cold room, and going at once close to the cage, as one is apt to do, without thinking, when giving food. If the parrot becomes in this way suddenly and seriously ill without any apparent cause, it is put down to the "delicacy of such birds," without considering that such would not be the case if it received proper treatment and were reasonably accustomed to circumstances.

Too great heat has a most injurious influence, especially in a badly-ventilated room, whereas most parrots can bear a low temperature, even as low as 21deg. Fahr., if rapid variations be guarded against. The best temperature for all birds is that of an ordinary sitting-room, about 65deg. Fahr.

Many who keep a parrot hang a cloth round the cage of their favourite during the night. It is well to do so in the case of newly-imported, and consequently unacclimatised, birds, or with

birds of a species which is known to be weak and delicate, or with very valuable birds. It may also be done if the bird stands in a room which becomes much lower in temperature during the night, or in which the parrot would be disturbed by a number of persons coming and going. But on no account must this be overdone, for it is very apt to make the bird become delicate. Therefore, a thick woollen cloth must not be chosen, or, if such be considered absolutely necessary, a thinner one should be taken for the summer. I recommend sackcloth, or carefully cleansed sacking of stout hemp or jute. These have the advantage of not being too warm in summer, and yet of being sufficient to keep out the cold in winter. Moreover, they are especially suitable for the purpose, because the bird cannot pull off threads and fluff, which may so easily be done from woollen or cotton materials, the swallowing of these often causing disease.

The plumage needs great care, and this it should get in the case of all cage birds, but particularly parrots. One must see, in order to believe, in what a miserable condition our feathered friends from the Tropics arrive. Ragged, frequently almost featherless, sometimes bleeding in several places, the end joints of the wings beaten off by continual uncontrolled flapping, bleeding, or even festering, with the hard firmly-fixed stumps of feathers; the lower part of the body and the feet, sometimes the whole body, very dirty; or, when in better condition, with better plumage, yet the feathers of one, or usually of both wings, and even of the tail, very much cut. Now at once to set about a thorough course of treatment for the plumage of this pitiable new-comer would be the surest method of killing it; it must be done gradually, and with the utmost caution.

After the parrot has quite settled down, and become to some extent acclimatised, for which about four or six weeks will be necessary, attention must be paid to the plumage. The dealers moisten the whole body by means of the mouth, either merely with lukewarm water, or with some to which about a fourth part of rum or brandy has been added. The amateur can do this by means of a syringe or dusting brush. The alcohol and water must not be allowed to get into the eyes and beak. The cage should be placed in a tub, and syringed from all sides, so that the whole body is well wetted. Or, if preferred, on a hot summer's day, the bird may be put out in a heavy shower of rain. In any case, the

slightest cold must be most carefully guarded against, and the parrot must be placed in a room of a temperature not lower than 65deg. for several hours—indeed, until the plumage is thoroughly dry. A bath may be given once a month; in warm weather more frequently. The bird soon becomes accustomed to it, and takes an evident delight in it.

Medium-sized and smaller parrots need only be bathed by compulsion when they will not voluntarily take a bath; but for this purpose it is better to stick a leafy branch well wetted into their cage, for they mostly prefer to moisten their feathers on the wet leaves. As soon as they are quite accustomed to a bath, it should be put in the cage as often as possible, in summer on every warm day, and at other times when the room is thoroughly warm. Before putting in the bath the sand must be taken out of the drawer and the latter covered with paper. After the bath it should be well dried and again strewed with fresh sand. The bath alone, however, does not nearly include all the necessary care of the plumage. In the first place, the opportunity, at least, must be given to every parrot to paddle in the sand and bathe its feathers in it; most of them do it very eagerly. The sand must possess the qualities mentioned on p. 33, and be perfectly dry and free from dust.

A very great difficulty in the care of the plumage is the removal of the stumps of feathers which have been broken or cut off. Experience shows that most parrots, especially the larger ones, when in captivity, pass through no regular moult, but that the salutary change of plumage often does not take place for years. As a rule, there is nothing for it but to pull out the stumps of the feathers by force. For this, of course, great caution and care are necessary. From one to three stumps should be drawn out with a little tweezers about every four or six weeks, first from one wing and then from the other, and afterwards in a similar way from the tail. This must be done adroitly and quickly, and care must be taken that the bird be not pressed or hurt in that or any other part of the body. If it should, nevertheless, bleed, the injured place should be moistened with a mixture consisting of one part of tincture of arnica to twenty parts of water. It may here be remarked that severe bleeding may be staunched by dipping the part in a mixture of liquor ferri sesquichlorati, one part to one hundred parts of water, and then covering with freshly-burnt lint of pure

linen. One must carefully guard against catching hold firmly and tightly of any bird, parrots included, and must handle them as little as possible. Above all things, one must never pull out or break off a newly-sprouting feather with a still bleeding quill; for by this, on the one hand, the plumage is spoilt, and, on the other, there is danger of severe hæmorrhage and weakening. It is, of course, advisable that the drawing of the stumps, as well as all other painful or unpleasant operations of the kind, should not be done by the owner, but by some stranger, especially when the bird is newly imported or only lately acquired. This person must be thoroughly trustworthy, not rough and unskilful, and, if possible, accustomed to such operations.

Before I enter upon the actual diseases of parrots I must again notice the subject of moulting, or change of feathers, before mentioned, which may, at least, under some conditions, be regarded as a disorder. Whereas our native birds are known to moult, more or less, regularly every year, this process fails with most parrots, as I before remarked, and it cannot yet be determined whether this is natural or the result of captivity. In any case, the parrot-keeper must take it into consideration. In speaking of the care of the plumage, I have given directions how to remove the old stumps of the feathers, which would otherwise remain fixed, probably, for years. This must be done not only for the sake of appearance and to obtain the renewal, as soon as possible, of the wing and tail feathers, but it is also absolutely necessary for the restoration and preservation of health. If, owing to the captive state, the parrot retains the injured plumage too long a time, many dangers may arise, and, by the plucking out of the feathers, it is sought to induce an artificial moult.

It must not be forgotten that the feather on the other wing, or on the other half of the tail corresponding to the one which has been pulled out, will fall out of its own accord, so that it would be an unnecessary trouble and torment to the bird if one were, for example, to pull out the first three pinions on each wing at the same time.

If, however, an old parrot maintains an irreproachable plumage for years together, without renewal, it is by no means necessary to produce an artificial moult; it is much better that its feathers should receive only partial treatment. This includes,

above all things, careful physical attention in general, besides regular, abundant, and especially nourishing food, and the observation of all the other rules for management which I have already given. I may mention that the change of plumage goes on more slowly and with greater difficulty in the case of emaciated, weak, or old birds, and, therefore, at the commencement, particularly if it be artificially produced, the parrot must be well nourished; the best hemp seed, eggbread or biscuits, also a teaspoonful of fresh ant grubs every day, a teaspoonful of good wine, and perhaps, also, from one to three, or at the most five drops of malic acid or tincture of iron, in the drinking water, or with the wine upon biscuit, may be highly recommended; finally, a warm dry lodging and occasionally a bath.

In the plumage of the large parrots down often grows to a great extent, and, in consequence, apart from the necessity of movement in itself, every parrot must have a cage as large as possible, so that it may, by flapping its wings, subject its whole body thoroughly to the air. In case the cage, as only too often happens, is not sufficiently large, the parrot must be let out every day for a longer or shorter period, and then be accustomed to flap its wings well upon the perch in the upper part of the cage, as described on p. 22. If one has to deal with a wild bird which bites, and which cannot be let loose from the cage, or with an old stager which will no longer come out of its own accord, and which, not being accustomed to it, becomes very terrified when taken out by force, it is best to blow through the feathers with a little hand bellows or an indiarubber syringe. Even if it be very frightened on the first occasion, yet it will soon get used to it, and after a short time it will hold out its feathers voluntarily to the artificial wind. If the down be not removed at all it may interrupt the action of the skin by stopping up the pores, and thus cause boils, internal disease, or extreme irritation, which latter often leads to the unfortunate habit of self-plucking.

A well kept bird of any kind should never have neglected feet, for if they are dirty, covered with filth, sore, or festering, they not seldom cause disease and death. Cleanliness, dry sand, and frequent baths are the best means of keeping them in order. Above all things the parrot needs a perch completely in accordance with nature. (See p. 22.) Neglected feet should be cleaned with a soft brush, warm water, and soap (catching

cold must be avoided), and then smeared with glycerine, diluted with water, one part to ten, or with the best olive oil. The claws rarely need to be cut, because with parrots which have sufficient opportunities of climbing they do not grow too long. When it is necessary it must be done with great caution.

CHAP. VII.—DISEASES.*

Signs of Ill Health—Influenza—Catarrh in the Air Tubes, and Inflammation of the Mouth, Larynx, and Throat—Inflammation of the Lungs—Windpipe Worm or Larynx Worm—Diphtheria and Croup—Inflammation of the Bronchial Tubes and Lungs—Tuberculosis—Digestive Disorder—Flatulency—Inflammation of the Stomach and Intestines—Poisoning—Purging—Costiveness—Typhus—Blood Poisoning—Dropsy—Intestinal Worms—Emaciation—Choking and Vomiting—Disease of the Vent Glands—Diseases of the Ovary—Diseases of the Liver and Spleen—Heart Diseases—Diseases of the Brain—Diseases of the Eyes—Gout, Rheumatism, and Lameness—Wounds—Burns—Fractures of the Bones—Abscesses—Diseases of the Beak—Diseases of the Feet—Diseases of the Plumage—Table of Medicines, with Directions.

I HAVE already admitted that the diseases of birds is to me a difficult point to deal with. I am not skilled as a professional medical man to give scientific descriptions, and I am too conscientious to enter upon so important a subject in a superficial manner. Until of late years this department of the practical management of birds was strangely neglected, and only very recently has it been treated in a systematic and scientific manner, in the work of Dr. Zürn ("The Diseases of Household Birds," Weimar, 1882). While, therefore, in my former works, especially in the "Manual for Bird

*At the conclusion of this chapter the reader will find a list of the prescribed remedies, with directions for preparing and administering the same. The numbers indicate the remedy which should be given in each case.

Fanciers," vol. i., in speaking of diseases, I entirely confined my statements to the results of my long experience, and both grounded the diagnosis and prescribed the treatment upon it, I will now extend my remarks by, as far as possible, introducing the scientific descriptions of Professor Zürn. I must, however, warn amateurs, keepers, and breeders, that the chief endeavour should be to guard against disease which it may not be possible to heal, or which can only be cured with great difficulty, and, with this view, I have given the preceding instructions upon the "Preservation of Health."

When a parrot bristles its feathers, particularly on the back of the head and the neck, yawns often, and shakes its head, or sticks it under the feathers, and shudders or trembles as if cold, the case is very ominous, and should warn the owner carefully to watch the bird. Neither the peculiar grinding of the beak which is often heard when the parrot is uncomfortable, or as the result of a bad habit, nor yet the bristling of the feathers on the neck, are generally signs of much importance. The chirping sound uttered now and then, when quiet in the evening, by a parrot which, to all appearance, is quite healthy, is, however, more serious, and is often followed by expectoration, coughing, snoring, heavy breathing with open beak, and the yet graver symptom of running from the beak and nostrils; even a continuous moisture of the latter requires immediate attention.

The principal indication of the state of health is in the condition of the excretions. In a thoroughly healthy parrot they consist of two parts, a thickish dark green and a thinnish white substance. Whenever both parts run into one another, or one predominates, when the excretion is all greenish-grey, slimy white, or watery, the bird is no longer quite healthy. Any severe internal disease of parrots is difficult to cure, because it is hard to make a proper diagnosis for each bird, and to find out which of the great organs has been attacked with the disorder, and what the evil effects may be which are produced on it. Professor Zürn deserves our thanks for the manner in which he has described a great many such diseases, stated their symptoms, and prescribed remedies; nevertheless, I am of opinion that it is difficult, indeed scarcely possible, even for an experienced bird fancier, to discover those signs of sickness in the living bird, and consequently not less difficult to subject it to the appropriate

treatment. The last-named difficulty is unfortunately the greatest, for the disease and its remedy may be perfectly understood, and yet it may not be possible to use the latter, because the bird will not take it voluntarily, and, if force be employed, becomes so excited that greater danger arises. In severe internal disease, the compulsory administration of medicine should be avoided as much as possible; yet it is but seldom that a sick parrot is so docile as voluntarily to take what is unpleasant.

INFLUENZA (COLD IN NOSE, THROAT, AND MOUTH).—*Symptoms:* Sneezing; slimy yellow discharge from the nostrils, which become encrusted; rolling or shaking the head, discharge of slime. *Treatment:* To be kept dry and warm, and inhale tar vapour (84); smear inside with good grease; rub beak and throat externally with a solution of chlorate of kali (37) (Zürn); cleanse the nostrils and the beak with a feather dipped in salt water, and then moisten them with oil of almonds.

CATARRH IN THE AIR TUBES (ALSO INFLAMMATION OF THE MOUTH, LARYNX, AND THROAT). — *Symptoms:* Hoarseness, coughing, rapid breathing, and rattling in the throat. *Treatment:* To administer something sweet, such as honey, sugar candy, or pure liquorice juice; a mixture of sal ammoniac (76), half, or a whole, teaspoonful several times daily; extract of dulcamara (19), a whole or half a teaspoonful twice daily; an inhalation of mild tar or pyroligneous vapour (30 and 84). Only lukewarm or tepid drinking water should be given, and the mouth, far back into the throat, and the nostrils, should be smeared with a solution of salicylic acid (73). The bird experiences relief if kept in a warm, moist atmosphere; several times daily lukewarm water should be sprinkled round it, and the room kept at a temperature of 72deg. to 85deg. Fahr.

INFLAMMATION OF THE LUNGS.—*Symptoms:* Difficult, short, rapid, or wheezing breathing, with open beak, hot breast, melancholy, want of appetite, perceptible fever, painful coughing, discharge of yellow phlegm, sometimes streaked with blood (Zürn); a chirping, gasping sound to be heard, particularly at quiet moments in the evening. *Treatment:* Warm, moist air, as above; according to Zürn's prescription, two or three pills of

carbonate of ammonia (5) or purified nitre (77) every three hours daily. The remedies for cold in the air tubes should also be given when the inflammation of the lungs is catarrhous.

WINDPIPE WORM OR LARYNX WORM (*Syngamus trachealis, s. Strongylus Syngamus*) is one of the most mischievous of parasites for cage or yard birds. It resembles a leech in shape, cylindrical, but pointed towards the end, of a reddish colour; the male is ·15752in. to ·1969in., and the female ·47256in. to ·51194in. in length, and from ·01969in. to ·023628in. diameter. The eggs are cylindrical, and from ·0043318in. long and ·00141768in. diameter. With a strong cover to its mouth, which acts as a cupping-glass, it bores into the mucous membrane of the larynx or windpipe, singly or in numbers, causes redness, swelling, accumulation of thick stringy phlegm, and, by this, as well as by its ever-increasing bodily size, causes suffocation. *Symptoms:* Peculiar cough, throwing the head about, want of breath, open beak, gasping for air, and discharge of phlegm. *Cause:* The sick bird has eaten the phlegm discharged by itself or some other bird, in which innumerable eggs of the parasite may be found. *Precautionary measures:* The strictest isolation of every fresh arrival, as well as of every sick bird, and the most careful watching; good, dry, airy quarters, and the utmost cleanliness. When the visitation appears as an epidemic, the cages and walls must be scrubbed with warm water and soap, or with a solution of carbolic acid (49). The food and drinking vessels must also be thoroughly scrubbed. *Treatment:* Examine the larynx, and take out the worm by means of tweezers (Zürn); rub in pure spirits of turpentine or benzine; give creosote vapour (54) to inhale, and administer half or one teaspoonful of pure linseed oil.

DIPHTHERIA AND CROUP (DIPHTHERITIC-CROUPISH INFLAMMATION OF THE MUCOUS MEMBRANE) is caused by vegetable parasites, called gregarinæ.* *Symptoms:* Coughing, sneezing, difficult breathing with open beak, shaking of the head, discharge of sweet-smelling phlegm, difficulty in swallowing, gasping for air, and increasing shortness of breath, together

* Gregarinæ are microscopical living creatures, which have of late been regarded mostly as vegetable organisms. They appear in masses and occasion severe symptoms of disease in men and animals.

with snoring and rattling, growing dulness, sitting on the ground with drooping wings and closed eyes (at the same time nearly always catarrh in the bowels and watery, slimy excretion); then trembling, shivering, and thirst. The seat of the disease is in the mucous membrane of the mouth, throat, larynx, the air tubes, the bronchial tubes, the intestines; also in the membranes of the nose, the ligatures and cuticle of the eye. From the nostrils flows a yellow, slimy, clammy fluid, which hardens into a dark yellow or brownish crust, the eyelids swell, and adhere together. The illness usually lasts two or three weeks, or, it may be, sixty or seventy days. *Preventative Measures:* Examine every freshly received bird, and isolate it for the purpose of noticing its condition. Strictly isolate every sick one, immediately destroy the bodies of those that die, and carefully clean the cages and vessels with a solution of carbolic acid (49). *Treatment:* As a rule, the diseased bird is lost, and the chief efforts must be directed to prevent any infection, which may be caused by the least touch of the secretions of the parts attacked. Administer a solution of carbolic acid (43); and smear or sprinkle, by means of a dusting brush, the diseased parts of the membrane with the same (43). The incrustations must be softened with good grease, and not pulled off forcibly; a solution of nitrate of silver (28) is used for smearing, and then the parts washed with a solution of common salt (51), tincture of iodine (33), and, for the eyes, a solution of salicylic acid (73), a solution of vitriol of copper (55), and a solution of tannin (82). Internally, one may give chlorate of kali (36), one teaspoonful three times daily, and smear with the same (37) externally.

Inflammation of the Bronchial Tubes and Lungs is often produced by fungous parasites. *Symptoms:* Hoarseness, snoring, rattling breathing, fever, want of appetite, great thirst, then rapid and great emaciation, and finally diarrhœa. *Duration:* Six to eight days, often two months. *Preventative Measures:* Inhalation of a weak tar vapour (84); the most extreme cleanliness, and the isolation of every suspected bird. *Treatment:* Inhalation of tincture of iodine (35); but very few recover.

Tuberculosis.—Of frequent occurrence not only in the lungs but principally in the liver; also in the heart, the sac

of the heart, spleen, kidneys, stomach, ovary, intestines, &c. *Symptoms:* Emaciation, and swellings upon the most diverse parts of the body. It must be regarded, so far as our knowledge extends, as incurable, and, at the same time, hereditary; therefore the progeny of birds which have died of this disease must not be used for breeding purposes.

Disorder of the Digestion.—*Symptoms:* Want of appetite, hard, brown excrement in small quantities; apathy. *Causes:* Unsuitable or bad food, and consequent disturbed condition of the gall and other digestive fluids. *Treatment:* Light food, but little green food, some salt, and tepid drinking water; a teaspoonful of lukewarm Bordeaux wine, with a small piece of sweet almond or walnut, often renders good service. Zürn recommends also an infusion of peppermint (68) or calamus root (39) three times daily, a teaspoonful for a dose; nevertheless I do not recommend this for parrots. In England a grain of cayenne pepper, or an infusion of the same, is given.

Flatulency, also called Windy Swelling, appears as a flat white swelling; is chiefly found among young birds, arises from disturbance of the digestion, and is, therefore, produced by unsuitable, bad, or over rich food; it is caused also by bites. It may be cured, if not severe, by scanty and meagre food and careful pricking of the bladder-like swellings; the air can then be pressed out gently, and the place should be rubbed with warm oil, or, if a large hole has been cut, it should be smeared with collodion (52).

Inflammation of the Stomach and Intestines (Catarrh in the Stomach and Intestines, or Inflammation of the Bowels).—This is unfortunately very common. *Cause:* Stale, or otherwise bad food; icy cold drinking water; cold in the stomach; eating some corrosive or poisonous substance; also too fresh seed, or wet green herbs; as well as, but this seldom occurs, the swallowing of metal, bone, glass, little stones, &c. *Symptoms:* Want of appetite, thirst, choking and vomiting, slimy, and even bloody, excretion, shivering, and weakness; the bird sits continually at the food trough and turns over the food without eating it; often the belly appears swollen and red. *Treatment:* Varies according to the cause. Quiet; warm poultices; also sand, as warm as is pleasant to the hand, which

must be kept at the same temperature; a solution of tannin (82) and Glauber's salt (23) as a purge, two or three times daily. If the stomach be injured by glass or such like substances, mucilage of linseed with a little oil should be given; but it is usually in vain. The parasites mentioned on p. 55 also cause inflammation in the intestines, which shows itself in violent diarrhoea, immediate and extraordinary weakness and rapid death. In order to be assured of the cause, it is necessary to examine the excretions with a microscope. *Treatment:* Hyposulphide of natron (63) twice daily. Zürn recommends a teaspoonful of pure glycerine daily and a solution of salicylic acid (73).

Poisoning in parrots usually arises only from three causes: Bitter almonds; phosphorus from loose lucifer matches; and oxalic acid from the cleaning of the cage. All are due to carelessness, and therefore watchfulness is the only precautionary measure possible. *Symptoms of Poisoning with Bitter Almonds:* Anxiety; staggering; falling, without being able to rise; trembling and cramp. *Treatment:* Dip the bird in cold water, or pour cold water over it; administer spirits of sal-ammoniac (75) or spirits of ether (29) every half-hour, or three times an hour. *Symptoms of Poisoning by Phosphorus:* Draggled plumage, want of appetite, purging, weakness. *Treatment:* Liquor chlori (15) every half-hour; rectified spirits of turpentine (83); and white of egg. *Symptoms of Poisoning by Oxalic Acid:* Staggering, helplessness, cramp. *Remedy:* White of egg and other mucilaginous substances; calcined magnesia (60). It must be remarked that the determination of the cause is in all cases just as uncertain as the treatment, and that there is no prospect of the latter being successful unless it is possible to ascertain that the bird has been poisoned, and how, for there are several other maladies which exhibit similar symptoms. At any rate, when poisoning of any kind is suspected, some mucilaginous coating substance, white of egg, infusion of althea, or linseed, and calcined magnesia (60), may be given with advantage.

Purging (Diarrhœa) arises from various causes, and consequently appears as a symptom in different diseases. It is necessary daily to look to the excrement of every parrot, to see if it maintains the condition mentioned on p. 53; if it becomes whiter, yellower, or more slimy, if the feathers under

the tail stick together, and if the vent looks swollen or inflamed, then the cold in the intestines mentioned on p. 57 exists, and the remedies there given should be applied. If the excretion is whitish-green or chocolate coloured, becoming greener to greenish black, and of a sour, bad odour, if the appetite is quite gone, while the crop continues full, and there is great thirst, then there is severe inflammation of the intestines or stomach, and the bird mostly dies, from whatever cause the disease may have arisen. *Treatment*: Do not stop the purging, keep warm, give rice water, calcined magnesia (60), or other mucilage; when of a dysenteric appearance, accompanied by severe pressing and bending of the hinder part of the body, and even bloody excretions, then give from half to one teaspoonful of castor oil (72) with the mucilage; if the excretions be blackish, half to a whole teaspoonful of red wine, one, two, or three times daily; also laudanum (65) twice daily; also a solution of nitrate of silver (27), one teaspoonful twice daily. The sticky feathers under the tail must be bathed and washed with warm water.

Costiveness may naturally arise from various other diseases, but also from disturbance of the digestion or from intestinal worms. *Symptoms*: Continual effort to void; tilting the hinder part of the body; ruffled feathers; melancholy; and want of appetite. *Treatment*: Above all things endeavour to administer an enema—that is to say, introduce warm oil (castor oil and olive oil in equal parts) by dropping it into the vent from the head of a pin—by this means, after several repetitions, incredibly large masses of excrement pass away. Also a simple water enema may be used by means of an indiarubber ball with a thin glass pipe having a rounded point; administer castor oil with mucilage once or twice daily in doses of one teaspoonful.

Typhus (Infectious Typhoid, called Cholera in Fowls). —*Cause*: Microcosms and bacteria, also microscopical vegetable parasites, which are very contagious. *Symptoms*: Want of appetite, sitting about in a melancholy manner with drooping wings; weakness; severe purging, with excretions of thin yellowish white slime (slimy or chalky purging), which then become greenish, and soil the belly very much, often accompanied with vomiting of a thin greenish fluid; severe thirst, trembling, bristled feathers; also staggering, and convulsions. Duration, from a day and a half to three days, but often for

weeks; with parrots this is unfortunately not seldom the case. *Preventative measures*: Strict isolation of all newly bought birds and of those which have the disease; careful disinfection (17), and the utmost cleanliness. If the disease has broken out, the birds which are still healthy should get a solution of sulphide of iron (20) in their drinking water for about a fortnight. *Treatment*: A similar solution of sulphide of iron (20), one teaspoonful three or four times daily. Recovery is scarcely possible.

BLOOD-POISONING I have already described on p. 9, when speaking of importation, and the reader is requested first to refer there for its causes. The parrots which are subject to it, chiefly the Grey Parrots, arrive in Europe apparently quite healthy, well nourished, cheerful and with bright eyes; but, as I said before, at the latest in eight weeks, and usually much sooner, they are, almost without exception, devoted to death, and die most quickly when they receive drinking water, of which for this reason the dealers entirely deprive them. *Symptoms*: Bristling feathers, especially on the neck; sitting dull and melancholy; a change takes place in the bare skin around the eye, from pure white to a dull bluish or yellowish grey; refusal of food, and often, but not always, vomiting and purging, sometimes only the latter; shortness of breath and staggering, ending in death. Examinations by physicians (Dr. Grun, district physician in Gumbinnen; Dr. Wolf, private lecturer; and Dr. Moritz Löwinsohn, both of Berlin) have resulted in discovering appearances which are caused by decomposition of the blood, namely, dark, thickish blood, not firm, coagulated, numerous dots of blood which have oozed from the lungs, sac of the heart, and covering of the brain; yellow fibrous excrescences on the lungs and the liver; scattered, red, inflammatory spots in the lungs; frequently there are light yellow wedge-shaped hard excrescences on the liver. The latter is often enlarged, decayed, and of a purplish red, or quite pale waxy-yellow colour; there is also catarrh of the stomach and intestines, and at the time of death the symptom of choking, from flow of blood to the lungs, and the venous circulation of the right heart, of the great veins of the neck, and the veins of the soft membrane of the brain. In the decomposed blood there are bacteria of peculiar shapes like balls, sticks, and chains, and these prove beyond doubt poisoning of the serous fluid of the blood. These organisms of

decay, if they are only present in small numbers, can be rejected by the body as soon as it has sufficient oxygen to breathe, as the bacteria of blood-poisoning are destroyed by oxygen, and nourished on the want of it. This miserable disease is extremely poisonous and very infectious, and, therefore, causes the illness of all arrivals as soon as one individual among them is attacked. The excretion may cause infection, even after months (Dr. Grun). *Treatment recommended:* Liquor chlori (15 and 16), milk of sulphur (79), phosphoric acid (69), quinine (14), tannin (82), extract of ergot (21 and 22), salicylic acid (73 and 74), salicylate of soda (61 and 62), carbolic acid (43 and 45), and similar preparations, to be taken internally, or administered by subcutaneous injection; also chilies (50). A dealer in Leipsig claims to have attained the best results from giving yolk of egg, beaten up in a little water. The use of ozone water (66), or the influence of oxygen, according to Dr. Grun's prescription, up to the present gives no guarantee of recovery, and I must repeat my conviction, that all birds which are attacked with this disease are completely lost, and that, unfortunately, up to the present time we have no reliable remedy, nor yet the power to put a stop to this wretched trade (see p. 8). I cannot decide with certainty whether this disease of Grey Parrots is one and the same as the above described sickness, or typhus (infectious typhoid).

Dropsy.—*Cause:* Cold, especially after incautious forcible bathing in the case of the large parrots; inflammation of the peritoneum, probably succeeded by other disorders, such as tubercles in the intestines. *Symptoms:* At first, difficulty in breathing, then the body becomes swollen, and when it is much swelled, a fluid can be distinctly observed in the swollen part. Fortunately this is of rare occurrence. *Cure:* Scarcely possible.

Intestinal Worms.—In several cases of late it has been ascertained with certainty that tape-worms and ascarides exist sometimes in parrots as well as in other birds. The former I have myself found and the latter have been sent to me. No researches have been made either as to the kinds of parasitical intestinal worm from which parrots suffer, nor as to their transmission by contagion. It would also be superfluous to give the symptoms caused by their presence, for emaciation, &c.,

may be produced also by other unhealthy conditions. The only certain test of the existence of these parasites is to notice if they are present in the excrement. Zürn recommends as a remedy fresh gourd kernels, which certainly the parrots like to eat, and fresh areca nuts (6). As to the latter, however, I can say nothing. I advise pure linseed oil (it must not be dirty, rancid or otherwise spoilt) to be given to the affected parrot in doses of one teaspoonful every morning and evening, and in some cases even three times a day. The same advice applies in all other cases of intestinal worms.

EMACIATION OR ATROPHY is in itself no disease, but only a symptom of other disorders, sometimes only the result of some disturbance of the digestion, but usually arises from disease of the digestive or breathing organs, or other part, as from inflammation or suppuration of the glands of the vent. The remedy lies, therefore, in the discovery and alleviation of the cause.

CHOKING AND VOMITING are seen in several conditions of disease, and can only be cured by their removal. However, vomiting often occurs with the large parrots merely from mental excitement, fright, anxiety, &c., and may have but little significance, being only a passing attack. It also occurs when the stomach is overloaded, or after indigestible food has been eaten; but even then it is mostly without danger.

DISEASE OF THE VENT GLANDS (ALSO CALLED THE FAT GLANDS).—These provide the bird with the necessary fatty substance for the maintenance of the plumage, and easily become affected, especially in the case of cage birds. This may be the reason, particularly with the parrots, of the irregular or failing moult (see page 50). Most frequently the glands get too full of fatty matter, and they then become hard or suppurate, so as to resemble a gathering, which is often erroneously taken for pip, and an attempt made to heal it by cutting it open or by foolishly cutting it off, by which the bird is exposed to the danger of losing its life. *Preventative measures*: These I will state at greater length in speaking of "Corpulency"; but above all frequent voluntary or forced bathing may be recommended. *Treatment*: Careful examination, whether the glands contain hard fat or true

pus. In the first case, smear with warm olive oil, two or three times daily; and have recourse to much green food, motion, and careful bathing with lukewarm water. If pus be present, careful puncturation, gentle pressure, and, according to Zürn's recommendation, touching with a solution of boric acid (13). When inflammation of the vent glands arises (this usually takes place simultaneously with purging), remove the nearest feathers, apply a rag with Goulard water (11), and, according to Zürn, cautiously smear the part with a solution of carbolic acid (47); then smear with mild grease, glycerine (25), or zinc ointment (86).

Diseases of the Ovary, of course, occur in parrots; but as no experiences concerning these are on record, nor any remedy prescribed, and as they are unlikely to occur in birds kept singly, I will here pass them over in silence. On the other hand, a parrot kept alone in a cage may often lay one or more eggs; this even happens with some birds regularly every year. Usually this is of no consequence, for even if the bird appears indisposed for a few days, yet it recovers; happily only in rare cases does it become really ill with the effort to lay. *Symptoms:* Heaviness, inclining to motionlessness, cowering on the ground, the hinder part of the body swollen, shuddering from time to time. *Preventative measures:* Administer lime as mentioned (page 33). Very carefully avoid all fright and anxiety, as in any illness; prevent the bird becoming too fat. *Treatment:* Vapour bath, equal temperature, the utmost quiet possible, and careful dropping in of warm oil in the opening of the ovary, as described on page 57; but in this case it must be done with the head of a somewhat larger pin, the cavity being carefully opened as far as the egg, which must, of course, be pricked and gently pressed out.

Diseases of the Liver and Spleen.—The first occur rather frequently in parrots. *Causes:* Wrong or over rich food. In consequence of catarrh in the intestines, the opening which conducts the gall into the smaller intestines becomes closed, from which results stoppage, and the gall becomes absorbed in the blood and causes jaundice. *Treatment:* Glauber's salt (23) as a purgative, and an infusion of calamus root (38), in doses of one teaspoonful; for the rest, a light and sparing diet and green food.

Other diseases of the liver are difficult to recognise in parrots; indeed, only two can really occur—the formation of tubercles in the liver, already mentioned on page 56, and fatty liver, or obesity in general. *Symptoms* of the latter: Laboured breathing, panting, difficulty in moving, hard or thickish excretions. On closer examination the body is found to be completely laden with fat, flaccid inactive skin, full of folds, and probably also large places destitute of feathers. *Preventative measures:* It is best to take the parrot from the cage every day, and let it fly several times about the room; otherwise procure a more roomy cage, with an arrangement for climbing; always give wood to gnaw, and now and then a scanty diet. *Treatment:* The above measures should be used, green food given; if the bird suffer from costiveness, castor oil (72); much movement, yet without the parrot being frightened, and bathing, but very cautiously.

I do not know whether inflammation of the spleen really occurs in parrots; its occurrence among barndoor fowl has been really proved. *Causes:* Often bacteria. *Symptoms:* Sudden illness, trembling of the muscles, the feathers much bristled, evil-smelling, blood-streaked excrement, blood and foam from the mouth and nostrils, convulsive twitching; when in a lesser degree and of slower progress, a bluish colour is seen on the mucous membrane, staggering, formation of swellings or lumps from the size of a pea to a hazel nut, which are hot and painful, and which, when opened, are found to contain a sticky, yellowish, brown, gall-like matter, or a thin, watery humour; there are also reddish-blue blisters on the tongue. *Preventative measures:* The strictest isolation. *Treatment:* A solution of carbolic acid (44), one teaspoonful, at intervals of half-an-hour, give eight or ten times, and brush the tumours over with a solution of carbolic acid (46). The bird is nearly always lost.

Heart Diseases are naturally difficult to recognise in birds, whereas they occur much more frequently than is supposed. Zürn speaks of inflammation of the sac of the heart, and gives as the symptoms, weakness, unsteady use of the feet, laboured breathing, and, above all things, very perceptible and rapid beating of the heart. The sick birds are mournful, sit apart, seek dark corners, tremble, and lie. Death soon takes place. *Treatment:* Experimentally, tincture of digitalis (18), two or three times daily. Besides this there are tubercles or ulcers in the heart, which I have often found myself; fatty heart, and

the contrary, atrophy of that organ, then dropsy of the heart; also ossification of vascular tissues, or contraction of the cavity of the aorta; finally, inflammation of the muscles or valves of the heart, produced by parasitical animalculæ (see page 54, "Inflammation of the Lungs"). Remedies can scarcely be applied in any of these diseases. Zürn gives no further information on the subject.

Diseases of the Brain frequently occur in parrots. If the brain (as well as the heart and the lungs) after death appear filled with blood, either all over or in parts, then we may know that congestion of the brain, or a condition called in man apoplexy, has arisen. *Cause:* Great excitement, terror, anxiety, &c.; too great heat, too much hemp seed in warm weather, and sudden and violent flow of blood. *Symptoms:* Strange manner of holding the head on one side, turning the eyes about, staggering or going backwards, twirling round, a rapid death in convulsions. *Preventative measures:* Averting the above-mentioned influences; hydrochloric acid (78) in the drinking water; scanty diet, and much green food. *Treatment:* Cold water over the head, either with a douche or by laying on it a wet sponge; as a purgative, castor oil (72).

Convulsions, Epileptic Fits, &c., are also the result of disorder in the brain, or other important organs. The parrot suddenly shrinks together, with violent twitching, beating of the wings, or twirling round; or it begins to tremble, totters, rolls the eyes and then the head, falls down, and writhes violently. *Causes:* The same as above; also from being kept in too small a cage; too great heat either from the fire or the sun; seclusion from mate, &c. *Preventative measures:* As above. *Remedies:* Change of food, much green food, and fruit; coolness, fresh air, change of place, and, for the rest, those suggested above. When the attack comes on, take the parrot in the hand and hold it upright, so that it may not bruise and injure itself severely, but may find relief. In doing this, however, one must guard against its bites. I strongly deprecate the customary barbarous remedy of cutting off a toe, or otherwise letting blood. If convulsions only occur once, they are not of great importance; only when they recur should remedies be applied, and, before all things, endeavours made to discover the cause. Not unfrequently the smaller, nimbler

parrots injure the skull or spine on some sharp edge by flying up in sudden fright. *Symptoms:* Staggering, falling down, convulsions, and violent convulsive writhings. Cure is mostly impossible. Alleviate by holding the bird in the hand, or laying it in a basket and covering it with a cloth. Staggers arise either from turning round constantly (as a very active parrot in a very small round cage may do), from injury, striking on a sharp corner, or from living parasites in the brain. *Symptoms:* Holding the head on one side, bending backwards, twisting round, staggering, tumbling backwards, and convulsions. *Treatment:* In the first case use a larger, square cage; in other cases cure is scarcely possible.

Diseases of the Eyes.—The eyes are more or less sympathetically affected by the diseases of other organs; for example, in the diphtheritic-croupish inflammation of the mucous membrane (see p. 55), in which nearly always the cuticle of one or both eyes, the aponeurosis, and even the cornea, is affected, so that the lids appear swollen and stuck together, and the cornea becomes thick. Concerning the treatment, I beg to refer the reader to p. 55.

Swelling and Inflammation of the Cuticle of the eye may also be caused by cold. *Symptoms:* Tears in the eyes, swelling of the lids, avoidance of the light. *Remedy:* Washing with lukewarm liquor chlori (16), or Goulard water (11), or solution of sulphate of zinc (87).

Besides these, Inflammation of the Cuticle or Cornea of the eye may be caused by a blow or bite. *Remedy:* Cool with water; smear with a solution of sulphate of zinc (87), or with a solution of potash and laudanum (71).

Internal Inflammation of the eye, which Zürn has noticed in fowls, may also arise in parrots, and cause blindness (cataract). *Treatment:* Touching the apple of the eye with sulphate of atropia (8). I have several times observed a disease of the eyes in the Noble Parrakeets, which begins with a swelling of the lid, upon which, and even upon the apple of the eye, little ulcers form, so that the eye is destroyed. These parrakeets had the suppuration, which spread over one side of the head, and entirely discoloured it, for years, though

the bird was otherwise quite healthy, for the couple bred with satisfactory results. As a remedy, a solution of nitrate of silver (28) should be used betimes.

Warts on the Eyelids, Swellings or Scirrhus of the Eyelids, and of the cuticle, also occur; they can only be removed by operation.

Gout, Rheumatism and Lameness occur not unfrequently in parrots. Zürn mentions two varieties of the first—festering, and gouty inflammation of the joints, which, however, as far as the parrot fancier is concerned, are very nearly the same. *Causes:* Cold or injury, also sitting upon too narrow and sharp-edged a perch. *Symptoms:* Loss of appetite, fever, swelling of the joints of the wings and feet, which are at first hard, very red, hot and painful, and then become soft and contain a fluid of mingled blood and pus; later on they get hard again; the contents, also, are hard, and resemble gall or cheese. Sometimes, after a lapse of weeks, they heal of themselves, but usually they leave enlargement of the joints behind; in other cases, emaciation sets in slowly, poverty of the blood, pallor of the mucous membrane, then severe purging, and death from exhaustion. *Treatment:* Warmth and dryness; when the swellings are inflamed and hot, cool with Goulard water (11) or vinegar and water; if hard, rub with spirits of camphor (40), or spirits of ants (4), or smear with diluted tincture of iodine (34). Wrap them up also in warm woollen rags; if the swellings suppurate, cut them open, taking care not to do it too soon, press them, and then rub with a solution of carbolic acid (46). Give, in any case, an internal dose of a solution of salicylic acid (73). The useless perches must, of course, be taken away, and replaced by good ones (see p. 22).

Rheumatic Pains, which occur without swelling of the joints and cause painful lameness, and which arise from cold caught from a draught or after a bath, I have cured, as a rule, by rubbing with warm oil and wrapping up the suffering limb in a warm woollen cloth, which must, however, be firmly sewn on. Of course, the invalid must be kept in a warm room. Other lamenesses, which arise from severe injury to internal organs, can only be healed by the discovery and removal

of the cause. As soon as such disease is rightly determined and heals with proper treatment, the lameness ceases of its own accord.

Wounds.—It is astonishing with what wonderful self-healing power Nature has endued birds. It is only necessary to clean and cool even severe wounds with a damp sponge and the place will heal of itself, if only care be taken that the patient is kept quiet. In parrots the injuries mostly arise either from more or less severe bites, from chance cuts, or torn wounds, for instance, caused by a projecting piece of wire or a nail. All bites are hard to heal, because they consist of a bruise and tear at the same time. They should be washed with arnica water (7), or, if worse, with Goulard water (11); then smeared with glycerine (25), or lead ointment (10); this is usually sufficient. If the wound is very deep and bleeds much, lint must be laid on it to staunch the bleeding, after it has been carefully cleaned with a sponge dipped in arnica water (7), or it must be smeared with collodion (53). In the worst cases the wound should be sewn surgically, and this is best left to the surgeon or his assistant; collodion (53) should also be put on the wound when it has been sewn up. Great gaping wounds, which cannot be drawn together, especially torn wounds, after being washed with a sponge dipped in arnica water, should be touched with carbolic acid oil (41), or a solution of boric acid (13). Wounds which heal badly, fester much, and break open again and again, must be cleaned once or twice daily with a lukewarm solution of carbolic acid (48), and then brushed over with a liniment consisting of thin gum arabic and carbolic acid (59), or boric acid (57). If, after the wound has closed, a swelling remain, the latter should be touched twice daily with spirits of camphor (40).

Burns.—A parrot, say, has flown upon a hot iron plate, or is scorched at the door of a stove. Such injuries should be treated as in mankind, with a liniment made of linseed oil and lime water (58) or Goulard's extract (56); in less severe cases with collodion (9), and covered with a thick dressing of wadding to exclude the air, and to prevent the parrot from licking off the poisonous remedy.

Fractures of the Bones of birds, also, heal with surprising

quickness. A simple fracture of the leg above the ankle, which often occurs in parrots, merely requires rest in order to heal perfectly, so that the foot will not be in the least crooked. It is better, of course, to get both ends of the bone into the right position by carefully drawing and pulling them; then to put on them two little smooth pieces of wood (splints), to bind these pretty firmly with a thick, soft, woollen thread, and to smear thickly and evenly over it plaster of Paris, or thick, warm, but on no account hot (joiner's) glue. Hold the bird fast till the glue is hardened, and then put it in a small cage. In about four weeks the bandage may be carefully removed by means of softening with water. If the fracture is in the wing, the feathers must of course be cut away first, not pulled, to avoid pain and irritation. Zürn advises that the place be bound with a woollen bandage, and above this a linen bandage dipped in a solution of water glass or soluble glass, and then sprinkled with common lime. This bandage is said to have the advantage of keeping firm and being easily cut off. For splints, Zürn recommends strips of pasteboard, or, better still, thin Norwegian pine splints.

Abscesses, besides being due to internal diseases, as already mentioned, frequently form from external causes in parrots, as well as in all large birds. First of all it is necessary to examine whether the swelling is hard, inflamed, and hot, or already yellow and soft, and then treat accordingly. Hard swellings should be softened by warm poultices containing some fat; very inflamed swellings should be cooled with Goulard's water (11), and then softened with warm, often-renewed, poultices. A ripe abscess can usually be emptied without danger, with one cutting, and, after being pressed out, it should be covered with a so-called Hamburgh plaster (26); or bound up with bandages dipped in carbolic acid oil (41). The worst disorder for a parrot is an encysted tumour, which forms most frequently in the head, near the beak or eye. It is neither hard nor soft; it is filled with a membranous matter, and becomes very large or works deeper, in any case causing the bird discomfort and pain. As long as it is small or lies loose in the skin, it may be taken off by burning with caustic; a better way is to tie it round tightly with a thin but very firm thread. Encysted tumours, however, are mostly produced by internal disorders of the juices of the body, and local operations,

taken singly, cannot be of much use, as fresh tumours continually arise. The parrot usually dies unless it can be restored by the strictest avoidance of all unnatural food, such as meat, fat, cake, potato, &c. Administering a solution of salicylic acid (73) is sometimes of good service. Dreadful boils, filled with blood in the shape of lumps, sometimes form under the wings of newly-imported parrots which have been badly cared for on the voyage. Concerning these, I beg to refer the reader to the treatment for "Blood-poisoning."

Diseases of the Beak.—All birds are subject to deformities of the beak, which sometimes occur in freedom, but are usually due to the influences of captivity. The parrot's beak is often immoderately long, too much bent, or otherwise misshapen. In most cases such an abnormality is treated lightly, although it usually causes the loss of the bird. If the upper beak grows so far down over the under as to be a hindrance to picking up food, it must be cut back to its natural length, and this is best done by a skilled hand with a sharp knife. It can certainly be done more easily with sharp pincers, but this is more dangerous, as the sensitive, *i.e.*, the fleshy part of the beak, may be thus injured. In any case, care must be taken not to break it off or tear into it, so that splits come in the horn which leads down to the pith, for then it is scarcely possible to heal them; they break open again and again, cause the bird much pain, and prevent it eating, so that it may probably die. Therefore, before being cut, the beak should be rubbed several times with warm oil. A split in the horn should be cleaned once a day with a brush, and smeared with a warm oily mixture. A beak which has been injured, and sometimes even a beak which has hitherto been quite sound, often begins all at once to increase enormously in size, growing an unnatural length, and the point at the same time splitting up in threads. *Cause*: Scanty or improper nourishment of the horny substance, and at the same time some particular irritation. Such a beak may be cut back with a pair of scissors, yet the bird is often lost from it, because the horn of the beak then begins indeed to grow fast, at the same time becoming soft, and either breaks off in little pieces, or bends, and is useless for cracking hard grains. *Treatment*: Natural food, especially give lime and sand; avoid mashy food and tit bits, and take the bird into the open air until the weather becomes cold.

DISEASES OF THE FEET.—When the feet of birds are neglected, inflammation may be set up under the crust of dirt, with suppuration, and larger or smaller ulcers, which may lead to inflammation of the joints, the loss of some of the toes, or even of the whole foot. *Treatment*: If the inflamed foot be at once bathed in warm water, cooled with Goulard water (11), the sore places smeared with diluted glycerine, then thickly covered with the finest starch powder, and this treatment repeated every day, the cure will soon be complete. In obstinate cases lead ointment (10) should be used; or, if the wound be moist, ointment of carbonate of lead (12), but then the foot must be put in a little leather bag, and this firmly tied, because the ointment is poisonous for the bird. INDURATIONS or CALLOSITIES come from abscesses in the joints or from corns. *Treatment*: In the former the treatment should be as above; in both cases the wretched cause, namely, the thin, hard, or otherwise unsuitable perch, should be removed. The corn must be softened by rubbing with warm olive oil, then washed with warm water and soap, and carefully pared with a small knife, but one must guard against drawing blood. If a tough hard thread has got wound round the foot (but this rarely happens to parrots), and by cutting into it has caused inflammation and suppuration, after being softened and washed as above, it must be extracted with the point of a knife, and the foot will heal of itself, if smeared with glycerine ointment (25). Callosities, ulcers, and lameness are often caused by the pressure or rubbing of the parrot's chain; in all cases the ring must be taken away at once, and the parrot, if it may not be trusted to sit on the perch unfastened, must be put into a proper cage, when the foot will generally heal of its own accord; but in severe cases it needs to be treated as above. In many parrots, in consequence of internal diseases, yellow mattery lumps form on the legs, especially between the toes; these must be treated outwardly like other gatherings, but can usually only be removed by the cure of the disease which has produced them. Still more mischievous is a condition caused either by an abnormal propensity, or by outward irritation, which actuates the bird to gnaw the foot, and even to eat off whole toes. Here, also, no cure can be effected without the removal of the exciting cause. In such cases, tincture of aloes (2) and similar things have been tried without effect; the bird began to eat the other foot, then a wing, then the second, and, finally, other parts of the body.

Some benefit is derived in such cases by bathing the part in a strong warm solution of potash (70), and then sponging it with carbolic oil (41). A parrot sometimes tears out a claw by catching in the wires or in some split; then the wound must be washed and cooled with arnica water (7), dried with a soft towel, and brushed over with lead collodion (5). SCAB IN THE FOOT (calcareous bones or elephantiasis) rarely occurs in parrots, but I have seen it in an old cockatoo. The feet become covered by degrees with a rind or crust, which increases continually in bulk, prevents the parrot climbing, and disfigures the legs; it causes unbearable itching, and so worries the bird that it grows thin. It must be separated from other parrots, because the disease, which is caused by mites in the skin, is infectious. *Treatment*: The hard crust must be smeared with soft soap, and twenty-four hours after softened with warm water, and cleansed as much as possible with a hard brush from scab (but the feet must not be made to bleed) and then rubbed with balm of Peru (67), or carbolic acid ointment (42). In more severe cases the treatment must be repeated. Finally, the feet must be smeared with glycerine.

DISEASES OF THE PLUMAGE are caused by tiny parasites, which take up their abode in the skin or the feathers, or by a diseased internal condition. The first are of many kinds, and either produce an eruption (similar to the itch in man) or destroy the feathers themselves. *Treatment*: In order to make sure of their presence, microscopical examination is necessary, but, fortunately, they are easy to banish. Strong smelling stuffs, such as petroleum or spirituous oils, &c., are often used for yard fowls and for cage birds, without recollecting that they are just as disagreeable and hurtful to the bird as the vermin. I therefore recommend, in all cases, Peruvian balm (67), and, as a further, effectual, and harmless remedy, insect powder (31), with the greatest cleanliness and care of the plumage in general. If the bird gets some places on the body where the feathers decay, or it tears them out, and constantly scratches with the beak, so as even to make a sore, it is necessary at once to find out whether it is on account of bird mites (the so-called bird louse). These red parasites may be recognised with the naked eye. The affected spot should be brushed with tincture of insect powder (32), or smeared with diluted glycerine (24), over which should be puffed some insect powder (31). Next day it should be washed

with soap, warm water, and a brush, and then rubbed thinly with olive oil. In severe cases the treatment must be repeated. When a parrot is badly attacked with mites, the cage should be scalded out with hot water, and, having been thoroughly cleansed and dusted out with insect powder, should be taken to another place. Feather mites, &c., which live in the feathers and injure them, are also banished by brushing the affected place with tincture of insect powder (32), or Peruvian balm (67), and, after being bathed with soap and water, smeared lightly with olive oil; for the rest, careful management of the plumage is necessary (see p. 48). If bald spots come, on which scales or scabs form, they, also, are probably due to some animal or vegetable microscopical parasite. No researches as regards these in parrots have as yet been made, and I have treated the affected bird in a similar way as for foot scab (p. 72) with good results.

SELF PLUCKING is one of the worst diseases of the larger and, indeed, of the most valuable parrots. It makes a most dreadful impression to see a clever-speaking, almost humanly-intelligent, bird become in a short time quite naked, with the exception of the head, and plucking out every feather that sprouts from its bleeding body. It has long been known that this diseased inclination is founded on improper management. Whether the cause lies in microscopical parasites or in the want of movement, the impossibility of shaking the feathers thoroughly in the air, and, consequently, in irritation of the skin produced by the closing of the pores from down, or in the corruption of the juices of the body, and the irritation which proceeds therefrom, or, finally, as many wish to maintain, merely from bad habit, is by no means determined with certainty. We can only point out the unfortunate fact that self-plucking is not rare, and that, to the present time, no certain mode of cure has been discovered. *Preventative Measures*: A constant supply of wood to gnaw, also lime and sand; avoid all tit-bits and unnatural food in general. On the other hand, suitable food and careful treatment of the plumage (see p. 48). The owner should also occupy and amuse himself with the parrot as much as possible. *Treatment*: Sprinkle with eau de Cologne or diluted glycerine (24), or some similar liquid, through a vaporiser; smear the places with tincture of aloes (2), infusion of tobacco (81); or walnut leaves (85), or other bitter or unpleasant fluids; brush with tincture of

insect powder (32); puff well through the plumage several times a day by means of a hand bellows; a daily douche bath (80), with cool water, in which spirit, French brandy, rum, or eau de Cologne has been mixed. In Rotterdam tin collars were put on some parrots who had the habit of plucking themselves, but without success; nor, in fact, have any of these so-called remedies really worked a lasting cure. The best hope lies in the treatment of Mr. Dulitz, that of putting the parrot into totally fresh surroundings, supplying it with a roomy cage and dry sand to scrape, placing it near the fire in cold weather, douching it daily with lukewarm water, giving it only maize, oats, and little hemp, and, on the other hand, fruit, green food, and cuttle-fish shell; and, while carrying on this management, in accordance with the laws of nature, busying oneself with the bird as much as possible. The Rev. Mr. Ottmann obtained the best results by allowing the infatuated parrot to starve, it being deprived of its food by degrees, till at last it only got a third part of the customary allowance; it thus became quite drooping, and left off the bad habit of mutilating itself.

Table of Medicines, with Directions for Mixing the same, and Doses.

All the medicines prescribed may be bought at an apothecary's or druggist's. If no directions are added to the name it must be asked for by that here given. Attention must be paid to the number which stands before each prescription, for there are many different dilutions and solutions of the thing mentioned, and each one applies only to the case in point. The bird-keeper must use his own judgment as to measurements in diluting or dissolving, but the strength of the sick bird should be rather under than over rated. The sub-cutaneous injections must be made with a very small glass syringe with a very fine point on the fleshy part of the breast.

1. 1 part of alum to 200 parts of water.
2. Tincture of aloes.
3. Marshmallow root.
4. Spirits of ants.
5. Carbonate of ammonia formed with confection of roses or other suitable substance (bread) into pills, each pill to contain from 2gr. to 3gr. of the ammonia.
6. Powdered areca nut, about 1gr. daily.
7. Tincture of arnica mixed with water—1 or 2 parts to 100 parts of water.

8. Sulphate of atropia, 1gr. to 800gr. of distilled water.
9. Lead collodion.
10. Lead ointment.
11. Goulard water.
12. Carbonate of lead ointment.
13. Boric acid, 5 parts to 100 parts.
14. Sulphate of quinine.
15. Liquor-chlori, from 3 minims to 5 minims for a dose in water.
16. Liquor-chlori mixed with water, a teaspoonful to half a pint of water, for painting.
17. Chloride of lime, solution, or simply mixed with water, for disinfecting and scouring purposes.
18. Tincture of digitalis, 1 minim to 2 minims in water, for a dose.
19. Extract of dulcamara, 30gr. to half a pint of water.
20. Solution of sulphide of iron, 30gr. to half a pint of water.
21. Extract of ergot of rye, for internal use, dissolved in water, 1 part to 100 parts.
22. The same, for injection, 1gr. to 3gr. each time.
23. Glauber's salt, ½gr. for a dose, in water.
24. Glycerine 1 part, water 10 parts.
25. Glycerine of starch—glycerine ointment.
26. Hamburgh plaster.
27. Solution of nitrate of silver, 1 part to from 300 to 500 parts of distilled water.
28. Solution of nitrate of silver, 1 part to 10 parts.
29. Spirits of ether, 1 to 2 drops in water.
30. Solution of pyroligneous acid, 1 part; hot water, 50 parts; to be held under the beak in a bottle.
31. Insect powder.
32. Tincture of insect powder.
33. Tincture of iodine.
34. Same, mixed with spirits of wine, 1 part to 50 parts.
35. Same, mixed with equal parts of hot water for inhalation, to be held before the beak.
36. Chlorate of kali, 1 part; hot water, 200 parts; for internal use.
37. Same, 1 part with 20 parts of hot water, for painting.
38. Infusion of sweet flag or calamus root, 1 part to 20 parts.
39. Same, with bicarbonate of soda; 40gr. of the latter to half a pint of the infusion.
40. Spirits of camphor.
41. 1 to 2 parts of carbolic acid to 100 parts of sweet oil.
42. 1 part carbolic acid, 10 parts clarified lard.
43. Solution of carbolic acid, 1 part to 30 parts of water; for painting and sprinkling use. *For internal use*: 1 to 2 drops of this solution in water.
44. Same, 1 part to 200 parts of water, in pleuro-pneumonia.
45. Same, 1 part to 100 parts, for hypodermic injection; each time 3 to 5 drops.
46. Same, 1 part to 50 parts, for syringing abscesses, ulcers, &c.
47. Same, 1 part to 400 parts, for painting the rump.
48. Same, 1 part to 100 parts, for cleansing wounds.

49. Same, 1 part to 10 parts, for scrubbing cages.
50. Chillies, one to three daily.
51. Common salt, with water, a tablespoonful to half a pint.
52. Collodion.
53. 1 part of fluid chloride of iron and 10 parts of collodion.
54. Creosote vapour; 2 parts of creosote to 100 parts of water, stirred with a red-hot poker.
55. Vitriol of copper, solution in distilled water, 3 parts to 100 parts.
56. Equal parts of Goulard's Extract and sweet oil.
57. 20gr. of boric acid to 1oz. of mucilage of Arabian gum.
58. Equal parts of linseed oil and lime water.
59. 2 parts of carbolic acid to 100 parts of mucilage of Arabian gum.
60. Calcined magnesia, with water, to be rubbed on, and poured in, in a thin mixture.
61. 1 part of salicylate of soda to 100 parts water. Dose, 1 teaspoonful.
62. Same solution for hypodermic injection, 2 to 3 drops each time.
63. Hyposulphide of soda, dissolved in warm water, ½gr. to 1gr. twice daily.
64. Spirits of turpentine, 1 part to 6 parts of sweet oil.
65. Laudanum, 1 drop to from 5 drops to 30gr. of water.
66. Ozonised water.
67. Peruvian balsam.
68. Infusion of peppermint leaves, 1oz. to a pint of water, with bicarbonate of soda; one part of the latter to 60 parts of the infusion.
69. Phosphoric acid and water, 1 part to 200 parts; of this give 3 drops to 5 drops for a dose.
70. One part of potash to 10 parts of water.
71. Three parts laudanum, 10 parts potash, 750 parts water.
72. Castor oil, half to 1 teaspoonful.
73. Solution of salicylic acid, 1 part to 300 parts for internal and external use
74. Same; 1 part to 500 parts water. Each time 1gr.
75. Spirits of sal-ammoniac, 1 drop to 2 drops in water.
76. Half grain of chloride of ammonia to 1 fluid dram of clarified honey, 50gr. of fennel water.
77. 1gr. to 2gr. of nitre for a dose, dissolved in water.
78. Hydrochloric acid concentrated, 1 drop in a large wineglassful of water.
79. 30gr. of milk of sulphur, 1 part to 200 parts; a teaspoonful two or three times daily.
80. Spray of lukewarm water, with an addition of eau de Cologne, brandy, rum, or spirits.
81. Infusion of tobacco leaves, 1oz. to a pint of water.
82. Solution of tannin, 1 or 2 parts to 100 parts of warm water.
83. Spirits of turpentine, rectified, 1 drop to 5 drops in water for a dose.
84. Inhalation of tar vapour, 1 part of Norwegian tar and 50 parts of hot water, to be held under the nostril in a small bottle.
85. Infusion of walnut leaves, 1oz. to a pint.
86. Zinc ointment.
87. Solution of sulphate of zinc, 3gr. to 500 parts of water.

PART II.—THE SPEAKING PARROTS.

CHAP. VIII.—GENERAL REMARKS.

Exposition of the Subject—Breeding of Valuable Speakers.

IN accordance with the title of this work, I must here treat of all parrots which have hitherto proved themselves to be gifted with speech, from the best speakers down to those species of which it has been shown that, at least, one of their kind has, at all events, learnt to pronounce one word. Of course, I shall notice them in proportion to their very varied gifts; describe the valuable and remarkable talkers fully, and speak of the remainder the more shortly according as their importance to the fancier decreases. In my books, before mentioned, I have divided this family of birds into two great groups, the short-tailed, or true parrots, and the long-tailed, or parrakeets. The former number amongst their ranks the most excellent speakers, and I therefore now begin by describing them. Among them there are classes of which all the members have shown themselves possessed of the gift of speech: for instance, the Grey and the Black parrots, and the Amazons; while in many other classes, in the short as well as the long-tailed species, hitherto only some kinds, or even only one individual, has proved itself capable of speaking. Those classes of which, as yet, no species has been found to be talkers, are mentioned on page 5, but are left otherwise unnoticed. One part of the subject of parrot fancying which, in later times, has become very important, *i.e.*, breeding, I must of necessity pass over in complete silence, as not coming within the limits of this book. Of the lesser kinds, many, as is generally known, have already been most successfully bred, and the young used by preference for teaching to speak. Attempts at breeding the larger and more

valuable speakers, have, up to the present time, scarcely ever been made; on the one hand, because such a pair of birds would require a very large space for the purpose, and on the other, and chiefly, because one would not wish to expose valuable speakers to danger, or even to risk those parrots which promise to repay their training well. This apprehension, however, is not well founded; for, according to my experience, the bird is by no means more than ordinarily endangered during hatching, if treated competently.

CHAP. IX.—THE TRUE PARROTS.

Talents as Speakers—Natural History—Existence in Captivity.

The class of True Parrots, with which the Grey Parrots (*Psittacus*, L.) and the Black Parrots (*Coracopsis*, Wgl.) are connected, includes the most noted of all the talkers. There are six varieties, two grey and four black, which, at the first glance, appear so different, and, on closer acquaintance, show so little agreement in their peculiarities, that the amateur might scarcely consider them as related, while the scientific observer ranks them together. The characters in which they agree are: Their beaks rounded off at the side, more or less broad and arched, with rounded top; upper beak without dental section, indented like a file; under beak lower, with a rounded socket edge gently bending out before the point; nostrils large and round; the cere, lores, and the broad circle round the eye (eye cere) bare; tongue thick, smooth, with blunt end; wings long and pointed, from nine to twelve pinion feathers; tail broad, almost straight or rounded; plumage soft, each feather ending abruptly; feet strong, with thick tarsus and powerful crooked nails; size between a jackdaw and a crow. In the Grey Parrot the beak is longer, more closely pressed together, with longer and thinner point, the tail is short, almost straight, the feathers bracket-shaped at the end. In the Black, on the contrary, the beak is thick, as high as it is long, with short, slightly prominent point; the tail is longer and more rounded. Both appear to differ from the species most nearly related to them (the Amazon, or Short-winged Parrots) by the naked parts of the face; in the Black species,

the bare skin on the nose is mostly somewhat distended. The movements of the Grey species are unwieldy, the flight is, however rapid, but clumsy, the gait on the ground awkward, and even the climbing unskilful. In the Black species, the motion is rather more nimble, or at least quicker. The natural voice of the Grey is shrill and reverberating, that of the Black short and rough, sometimes also melodious. The speaking power of the former is probably the highest among all parrots; that of the latter is insignificant, or, at any rate, only moderate. Concerning the life in freedom of the birds belonging to this family very little is known as yet, but all the more has their existence in captivity been investigated in every respect. All further particulars will be given in the description of the individual species.

CHAP. X.—THE GREY PARROT.

Psittacus erithacus, L.

Grey Parrot, Red-tailed Grey Parrot, or Jaco (German, *Grauer Papagei oder Jako, rothschwänziger Papagei und rothschwänziger Graupapagei*; French, *Perroquet gris, Perroquet cendré, Jaco*; Dutch, *Grauwe of Grijze Papegaai*)—*Natural History—Importation—Talent for Speaking and other Imitations—Apprehension and Judgment—Illustrations—Precautions in Acquiring.*

No other parrot, indeed no other bird, is so highly gifted as the common Grey Parrot; moreover, these gifts extend in various directions, for it is, without exception, the best of all talkers, and at the same time possessed of rich mental talents. It therefore justly rejoices in the greatest and most general popularity.

It is said to have been known from very ancient times, and, though it cannot be proved with certainty that the people of ancient civilisation possessed these birds, yet our authors of the sixteenth century speak of them. In the Middle Ages they were often brought to Europe, and since that time the love for them has become more and more wide-spread.

On the other hand, it is astonishing that travellers, up to the present time, have not been able to get any satisfactory information of their life in freedom, and that we are still

ignorant as to their food, manner of building, first plumage and other important points.

The Grey Parrot is ashen grey; each feather on the head, neck, breast and back has a light edge. The wings are of a darker grey, without the light edge; the quills greyish-black: the middle and lower part of the back, and the rump, are pure greyish-white; the tail, as well as upper and lower tail coverts, scarlet; breast, belly, sides, and hinder part of the body, whitish-grey; the beak black, the eyes black, grey, yellow, or white, according to age; the skin on the nose, lores, and circle round the eye (eye core), featherless and greyish-white; the feet bluish or whitish grey, dappled with black; the claws black. The plumage, like that of most parrots, is more or less full of down. The size varies extraordinarily, and often depends upon the age, sex, and, probably, on the place where found; it is about that of a large pigeon—length 14½in. to 15¾in. (the smallest from 11¾in. to 12⅝in.); the wings from 7½in. to 9in.; the tail from 2¾in. to 3⅛in. long. The differences in sex are not yet known with certainty; the smaller, lighter-coloured parrots are taken to be the females, and the larger darker ones, with long neck, for males. The negroes are said to assert that the nostrils of the males are round and those of the females oblong; the only certain difference (according to Soyaux) probably is that the bones of the pelvis are close to each other in the male, and in the female are so far separated that an egg can pass through.

The colour of the plumage of the young birds has not been ascertained with certainty, at least, no African traveller has stated whether the young leave the nest with a red tail, or whether, as asserted by some one who could, however, give no proof of his statement, they have at that stage a brown tail. Otto Richter, of Bremerhaven, says that he recognises the young Grey Parrots as they come into the market most surely by the brown nest feathers which cover the whole body, with the exception of the head, pinions, tail, and belly, and which by degrees give place to the grey feathers with a light edge. These birds mostly have black eyes when they arrive, which gradually change to ashen grey; in about five months they become light grey, and after the lapse of a year greyish-yellow, or pale yellow; and not till after three or four years do they become maize-coloured, or yellowish-white. The tail is bright red, every feather faintly seamed with brown, changing by

...es to darker red, when the blackish-brown colour disappears. There are many varieties of colour, from some dappled with red to those which are all red on the back. The latter, even in their native place, are highly esteemed and fetch a high price. In England they are called "King Birds," or only "King;" they are also said to have greater talents, but this ... no means be maintained. There are, further, some quite grey varieties, even without the red tail, and in Russia lately a dealer is said to have shown a Grey Parrot with a white tail.

"Jaco," the name by which this parrot is usually known, is said by Buffon to be the echo, in the Portuguese language, of its natural cry. West and Central Africa is its home—a large district, in some parts of which it is very numerous, and lives gregariously in great numbers. Its food, as far as our present knowledge extends, includes all kinds of tree fruits, especially bananas and palm nuts; moreover, the flocks not unfrequently do great damage in the fields of maize, &c., where they destroy much more than they eat. When plundering the fields, they keep (as nearly all parrots do) quite still, for fear of being chased away; whereas, when they assemble for the night in high trees, they make a great noise. Keulemans informs us that the breeding time is in September, after the rainy season; they build in very deep hollows in trees, so that it is exceedingly difficult to get at the nest. They generally dwell in companies, often several hundreds of couples together, but never more than one in a tree. The eggs are usually four or five in number, and, like those of all parrots, pure white. The young ones, it is said, are covered with long down, grow quickly, are fledged in four weeks, and, after two months, moult for the first time; their eyes remain dark for seven months. Unfortunately, we have no further information. The above-named traveller also tells us that the old birds can defend their brood bravely, and this, as the negroes are afraid of their bites, may be the reason why they never steal the young until they have left the nest, being yet unskilled in flight. The young, which are perfectly fledged, are said to be easily caught with snares or nets. It may here be casually remarked that most travellers highly praise the flesh of this bird.

On the Gold Coast the negroes bring the parrots (as mentioned on page 8), in reed-shaped baskets, to the seaport towns

in great numbers to market, and here they may be bought for about 5s. a head, whereas in the interior they are purchased by the buyers of the wholesale dealers, who, of course, take them in large quantities at a much lower price. The price naturally continues to increase, so that on board the great steamers a single one is often worth 15s. or 18s. Parrots already tamed and trained, which are offered for sale by negroes educated in missionary houses, and which already speak some words in bad English, fetch a much higher price. Dr. Fischer says the Arabians also are very fond of the Jaco. He found the bird inland in all the Arabian settlements. In Zanzibar the price is from 30s. to 40s. each.

The dealers make a great distinction in the imported parrots, according to the place from which they are obtained, and according to the method of importation. Ussher informs us that the finest Grey Parrots are brought from the forests of Akim to the towns on the Cape Coast and to Accra, where they are valued at from one to one-and-a-half dollars a head; these light birds are also considered by us as the best. The large, long-necked, dark-grey Jacos, which are said to come from the interior of West Africa, are, for the most part, particularly gifted birds; nevertheless there often appear excellent speakers among the very small light-grey ones. The so-called "sailing-ship birds"—Grey Parrots which are imported in smaller numbers, and are therefore better cared for on the journey—are considered much more valuable, and are carefully selected by the purchasers. They are said to afford a guarantee that on the way they have not received the germs of the incurable blood-poisoning (see pages 9 and 60), and may, therefore, at the outset, at least, be regarded as capable of living. This, indeed, would be a very valuable assurance, but, unfortunately, it does not always prove right. In "steamer birds" all those are included which are imported in immense numbers and under the worst circumstances.

There is also a difference between the so-called black-eyed and grey-eyed Jacos. First of all, attention must be paid to the description given on page 80, and to that I add Dr. Lazarus's opinion: "Most of the young Grey Parrots which come into the trade have already dark ashen-grey eyes; but I recommend purchasers to choose a bird with yellowish-grey eyes, because it is not so tender and delicate as one with quite dark eyes. The light-grey or yellowish-grey eyed birds (or those which

still have dark eyes), not large, with a slim neck and a small long-shaped head, have always proved, in my experience, the cleverest birds; whereas the large ones, with a round, thick head and a short, thick neck, are less teachable. This holds good in general." For the rest I must refer the reader to the particulars of the different talents mentioned on page 42, and, for my part, expressly state that I have found no difference, and do not believe there is any, as to talents which can be distinguished in the size, lighter or darker colouring, the more slim or stout form, the larger and more powerful beak, and such-like tokens.

Mr. Heer (barrister) considers that the colour of the eyes does not give the least intimation. "I received," he writes, "a yellow-eyed Jaco which has learnt to speak remarkably well."

If we inquire how far on the whole the talents of the speaking bird may extend, the answer presents many difficulties. We find that the most eminent authors either greatly exaggerate or underrate the facts.

Levaillant tells us of a parrot in Amsterdam which could repeat a great many speeches clearly without forgetting a syllable: "It might have passed for a Cicero; a whole book might have been filled with its sayings. It also performed all sorts of tricks, and fetched slippers, nightcaps, &c., when ordered." The parrot belonging to President von Kleimayrn, in Vienna, "spoke, sang, and whistled like a human being;" it even went through an air from "Martha." "Sometimes it displayed the genius of a composer!" "It gave evidence of understanding that was quite human." When it was in its master's room it remained quiet as long as he slept. "When, for the first time, in spring, a quail uttered its cry near it, it turned towards it and said, 'Bravo!'" Brehm gives an account of a Grey Parrot belonging to a lady, "which chattered in three languages as clearly as a human being, and at the same time often caught up forms of speech which had never been repeated to it (!), and which it then applied suitably, to the astonishment of all. It also introduced Dutch words appropriately (!) in a German sentence if in the latter language the word failed its memory or was unknown." Then follows an example of its sharpness, which outdoes all that ever was told of a parrot in this respect: A fat major, whom it knew well, one day paid a visit to teach it tricks. "Get up on the stick, Polly; up on the stick!" commanded the bold warrior. The parrot was decidedly

annoyed. Then suddenly it laughed loudly and said, "Up with you on the stick, Major!" Brehm describes this as a witticism of the bird's, and adds, "I cannot relate all this parrot said and did; it was half human."

In contradistinction to these exaggerated statements we have the opinion of Dr. Jäger: "The speech of parrots is very different from that of their teachers—mankind; less so in form, for in this respect it is a perfect imitation of the words taught them in key, sound, and intonation, but much more because the creature merely catches the sound of the word, and imitates it just as it has been pronounced." Dr. Finsch goes beyond this, for he says, "Birds do not understand human words." Surely these opinions are not warranted! They may, in truth, be easily disproved, for there is no difficulty in showing that the parrot has become acquainted with the meaning of words, and knows how to apply them. I have already expressed my own opinion of the speaking faculty of parrots, and need say nothing further. I would add, however, that after countless descriptions on the part of eminent men of the nature of the feathered speakers, the lamentable fact remains, that observation, and even exact research, establishes no perfect clearness as regards the mental life of these creatures. We must content ourselves with pointing out its existence, without being able as yet to draw positive conclusions from it.

In my periodical, *The Feathered World* (Louis Gerschel, Berlin), in the course of nearly ten years, innumerable descriptions of speaking Grey Parrots have appeared; and, to show how exceedingly numerous and variously gifted the different Jacos are, I will cull some examples.

The following account has been given of the Grey Parrot belonging to Director Kastner, in Vienna—a remarkable, well-known, and much-admired bird: When it first came into his possession it only spoke if there was no one in the room; but soon it began to chatter without troubling itself about its surroundings. It joined heartily in laughter when it heard others laugh, whistled softly, called "Karo, where is Karo?" and then whistled to the dog. It piped different airs with surpassing skill, and imitated the voices of all sorts of animals in the most deceptive manner. When the dinner bell rung, it called to the maid, with a high voice, "Katty!" until she came. When someone knocked, it called out, "Come in!" and

could not be deceived by anyone knocking in the room. If it saw that a bottle was about to be drawn, it imitated the sound long before the cork came out. It spoke to itself in a gentle, tender tone, "You good little Jaco!" &c.; called "Guard!" with a deep manly voice, and produced the sound of the drum, "tra ta, tra ta," or beat it on the cage with its beak; then it counted "one, two, three," &c., and, if it made a mistake, or pronounced a word indistinctly, it corrected itself until it had said it rightly and clearly. If the green parrot, which stood near, began to scream, it tried at first by saying "Hush!" to silence it, and, if this was of no avail, it cried angrily and with raised voice, "You just stop!" In short, it spoke with astonishing variety of expression, tenderly to its master and his wife, coaxingly when it wanted anything, and scoldingly if it did not get it. Late in the evening it talked to itself, and concluded regularly with the words, "Good night, good night, little Jaco!"

Among the more remarkable of Grey Parrots is one belonging to Mr. C. Schwendt. "My parrot," he states, "has given the strongest evidence that one should not lose patience when a Jaco apparently cannot by any means be taught to speak. I had to wait fully eight months before mine pronounced a word, when it began by saying, 'Jacob;' but then I was richly rewarded, for it learnt something new almost every day, and now, after four years, it knows so much that it would be impossible for me to mention all it says. There is scarcely any expression in the daily conversation of the family which it has not learnt to repeat, and how well it knows how to apply the words! It addresses all the people and animals in the house by name, calls and commands the cats and dogs—whistles to the one, and coaxes or cries to the other, 'Get out!' &c. If the blackcap is heard, it calls at once, 'Just wait, you blackcap!' If the blackbird whistles, it exclaims, 'Be quiet, or if I come you'll catch it, Hex!' (this is the blackbird's name). In a similar manner it can distinguish between 'Dicky,' the canary bird, 'Redthroat,' and 'Polly,' an Undulated Parrakeet, without confusing their names. It can change its voice in an astonishing manner, from the tenderest pet name to the roughest word of command, 'Shoulder arms!' &c., and give the right intonation and the clearest pronunciation. Then it repeats verses, and praises itself if it has not made a mistake; but if it does, it says, 'You are no good,

stupid fellow!' It makes its salutation in accordance with the time of day, and can ask for anything it wants. It is able to count correctly up to eight."

The Baron von Siegroth says: "Our young Jaco began the morning after its arrival to cackle like a hen, and when it saw the breakfast it cried, 'Bake, bake cakes!' and also, 'Give some to the parrot.' It could also say various phrases, such as the dealers teach parrots. From us it learnt many things easily, and with great cleverness. Let me mention a few of its accomplishments. It would say to the dog, 'Karo, sit up!' at the same time stamping with its foot, and nodding with the head, as it had seen me do. It was very amusing when the little dog really obeyed the command. The hairdresser, who came every day to the house, used to step up to the cage to offer a military salute with his hand, and make a bow. In a short time the bird imitated this in a laughable manner, lifted its foot to its head, and made a low bow while saying, 'Good morning!' Among other remarkable things, I may mention that whenever my wife or I went towards the bell it would call 'Klaus!' the name of the servant." This is the same Grey Parrot as that mentioned on page 44, which taught an Amazon to speak. The Baron enumerates, as among the acquirements of the bird, several words and whole speeches, and continues: "It imitates, to the point of deception, the barking of dogs, the mewing of cats, and the crowing of cocks. If someone relates a funny story, and we laugh, both birds join in with heartiness. When the servants disarrange the room for cleaning, or anything else goes on which is disagreeable to Jaco, it at once begins to overwhelm the evil-doers with all the abusive speeches and other unpleasant expressions which it has learnt from the street boys while standing at the open window in the summer."

The Grey Parrot belonging to Mr. W. Stücklen is a remarkable example of a very different kind of accomplishments. It was not a notable speaker, and could only say one speech of ten or twelve words, but it displayed extraordinary sagacity. "If I let it loose in the room, and it begins to gnaw at the furniture around, one word only is needed, and it leaves off directly. If it hears my step it greets me with a loud call before I have opened the door, and if I go near its cage it scratches and begs until I take it from the cage. At breakfast it turns its attention to my mother, of whose greater generosity it

is well aware, though at other times it never neglects me. It is one of the greatest of gourmands, and if it does not get some of all the viands it climbs from its special chair on to the dining table. It is very fond of beer, and can lift the cover of the tankard itself; it can also uncork a bottle, which it does by hanging on the neck with its feet, and picking out the cork piece by piece with its beak. In the evening, between eight and nine o'clock, as soon as I push back my chair, it says, 'Good night!' but never says so at other times. In the morning, when it is brought into my room by a servant, it climbs at once to the top of the bed. If I pretend to be asleep, it softly touches my lips with its beak, and remains sitting motionless until I open my eyes. It enjoys a joke very much. Once, when it was dressed up as a doll and laid in a cradle, it appeared evidently flattered because everyone laughed at it. If it finds itself caught at some naughty trick it hangs its head sorrowfully. I once had occasion to pull out the stumps of feathers which it had begun to gnaw off, and had to lay it on its back; nevertheless, it never thought of biting me, but submitted patiently, although it uttered a little cry each time a feather was pulled, which proved how painful the plucking was, and it kissed my fingers, as if to beg me to leave off."

In this class of especially-gifted birds we must include the Jaco of the African traveller, Soyaux: "An old and wild bird, which had never become very tame, but which was always much admired on account of its great size. It scarcely spoke at all, but said sometimes the word, 'Kusu' (the name given to parrots by the Loango negroes). Its *forte* was whistling, and I never heard anything like it from any other parrot. It was not, perhaps, that it whistled artistically or knew whole songs, but that the tone was so wonderfully powerful, full and clear as a bell, like the high notes of an organ. It runs up and down the scale, but always in such a manner that it misses one note, and then brings it in after the next. I also greatly admire its wonderful memory for the voices of African birds; it imitates the call of the plover and of the night heron, &c., very faithfully."

I must add to my remarks on "Purchase" (see page 12 *et seq.*) the following in connection with Grey Parrots: I strongly advise novices in this fancy against buying a black-eyed and, therefore, very young Jaco, because even at the

lowest price it always entails a loss. Several times I bought lovely young Grey Parrots, such as sailors usually bring over for themselves, on the supposition that they had been better cared for on the journey and were, therefore, more likely to live, but in every case they died without any possibility of saving them. At last I arrived at the following explanation: On the voyage, when the birds are in the cages in great numbers, the young ones are regularly fed by the old ones, and as long as this continues, and they are at the same time in a high temperature, they are not exposed to disease, though they die all the more quickly as soon as they are deprived of both these favourable conditions. In the same way, or nearly so, does it happen with those very young Grey Parrots spoken of as brought over by sailors. They are not only kept in the sweltering hold, but up to the last moment they have been fed from the mouth with chewed maize, as the negroes fed them when they were taken from the nest. It is pitiable to see how so helpless a bird bought from an amateur clamours for food from the mouth of its former nurse, without the owner having the least notion why the bird is lost. No one but those who are willing and able to continue to feed it from the mouth should venture to buy so young a Jaco. Then, however, he will reap a rich reward for his trouble, for he has not only the prospect of having a thoroughly tame bird, but also, as a rule, a highly-gifted one.

If the newly-imported Grey Parrot at once come into the possession of the amateur, after it has passed through so many hands as described on page 10, it has surely given proof of an extraordinary tenacity of life. Although an inhabitant of hot Africa, it is able to bear our climate well when once it has become acclimatised, as is proved by those parrots which have escaped, and which have maintained themselves for a long time in freedom without suffering from the vicissitudes of the climate, or the change of food, they having partaken of the different fruits and seeds they could find. In spite of this, however, it must not be forgotten, that even those birds which have been many years in captivity, and, of course, still more, those which have just made the journey, perhaps very young, or, it may be, still suffering from the effects of the voyage, and already sickly, are very sensitive to the influences of weather, and even to changes of temperature, as well as

to unsuitable food, as I have already pointed out in the sections upon "Reception" and "Preservation of Health." The evil influences of the voyage (see page 9) are especially noticeable in Grey Parrots, and fall upon them very heavily, much more so than on any other kind of bird. The opinion that they should get no water on board ship, or the fact that there is none to spare for them, is particularly fatal to them. Owing to the tormenting thirst which they suffer, they devour their own excretions, and thus is laid the foundation of that destructive disease known as putrescence, or blood-poisoning, mentioned on pages 9 and 60. I must repeat once more that this sickly condition cannot be recognised by any outward sign; that the birds, on their arrival, appear in the best of health, whereas they already bear about the germs of death, and cannot be saved by any means. If it be wished, however, to make a trial with cheap young parrots, it is well to follow the advice of Dr. Lazarus, who says that such birds should only be bought when young milky maize, in the head, can be procured, because this food, given as abundantly as possible, supplies, at least in some measure, the place of drinking water, and thus makes it possible gradually to accustom the bird to the latter. It is not wise at once to give a newly bought parrot abundance of water, even though convinced that it is healthy, and though the seller may have expressly guaranteed that it is accustomed to water; it is much better to use it as a means of taming (see page 39); at first only give it once or twice a day, and let the bird each time take about three mouthfuls. Moreover, heed should be taken to the excretions of the bird at first, to see whether the change in drinking water has not caused diarrhœa, even though it had been treated according to the directions on page 34, in which case it may only be allowed one drink a day, and perhaps tincture of opium (three to five drops in 30grs. water) should be added. It is especially in the case of Grey Parrots that the rule, never to buy a bird which should not have water to drink, must be most strictly observed. For the rest, I must beg that the general advice given before, especially that in the sections on "Purchase," "Reception," and "Food," be carefully carried out in respect of the Grey Parrot. Improper diet, particularly the bad habit of feeding with all kinds of human food, which is unfortunately only too common, produces, as mentioned on page 30, the worst of diseases, namely, self-plucking. It is only the well-managed

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Jaco that lasts well and long, and then it attains a great age, which may extend, as abundant experience testifies, to 50, 80, or even 100 years.

The importation of Grey Parrots has increased enormously of late; not a week passes but there are fresh arrivals to be seen, and the total amounts to several thousands annually. Whoever considers that these costly birds, with comparatively few exceptions, are from the first doomed to death, will certainly agree with what I have said on this subject (see page 9), and wish that the trade may as soon as possible cease to be carried on in so terrible a manner.

CHAP. XI.—THE TIMNEH PARROT.

Psittacus Timneh, Frs.

Timneh Parrot (Ger., *Timneh, Timneh-Papagei, Timneh-Jako*; Fr., *Perroquet Timneh*; Dut., *Timneh Papegaai*) — *Distinguished from the Grey Parrot—Characteristics.*

The Timneh Parrot can only be distinguished from the Grey Parrot at the first glance by its being of a darker grey, with a chocolate or reddish-brown tail, the beak not black, but of a pale reddish-grey on the top and at the root, and by being noticeably smaller. It was at first taken to be a variety or the young of the above-named Grey Parrot, but it is now with certainty distinguished as a separate species. Its home is the north of West Africa. It is rarely seen in the market, but it has been exhibited several times at bird shows. The Baroness Sidonia von Schlechta describes it as of pleasing appearance, very comical behaviour, and exceedingly friendly to everyone. It whistles with a wonderfully clear tone, and speaks clearly, but with a peculiar drawl, and comparatively little. It is without the grunting scream of the Jaco, and has a clear, shrill call. After several annual moults it always again recovered the red-brown tail, and its whole plumage remained unchanged. Food: Sunflower seeds, also crisply-baked biscuit,

grated and moistened with milk or water. For the amateur the Timneh has little special interest, as it is neither handsomer nor cleverer than the Grey, and offers only the charm of novelty.

CHAP. XII.—THE GREATER VAZA PARROT.

Psittacus Vaza, Shw.

Greater Vaza Parrot (Ger., *Vasa oder Vaza, Grosser Vaza-Papagai, Grosser Schwarzpapagai, Mohrenpapagai;* Fr., *Grand Vaza, Perroquet Vaza;* Dut., *Groote Vaza Papegaai*) *—Inferior as a Talker, but a good General Mimic—Natural History.*

THE importance of the Black Parrot is not equal to that of the Jaco, for not a single one of them has up to the present time, in spite of numerous zealous attempts at training, shown itself to be an eminent or even passable talker. Besides, they can hardly be regarded as particularly handsome birds, for, in their plain monotonous black, they appear very unpretending. Their only special recommendation is that they whistle loudly and sweetly, pipe songs extremely well, and learn to imitate the song of birds; moreover, they readily acquire all sorts of other sounds, such as the barking of dogs, the mewing of cats, cock-crowing, &c. Otherwise they are very quiet, silent birds; now and then they become more lively, flap their wings quickly, and spread out the tail; but at other times they sit dreamily for hours together. They have shown themselves to be strong and hardy in the cage.

The large Black Parrot is usually of a deep dull black colour all over the upper part of the body, but is sometimes rather brownish or greyish; the quills, coverts of the wings, and feathers of the tail, are brownish, sooty black, or slate-grey, with a faint violet-green metallic lustre. The beak up to pairing time is pure or reddish-white, after this it becomes a dark blackish-brown; the cere is whitish flesh-colour, sometimes blackish; eyes dark brown, eye cere whitish flesh-colour; the feet greyish-brown, with black claws. About the size of a crow (length, 20½in. to 21½in.; wings, from 10½in. to 12½in.; tail, from

6½in. to 8¾in.). Towar s moulting time, according to Audebert, the plumage assumes a faded, reddish colour, and the beak becomes dark. Its home is the Island of Madagascar.

Mr. J. Audebert, who spent a long time in Madagascar, gives an exceedingly interesting description, and says, among other things: "I know few parrots which give so much pleasure to their owners; it does not scream or gnaw, is good-tempered, allows itself to be taken in the hand or carried about without fear, and never bites. If trained when young it whistles excellently, and learns to speak pretty well; besides, it imitates the voices of all animals, and interweaves with them its own natural notes. It is best to keep it on a stand. When shut up in cages they do not agree with one another, but when left free they take no notice of each other. The Black Parrot may be fed with all kinds of human food without any evil consequences; mine got boiled or roasted meat, broth, fish, vegetables, raw and cooked rice, bananas, sugar-cane, &c.; they never touched raw meat. They kept at a distance, anxiously, from any object which they did not know, such as glasses, bottles, &c., and never gnawed tables and chairs. One very talented Black Parrot knew how to interpret every tone of the human voice, and at once obeyed every command. I can recommend this species as a very teachable and faithful bird; nevertheless, I advise the purchase of a young unspoilt Black Parrot. In Madagascar they are easy to obtain in large numbers. The price there ranges from 5d. to 1s. a head." They occasionally come into our markets, but are only kept for special amateurs.

CHAP. XIII.—THE LESSER VAZA PARROT.

Psittacus niger, L.

Lesser Vaza Parrot (Ger., *Kleiner Schwarzpapagei, Kleiner Vaza-Papagei, blos Schwarzpapagei*; Fr., *Petit Vaza*; Dut., *Kleene Vaza Papegaai*) — *Distinguished from the Greater Vaza Parrot.*

With the exception of the unimportant difference that the plumage is not so deep a black, but more brownish or greyish, and that the size is about a third less (length, 13⅝in. to 14½in.;

wings, 8⅝in. to 9⅞in.; tail, 4⅜in. to 5⅛in.), this species is the same as that just described. The beak is either a fleshy-white colour or blackish-brown; the cere whitish-grey to brownish flesh-colour; eyes dark brown; eye cere more or less pure white; feet dark-grey, with black claws. Home: also in Madagascar. It appears, at least in my experience, yet more quiet than the Great Black Parrot, and it is obstinate and unteachable. Its cry is continuous and unpleasant, but varied by melodious piping. I could not discover in it any aptitude for speech. For the rest, all that has been said in general of the other black species also applies to this. But few come into the market.

CHAP. XIV.—THE AMAZON PARROTS.

Natural History—Talents as Talkers—Management.

As the before-mentioned parrots, or rather as the one species, the Red-tailed Grey Parrot, is distinguished among the parrots of the Old World, so in the New World stands the Amazon Parrot in the foremost rank as regards speech and mental talents; indeed, it is often a disputed question whether the former is not equalled, or even excelled, by many of the latter. I will endeavour to describe this speaker as fully as I have done the other, and then leave the verdict to the judgment and special fancy of the amateur.

The Amazon Parrots (*Chrysótis, Swns.*) are distinguished from their fellows already mentioned chiefly by their colour, for they are all—as, indeed, is the case with most parrots—green, with red, yellow, and blue marks, either in all three colours at the same time, or only in one or two. Otherwise they resemble the Grey Parrots in their strong compact build. The following must be mentioned as the particular marks by which they may be recognised: The beak large, powerful, moderately arched, sharply bent downwards; the ridge breaking off towards the back with a sharp rim, lightly furrowed; the upper beak hangs considerably over the lower, with a rounded or angular indentation; the under beak is as deep as the upper, with a wide socket edge rounded off, the sharp rim curving outwards; the nostrils large and open; the cere short, arched,

and set with small bristly feathers; the tongue broad, rounded, fleshy, and smooth, with blunt point; eyes large, circular, and expressive; wings broad and strong, longer than the tail; the latter is short, broad, and rounded; feet stout, with strong tarsi, and much bent powerful claws; the plumage lies close, the feathers are small, broad, ending abruptly, overlapping one another like scales, in some kinds mixed with down. It is about the size of a jackdaw or raven. Almost all Amazons, particularly the Guatemalan Amazon Parrot, have the peculiarity of bristling the feathers of the neck when frightened, for example, by the approach of a dog, and then resemble the Hawk-headed Parrot described later on.

They are found in their native land, South America, from the States of La Plata to South Mexico, but principally in the North and East of Brazil, in the primeval forests along the Amazon and other rivers, as well as on the coast; a few live in the woods of the Savannahs, and many are natives of the West Indian Islands. Most species are only found within restricted districts. All are, properly speaking, tree birds, climbing well, yet waddling when on the ground; their flight is heavy, and slow in proportion, with rapid beating of the wing, yet it often reaches a great height. Together with the information given by the travelled naturalists, Prince von Wied, Burmeister, von Tschudi, Schomburgk, and others, concerning their habits, we have a capital account from Karl Petermann, and based on these various descriptions I shall give a short review of their mode of life. Flocks of parrots are, in effect, a symbol of the primeval forest, and the attentive observer is above all things struck with the regularity of all their arrangements. As soon as the red dawn appears in the sky the chattering and noise begins in the sleeping places of the flocks. They dress their plumage, and, with loud cries, begin to depart, always keeping in couples, and soon the lately animated groups of trees again lapse into stillness. The flocks assemble at an appointed resting place at a great distance, uttering loud and alluring cries; answering their calls, the rest follow, and, with a deafening noise, the whole host set out to continue their journey to the feeding place, which may be situated miles away. Here they attack the fruit trees with voracious appetites; the dreadful screamers have now become silent, and nothing is heard but the rustling noise of the falling remnants. Flight after flight comes up noiselessly, and only the chirping of the young as they are fed,

and the rustling of the fruit which has fallen when plucked, betrays the presence of the spoilers in the thick summits of the trees. When they have satisfied their hunger, and drunk the rain water from the cups of the orchids found upon the trees, they subside to rest, uttering the while little soft monotonous notes. In very hot weather, when the water in the blossoms is dried up, they are often obliged to fly long distances to drinking places, and this always occurs at an appointed time. Towards evening a few noisily make short flights, more of them grow lively, and, when the sun sinks, troop after troop sets out on the return journey. They arrive at the rendezvous with piercing cries, greeted by those which have already arrived with shrill calls, and each one joins in the wild screaming with might and main. The chattering and quarrelling for the best sleeping places do not cease until dark. They continue these journeys all through the autumn and winter, migrating from one district to another, when, owing to their plundering, or to over-ripeness, any one fruit fails or another kind offers greater inducement. They sometimes leave a neighbourhood for a long interval in consequence of failure in the crops. At pairing time, from September, or October, to March, the couples withdraw separately. They usually choose as their resting place a very deep hole in a branch high up in a forest tree, and therefore difficult of access, the same pair reoccupying the same nest every year; the eggs vary from two to four in number, are very round, and, like those of all parrots, pure white. There is said to be only one brood a year. By way of precaution, the Amazons, as, indeed, all birds, more or less, keep silence near the nest, so that travellers say one might suppose they had lost their voices at this time. Their food consists of soft, juicy berries and fruits, especially siliquous fruits, besides nuts, kernels, all sorts of seeds, maize, and other grain. The screamers preserve silence also when they are devouring grain. On account of the damage they do, as well as for their delicious flesh, and likewise for their plumage, they are much pursued, and in the markets of the seaport towns, at the time of their migrations, they are sold in vast numbers as game.

They have been known from very ancient times, certainly quite as long as the Jaco; but only of late have the individual species been distinguished with certainty and described with exactness.

The Amazons are usually stolen from the nest, by the

natives of South America, while very young, and reared by hand, and to them the remarks on page 10 mostly apply. Therefore they are all, or at least the great majority, more or less tamed when imported; many speak some Spanish, and a few English or Dutch words, learnt on the homeward journey. Of thirty-seven species known, thirty-three have up to the present been imported alive. Many arrive every year in great numbers, others more seldom and in smaller quantities, and most of them are only found in the markets singly.

Opinions differ greatly as to the capacity for speaking in respect of the several species, and also as to their relations to the Grey Parrots. Dr. Lazarus thinks they are equal in many respects to the Jaco, but that they are behind it in their power of imitating human speech; for the latter can copy the voice of man most exactly, whereas the Amazons always have a peculiar tone, what one might perhaps call parrot-like. "An Amazon," he says, "will always speak in the same tone, whether it be taught by an aged man, a youth, or a woman; they do not possess the pliability of voice which would enable them, like the Jaco, to vary their speech, as, for example, successively to a begging, coaxing, or angry tone; their words always have the same tone and key. Even when very tame they do not show the sympathetic affection of the Grey, and they never give the impression that their accomplishments, the expression of their wants, &c., are to the same extent conscious; whereas the Grey Parrot in the course of time spontaneously discovers new phases of talent, and, indeed, develops a humanised character, so that one forgets that it has originally been wild and shy and only taught by cultivation: the Amazon, on the contrary, always reminds one that it is a trained creature. The tamed and trained Jaco entirely leaves off its screaming natural cry; but this is never the case with the Amazon, for the most notable speakers amongst them return with the greatest delight to the old screams."

On the whole, this verdict may be just; but it must not be forgotten that, among the varieties of Amazon Parrots, there is great difference in capacity; moreover, I can assert that some speakers occur amongst Levaillant's, the Blue-fronted, the Yellow-fronted, the Golden-naped Amazon Parrots, and others, which are inferior in no respect to the most teachable Grey Parrot. The last-named species are considered the most talented, but the Mealy, Festive, and Orange-winged Amazon Parrots are added

BLUE-FRONTED AMAZON PARROT.

(*Psittacus ventralis.*)

to these according to fancy, while the White-fronted and Red-throated Amazons, also the Vinaceous and Dufresne's Amazon, are said to be much less teachable, and the smaller species, such as the Yellow-shouldered, Sallé's, the White-fronted, and Red-fronted Amazons, and others, are evidently much less gifted, and are admired much more on account of their pretty comical ways.

As a rule, the Amazons are fed by the dealers with oats, maize, and moistened bread; and on this point I beg to refer the reader to the remarks made concerning the great parrots. But, as the knowledge we have of their life in freedom shows that they live on fruit, they should have some from time to time, and that of a good sweet condition, particularly walnuts, hazel and other nuts. The evil consequences of an unnatural diet are seen in no species of parrots so plainly as in these. But with suitable food and good management, they prove themselves to be very strong and hardy, and, like the Grey Parrot, attain to a great age. They are justly included among the most admired of all parrots.

Further details will be found in the chapters on the individual species. Concerning "Purchase," "Management," "Taming," and "Training," I beg to refer the reader to the special sections.

CHAP. XV.—THE BLUE-FRONTED AMAZON.

Psittacus æstivus, Lth.

Blue-fronted Amazon Parrot (Ger., *Gemeine Amazone, blos Amazone oder Amazonenpapagei, blaustirnige, gewöhnliche, blau-und gelbköpfige Amazone, Rothbugamazone, Rothbugamazonenpapagei und Kurzflügelpapagei mit rothem Flügelbug*; Fr., *Perroquet Amazone à front bl—, Perroquet Amazone à calotte bleu, Perroquet Lord du Brésil*; Dut., *Gewone Amazone Papegaai*)—*Physical Characteristics—Capacity for Training.*

The well-known common Amazon, with red shoulders, has often up to recent times been confused with the Orange-fronted Amazon, because the name of Amazon Parrot was added by Linné to the Latin name of the latter. The former is coloured in the following manner: The band on the forehead blue; top

of the head, cheeks, and throat, yellow; shoulders, the central spot on the wings, and the base of the tail feathers, red; all the feathers of the upper parts green, with a distinct dark tip; the lesser and greater coverts of the wings striped with greenish yellow; all the lower body light green; on the breast and belly each feather has a narrow greenish tip, yellowish towards the leg; beak uniformly brownish-black, inclining to black; cere black; eyes varying from yellow to orange-red; the eye cere bluish; the feet bluish-grey; the claws black. The difference between the sexes has not yet been determined with certainty. The plumage of the young birds is duller in colour. Size, about that of a crow (length, from 14½in. to 16½in.; wings, from 8in. to 8¾in.; tail, from 4½in. to 5½in.). There are numerous varieties in colour, in some of which the blue and yellow on the head extends more or less, or in which one or the other is wanting entirely; the red on the shoulder may be smaller or larger, sometimes yellowish-red, inclining to yellow; indeed, there are Amazons all yellow, but these are certainly rare.

This Amazon is a native of the south of South America, Brazil, and Paraguay, as far as the Amazon river. Although it is the most numerous and common species, yet of its life in freedom but little as yet is known; on the whole, the remarks made in the general description of the Amazons, page 93, apply to this.

They are most highly prized by the natives, because they are said to be the best suited for training. They are, therefore, met with everywhere among the Indians, and of all species are brought in the greatest numbers to market. With us also they are considered by bird fanciers as very valuable. There are examples of astonishingly gifted Amazons, not only in capability for learning to speak, but also in learning to sing songs, or piping in three or four different ways, and being surprisingly teachable. As among all the best speaking species, there are some to be found which will learn little or nothing; but these must by no means be considered as worthless.

The purchase of an Amazon, even more than of any other kind of parrot, is a matter of chance; and I would again call attention to the advice given on pages 12 *et seq.* Most of the Amazons arrive by the great steamships which ply regularly between Brazil, other parts of South America, and Europe, and may be had in the market from all the wholesale and retail dealers.

CHAP. XVI.—THE ORANGE-WINGED AMAZON.

Psittacus amazonicus, L.

Orange-winged Amazon Parrot (Ger., *Venezuela-Amazone, Kurz-flügelpapagei mit grünem Flügelbug, fälschlich Gemeine Amazone oder gar Neuholländerpapagei;* Fr., *Perroquet Amazone à ailes Oranges;* Dut., *Groenboeg Amazone Papegaai*)—*Characteristics and Talents.*

THIS species is much rarer in the market than that just treated, and not nearly so much admired. It is found of the following colours: The band on the forehead and the lores blue; front of the head and the cheek below the eye, as far as the beak, yellow; shoulders green, only yellow at the bend of the wing; central spot on the wing yellowish-red; tail feathers at the base orange-red; the whole of the upper feathers green, the feathers at the back of the neck with darker lines; all the lower part of the body light green, mingled on the breast with a little down; the beak is of a pale grey-yellow, with a dark-brown point, and at the base of the upper beak is a yellow spot; the eyes vary from light yellow to vermilion; feet brownish horn-grey. The hen is said to have duller shades on the head. Size, somewhat less than the Blue-fronted Amazon (length, 13½in. to 14¼in.; wings, from 7in. to 7⅔in.; tail, 3⅝in. to 3½in.). All the birds of this species which are imported appear to be the same in colour. They are natives of the East of Brazil, where they live in countless numbers in the forests on the coasts. Their food is said to consist of all kinds of tree fruits, principally that of the mangrove. They are described by the settlers as the worst screamers of all the family. In order to obtain them young it is often necessary to fell large trees with inaccessible branches. In their native country they are called "Kurika," and are considered very teachable, and this is confirmed by Dr. Lazarus. If this Amazon is less a favourite amongst us than the Blue-fronted Amazon, the reason probably is that, even as a speaker, it does not cease from harsh cries.

They are mostly brought from Venezuela by the sailors in the steamers.

CHAP. XVII.—LEVAILLANT'S AMAZON.

Psittacus Levaillanti, Gr.

Double-fronted Amazon (Ger., *Grosser oder doppelter Gelbkopf, grosse gelbköpfige Amazone, Levaillant's Amazonenpapagei, Levaillant's Kurzflügelpapagei*; Fr., *Perroquet Amazone de Levaillant, Perroquet à tête jaune*; Dut., *Dubbele Geelkop Papegaai*)—*Its Rank as a Talker—Physical Characteristics—Power of Apprehension.*

MANY of the admirers of speaking parrots esteem the Double-fronted Amazon more highly than all others, and consider, indeed, that in every respect it excels even the Grey Parrot. Such an assertion must not, however, be allowed to pass unchallenged, for no one can with certainty say of any species that it is absolutely the best. If one considers the extraordinary gradations and manifold capabilities of different individuals of the same species, one is astonished at the diversity of their talents, and is convinced that these may be repeated in any of the species, rendering comparison with one another very difficult, if not impossible. I, therefore, emphatically protest against pronouncing a decided judgment on any variety, or even arranging the individuals in a settled order of merit. Of course, it may be asserted that one species belongs to the more gifted and another to the less gifted species, but this is, in fact, all, and beyond this, in truth, none can go. Without doubt, the great Double-fronted Amazon takes high rank as a speaker, but we certainly are not justified in pronouncing it to be the best of all.

It is whitish-yellow on the forehead and about the beak; the rest of the head, neck, and throat is sulphur-yellow; shoulder, central spot on the wing, and the inner webs of the four outermost tail feathers at the base, bright scarlet; the upper parts of the body dark-green; the lower parts light-green; none of the feathers have a dark edge; about the leg the colour is yellow; the beak yellowish-white; the cere almost pure white; the eyes vary from yellowish-brown to brownish-red, with a yellow or grey circle round the pupil; the eye cere bluish-white, often yellow-grey; feet whitish-blue; claws grey. The difference between the sexes is not yet known. The plumage of the young birds is yellow only on the forehead

and top and sides of the head; the red marks are pale and dull. Size, nearly as large as a raven (length, 15in. to 17½in.; wings, 8¼in. to 9in.; tail, 4⅜in. to 5½in.). It is only found in the South and West of Mexico, its native country, and on the adjacent islands; it is seen further north than any other Amazon parrot.

It is much valued as a cage bird in its native land as well as with us, consequently it fetches a higher price than any of its fellows. The Indians steal the young from the nests, therefore all birds of this species come into the market at least half tame, and able to speak a few words; but they come singly or in small numbers. Immediately after their arrival they are delicate, and need much care (see "Acclimatisation" and "Management"), but when accustomed to the change they are among the most hardy of the parrot tribe.

One great advantage which Levaillant's Amazon possesses is its power of apprehension, by which it is always able to repeat clearly at once words that are taught it. On the other hand, there are amongst the ranks of this species some which will never learn anything; yet the statement of the experiences given on page 36 should always be borne in mind, and such a bird should not be given up too soon as incapable of improvement, because, as has happened in many cases, it may be that after many years it will become an excellent speaker. I must add that even the most excellent of these birds will, from time to time, give vent to its wild natural cry.

CHAP. XVIII.—THE YELLOW-FRONTED AMAZON.

Psittacus ochrocephalus, Gml.

Yellow-fronted Amazon (Ger., *Surinam-Amazone und Surinam-papagei, Gelbscheiteliger Kurzflügelpapagei und Gelbscheitel-Amazone;* Fr., *Perroquet Amazone à front jaune, Perroquet de Cayenne;* Dut., *Geelvoorhobfd Papegaai, Geelvleek Papegaa*) —*Physical Characteristics — Varieties — Habitat — Rank as Talker.*

ALL parrots included under the common name of Amazon show in colouring and special marks such noticeable characters, that even a superficial observer could not be confused in determining

the various species. Nevertheless, from olden times even to our own days, we find scientific observers as well as amateurs constantly confusing the birds of this genus, especially the Surinam, with other ones. The reader is, therefore, particularly requested to notice carefully the marks given in the following description:

The Yellow-fronted Amazon is of a deep yellow from the forehead to the middle of the head, more or less over the back of the head, with a broad green stripe above the eye; lores, sides of the head, and throat, yellowish-green; back of the head, cheeks, and neck, dark-green, each feather edged with a fine black line; the whole of the upper part of the body is a dark grass-green, without the darker edges to the feathers; edge of the wings red; the speckles on the wings, and the beard of the quills of the outermost tail-feathers, vary from reddish-yellow to scarlet; all the lower parts of the body are of a lighter green than the upper; reddish-yellow about the legs; beak blackish-brown inclining to black; on each side of the base of the upper beak there is a pinkish-white spot; lower beak dark horn-grey; the cere is blackish, thickly set with little black hairs; eyes orange-red, with a thin yellow, and then a broad brown rim round the pupils; eye cere bluish-white; feet bluish-white; claws almost pure white.

There appear the following varieties of this species: The yellow on the head may be narrower or broader, and sometimes extends over the whole front of the head, even over the eyes and the under beak; sometimes it does not appear, or is confined to a few feathers on the middle of the head and on the bridle; the yellow feathers are often edged here and there with red; the edge of the forehead is green; the red mark in the wing may be smaller or greater; the beak may be lighter or darker brown, with a fallow-red spot; the iris with an inner ring of brown and an outer one of red; eye cere grey.

The plumage of the female and of the young is not yet known with certainty. The young birds which come into the market have but little yellow about them, and the red marks are duller. Size, about that of a raven (length, 14½in. to 16in.; wings, from 8in. to 9in.; tail, from 4½in. to 5½in.).

It is a native of the north of South America. We are told by travellers that they are exceedingly numerous and common in Surinam, Guiana, and Venezuela. It is pursued on account of its flesh and feathers, but most commonly stolen from the

nests. The Indians, who consider them amongst the most teachable parrots, are said to rear and train them with special care. Surinam Amazons may often be seen flying half-wild about the huts of the Indians, with cut wings, but they always return home in the evening. This species is with us one of the most common in the trade, as they are imported in rather larger numbers than the Double-fronted Amazon. They are esteemed as good speakers, as some of them develope in the most notable manner, not merely speaking well and clearly, but learning to laugh, weep, and sing prettily. Others, however, are found to be backward, but this is not often the case, most of them being good medium birds.

CHAP. XIX.—THE YELLOW-SHOULDERED AMAZON.

Psittacus ochropterus, Gml.

Single Yellow-headed Amazon (Ger., *Kleiner Gelbkopf oder Sonnenpapagei, Gelbflügeliger Kurzflügeligpapagei, Gelbflügeliger Amazonenpapagei, Gelbflügelamazone*; Fr., *Perroquet Amazone à épaulettes jaunes, Perroquet Amazone ochroptère*; Dut., *Kleene Geelkop Papegaai*) — *Power of Mimicry—Physical Characteristics.*

The little Yellow-shouldered Amazon is, by many of the friends of the feathered speakers, esteemed a great favourite, though considered as among the commonest parrots in the trade; while by others it is regarded, like all the smaller Amazons indeed, with actual contempt. This arises, probably, from the fact that the individual birds of this species display such an astonishing difference in their capacity for speech. Descriptions have been given by credible connoisseurs, according to which there are some extraordinarily-gifted Yellow-snouldered Amazons, which are particularly valuable, because they become uncommonly tame, are very amusing in their ways, and can imitate faithfully the voices of all sorts of animals, such as cock-crowing, cackling of hens, cooing of doves, mewing of cats, barking of dogs, &c.; on the other hand, we find many Yellow-head, which are certainly very lovable, but which cannot be taught anything. One advantage is possessed by all of them—they belong to the most easily and perfectly tamable of all cage birds.

The Yellow-shouldered Amazon may be distinguished according to sex. The male is pale-yellow on the forehead and lores; the front and top of the head, cheeks, sides of the head, round the ear, and the upper part of the throat, yellow; the shoulders are marked with a large yellow spot; the central spot on the wings scarlet; the four outer tail feathers, with about a third from the base of both webs, vermilion; all the rest of the upper body dark grass-green, each feather has a black edge, only the upper covert of the tail is of a uniform yellow-green; the lower part is of a scarcely perceptible lighter green, each feather having here also a dark edge; about the leg the colour is yellow; the beak is horn-white, inclining to bluish-grey; the cere greyish-white; the eyes dark-brown, yellowish-brown, or inclining to reddish-yellow, with a red circle outside the iris; the eye cere white; feet and claws whitish horn-grey. The female is universally duller in colour, and round the lower beak, and more or less on the cheeks, breast, and belly, of a cerulean blue. The plumage of the young birds has also a cerulean tinge, and this sometimes extends over the sides of the head and the throat. In many old birds the green feathers on the head, cheek, throat, neck, and shoulder are more or less yellow, or mixed with orange colour. Size, about that of a jackdaw (length 12½in. to 13½in.; wings, 7in. to 8in.; tail, 3¾in. to 4½in.).

It has been well described by old writers, Brisson amongst others, and Buffon gives a pleasing description of its cage-life; but many errors prevail respecting it. The little Yellow-headed Amazon may be distinguished from all its fellows by its lesser size, the dark edge on the feathers of upper and lower body, and by the broad yellow shoulder.

CHAP. XX.—THE MEALY AMAZON.

Psittacus farinosus, Bdd.

Mealy Amazon (Ger., *Müllerpapagei, Müller oder Müller-amazone, weissbepuderter Amazonenpapagei, bereifter Kurzflügelpapagei*; Fr., *Perroquet Amazone poudrée, Meunier*; Dut., *Muller Amazone Papegaai*)—*Qualities as a Talker—Physical Characteristics—Habitat.*

This is another favourite speaker; it may decidedly be counted among the most talented, and it shows itself at the same time

gentle and lovable; but, unfortunately, it is also one of the worst screamers, and even when trained and perfectly tamed never ceases from time to time to utter the most ear-piercing cries.

The Mealy Amazon is yellowish-green on the forehead and cheeks; the centre of the head is yellow, sometimes with fine red spots; each feather on the top of the head is edged with violet; all the upper part of the body is of a dark grass-green; on the back of the head and neck each feather has a blackish tip; the central spot on the wing is scarlet; tail feathers green without red; all the lower body light yellowish-green; lower coverts of the tail greenish-yellow; beak whitish horn-grey; at the base of both upper and lower beak an orange-yellow spot; the skin on the nose blackish; eyes dark-brown, inclining to red-brown; the iris has a cherry-coloured ring; the eye cere white; feet dark-brown; claws black. The difference of sex, and the plumage when young, are as yet unknown. Special indications: The feathers appear as if powdered with flour, and, therefore, the upper part of the body looks grey-green; when sitting still the whole bird looks uniformly grey-green; moreover, though it has the red spots on the wing, there are no red marks in the tail, and its feathers are mixed with more down than those of any other parrot. In this species also varieties occur—many have no yellow on the top of the head; in others it extends over the whole top of the head; sometimes one is found without down. Size, about that of a raven or larger (length, 18½in. to 19½in.; wings, 8½in. to 10in.; tail, 4½in. to 5½in.). It is, therefore, one of the largest of the Amazon Parrots.

It is a native of South America (Central Brazil, Guiana, Ecuador, Bolivia, and Panama), and is said to be especially numerous in Guiana. Its mode of life resembles, on the whole, that of the other Amazons. It is much hunted, is easily tamed and trained, and learns to speak well; nevertheless, on account of its screaming, it is not so highly esteemed as its fellows previously described.

CHAP. XXI.—THE GOLDEN-NAPED AMAZON.

Psittacus auripalliatus, Less.

Golden-naped Amazon (Ger., *Gelbnacken oder Gelbnacke-Amazone, Gelbnackiger Papagei, Goldnacken-Amazone oder Amazonenpapagei, blos Goldnacken und gelbnackiger Kurzflügelpapagei;* Fr., *Perroquet Amazone à collier d'or;* Dut., *Goudnek Amazone Papegaai*)—*Distinguishing Characteristics.*

Though nearly related to the preceding, this kind is easily distinguished by the connoisseur. It is pale grass-green on the forehead, top of the head, and cheeks; crown of the head cerulean blue, and more or less (sometimes not at all) yellow; round the eyes blue, each feather edged with black; nape of the neck lemon-colour; the edge of the wing sometimes red, sometimes with single red feathers, sometimes with large red marks on the shoulder; central spot in wing red; a third from the base of the tail feathers, on the inner side, red; all the upper part of the body grass-green; on the back and the sides of the neck each feather has a blackish tip; lower parts of body greenish-yellow; beak dark horn-grey, with a yellow spot at the base; cere blackish, with small, black, bristly feathers; eyes brown or reddish-yellow, whitish eye cere; feet a brownish horn-grey; claws black. The plumage of the young birds is said by Hagenbeck to be without the yellow feathers on the neck. Special indications: The cerulean colour on the crown of the head and round the eyes, the yellow neck, and the black, bristly feathers on the skin of the nose. Otherwise it bears a strong resemblance to the Surinam Amazon. Size, nearly that of a raven (length, 14½in. to 15½in.; wings, 7½in. to 8¼in.; tail, 4⅜in. to 4¾in.). It is a native of Central America as far as Nicaragua. According to the account of the traveller, Dr. von Frantzius, it is much esteemed in Costa Rica as a cage bird, and valued as learning to speak easily. It appears in our markets less frequently than others of the same family, yet it is certainly among the best-known parrots.

CHAP. XXII.—THE GUATEMALAN AMAZON.

Psittacus guatemalensis, Hrtl.

Guatemala Amazon (Ger., *Guatemala-Amazone, Blauscheitel-Amazonenpapagei, Blauscheiteliger Kurzflügelpapagei;* Fr., *Perroquet Amazone de Guatemale;* Dut., *Guatemala Amazone Papegaai*)—*Characteristics.*

Among a number of freshly-imported Amazon Parrots one usually sees several different species which come from the same or neighbouring districts and are brought by the buyers at the same time to the ships; hence it is that the Guatemalan comes with the Mealy Amazon, yet it is much rarer. It is azure-blue on the forehead to the top of the head; the sides of the head are a lively green; the neck and shoulders greenish-grey; central spot in the wing scarlet; no red in the edge of the wing; the tail feathers altogether without red; all the upper part of the body dark grass-green; lower part somewhat lighter; the hinder parts and the lower covert of the tail yellow-green; beak blackish; on the upper beak a pinkish spot; cere bluish-grey; eyes carmine, with a broad brown circle round the iris; eye cere bluish-white; feet whitish-grey; claws black. The female has green on the forehead, each feather just edged with blue; the top of the head and the neck more of a purplish-blue; cheeks, sides of the head, and throat, grass-green; the beak lighter, blackish-horn-grey, with a whitish spot, at the root of the lower beak; the red ring in the iris is much narrower. Special indications: The blue on the top of the head; no red in the edge of the wing or the tail; down among the feathers of the back. Rather larger than a raven (length, 18½in. to 19in.; wings, 8½in. to 9in.; tail, 4½in. to 4¾in.). It is said by travellers to be a native of Mexico, particularly of the south. On the whole the Guatemalan greatly resembles the Mealy Amazon. Like the others, it is easily tamed, and learns to speak well; but is occasionally an unbearable screamer.

CHAP. XXIII.—THE FESTIVE AMAZON.

Psittacus festivus, L.

Festive Amazon (Ger., *Blaubart, blaubärtige Amazone, rothrückiger Amazonenpapagei, rothrückige Amazone, blaukinniger Kurzflügelpapagei;* Fr., *Perroquet Amazone à dos rouge, Perroquet Tavoua;* Dut., *Blauwkeel Amazone Papegaai*)—*Character as a Talker—Natural Characteristics.*

This parrot, known since Linné wrote of it, has been much praised by older authors, especially by Buffon, as a speaker which is said even to surpass the Grey Parrot. Nevertheless, it has also some very unpleasant characteristics, for it is treacherous and ill-tempered, and may bite even while being caressed. More modern travellers also, such as Schomburgk, assert that it is one of the most teachable parrots, speaks clearly, and learns to pipe songs well. Observation has, however, convinced us that these opinions are for the most part erroneous. All parrots, if badly trained, manifest treacherous, cunning ways, and among all the Amazons yet imported this one is decidedly wanting in talent for speaking.

The band on the forehead and the lores are blood-red; eyebrows and temple stripes light blue; a broad green spot on the top of the head; back of the head, as far as nape of neck, blue; sides of the head green; hinder part of the back and the rump scarlet; no central spot on wing; coverts of primaries, and bend of the wing, dark-blue; only the outermost tail feather on each side has a red base; all the upper parts of the body dark grass-green; the lower parts somewhat lighter; throat blue; lower coverts of the tail yellow-green; beak pale flesh-colour; cere blackish; eyes brown, inclining to carmine, with dark-brown rings round the iris; eye cere whitish-grey; feet greyish-white, or brownish horn-grey; claws brown-black. (In many the hinder part of the back, the rump, and tail, are uniformly green. It has not yet been ascertained whether this is the plumage of the female or of the young bird. The red lores are also sometimes absent, and the green spot on the top of the head extends more or less; the back of the head as far as the neck is blue). Size, about that of a crow (length, 14½in.;

wings, 7½in. to 8in.; tail, 3⅜in. to 3¾in. It is a native of Brazil, Bolivia, Guiana, and Venezuela. It is somewhat rare in the market, and this may be the reason why, even as an untrained bird, it fetches rather a high price.

CHAP. XXIV.—SALLÉ'S AMAZON.

Psittacus Salléi, Scl.

Sallé's Amazon (Ger., *St. Domingo-Amazone, weissstirnige Portoriko-Amazone, Blaustirne, Sallé's Kurzflügelpapagei;* Fr., *Perroquet Amazone de St. Domingo;* Dut., *Sallé's Amazone Papegaai*)—*Description.*

IN this species we introduce a group of smaller Amazons which are usually called collectively by the dealers "Porto Rico Parrots." As mentioned on page 97, they are far behind the great speakers previously treated of, both in the talent for speech and in general cleverness; on the other hand, they are always very trustworthy and gentle; but they must certainly be accounted dreadful screamers. Sallé's Amazon Parrot has a white forehead and lores; front and crown of the head dull blue; cheeks green, near the ear black; upper coverts of the tail yellow-green; coverts of the primaries and bend of wing blue; outer feathers of the tail, at the basal half, scarlet, which colour decreases on the inside; all the upper part of the body dark grass-green; each feather edged with black; lower part lighter grass-green; the hinder part of the body with a round, dull scarlet spot; near the leg bluish-green; beak yellowish horn-grey; cere whitish-grey; eyes dark-brown, inclining to red-brown; eye cere almost pure white; feet whitish-grey; claws horn-grey. Special indications: The want of the red line on the forehead, the eyebrow, and the central spot in wing; the forehead is sometimes yellowish-white. About the size of a jackdaw (length, 12⅜in. to 13in.; wings, 6¾in. to 7¼in.; tail, 3½in. to 4in.). It is a native of the Island of St. Domingo.

This pretty little parrot was described by Brisson as early as the year 1760, and was, therefore, known to the older writers; but it was thought to be the female of the White-fronted Amazon Parrot. Dr. Sclater, in 1857, was the first to determine

it with certainty as a species. It comes in comparatively small numbers into the market with us, and is not a special favourite. For the rest, the previous remarks on the small Amazons apply also to this.

CHAP. XXV.—THE RED-FRONTED AMAZON.

Psittacus vittatus, Bdd.

Red-fronted Amazon (Ger., *Rothstirnige Portoriko-Amazone, blos Portoriko-Amazone, rothstirniger Kurzflügelpapagei*; Fr., *Perroquet Amazone à front rouge, Perroquet de St. Dominge*; Dut., *Roodvoorhoofd Amazone Papegaai*)—*Description.*

This species also was taken to be the female of another kind. It was described by Boddaert in the year 1783, but until of late nothing was known of it. It has a scarlet band on the forehead; all the upper part of the body is of a dark grass-green, each feather having a broad black tip; the coverts of the primaries and bend of the wing dull blue; the edge of the wing mostly green; the outer feathers of the tail have a red spot at the base; spot on the throat red; all the lower part of the body light-green, on the front of the neck and breast each feather edged with black; belly and lower coverts of the tail yellow-green; beak horn-grey; upper half of beak greyish-yellow at the base; cere white; eyes brown or reddish-yellow; eye cere whitish; feet of a brownish flesh-colour; claws brown. Variations: Sometimes the face and upper part of the throat are red; the edge of wings bright yellow; the red spot on the throat is sometimes wanting. Special indications: The red band on the forehead, the blue covert feathers, and the blue bend of the wing; no red spot in the wings. Size about that of a jackdaw (length, 13¼in.; wings, 6¼in. to 7in.; tail, 3½in. to 4½in.). The traveller Moritz observed them at Porto Rico, and, according to his account, they do not differ in any way from the habits of all their larger congeners. They are said to lay waste the maize fields, frequenting them in flocks. When taken from the nest, and brought up by women, they are said to learn to imitate every possible tone of men or animals. They may be reckoned among the most common

birds in the trade, yet they are highly esteemed by some amateurs. On the whole, however, as regards their talents, the remarks concerning the lesser species hold good.

CHAP. XXVI.—THE WHITE-FRONTED AMAZON.

Psittacus leucocephalus, L.

White-fronted Amazon (Ger., *Rothhalsige Kuba-Amazone, blos Kuba-Amazone, rothbäuchiger Kurzflügelpapagei*; Fr., *Perroquet-Amazone à tête blanche, Perroquet Amazone de Cuba*; Dut., *Havana of Cuba Amazone Papegaai*)—*Description*—*Domestic Character.*

This bird has been known as long as any of the American parrots, for it was mentioned by Aldrovandi. The first to describe it was Edwards, and Linné gave its scientific name. Old authors extolled it highly, and Catesby even calls it the "Paradise Parrot;" Bechstein also includes it among the most teachable, and asserts that they chat much, and become very tame.

It is white on the forehead, top of the head, lores, and eye cere; the cheeks, round the ear, and the throat, are purple-red; the upper tail coverts yellow-green; the coverts of the primaries and the bend of the wing blue; the basal half of the tail feathers, on the inner webs, scarlet; all the upper part of the body deep grass-green, each feather having a broad black tip; the lower part is grass-green, the feathers being only lightly tipped with black; the belly purple; the leg feathers light-blue; the lower tail coverts yellow-green; the beak pale yellowish-white; the cere pure white; the eyes brownish or reddish-yellow; the feet whitish flesh-colour; claws flesh-coloured. In the female the red spot on the throat is said to extend to the upper part of the breast, and the lower part of the breast to be purple. In young birds the plumage is as follows: Only the forehead white; spot near the ear more of a greyish-black; the cheeks green, with a few red feathers. Special marks: The absence of the band on the forehead, and the stripes of the eyebrows; wings without central spot; on the other hand, the purple belly.

Size, fully that of a jackdaw (length, 12½in. to 13½in.; wings, 6⅞in. to 7⅝in.; tail, 4½in. to 4⅝in.).

It is a native of the Island of Cuba. Dr. Gundlach has given some interesting particulars concerning its habits in freedom, and I may also refer the reader to the remarks on Amazons on page 94! "The young birds in their native place are frequently stolen from the nest and brought up by hand; they are esteemed because they learn easily to repeat words and sentences, become very tame and affectionate, and have pleasing habits and beautiful plumage."

Fanciers among us also praise it as teachable, good-tempered, and easily tamed. "It chatters willingly and continuously," says Mr. K. Petermann, of Rostock, "but mostly incomprehensibly, and though it possesses remarkable power of distinction and an excellent memory, yet it is in every material respect far behind the Grey Parrot, and the most noteworthy of the Amazons." This opinion is decidedly just. The above-named gentleman has a Cuban Parrot of this breed which has never been ill during twenty-two years.

CHAP. XXVII.—THE RED-THROATED AMAZON.

Psittacus collarius, L.

Red-throated Amazon (Ger., *Weissköpfige Amazone, Jamaika-Amazone, Jamaika-Amazonenpapagei, weissköpfiger Kurzflügelpapagei;* Fr., *Perroquet Amazone à gorge rouge, Perroquet Amazone de la Martinique;* Dut., *Witkop Amazone Papegaai*)—*Description.*

The Red-throated Amazon Parrot has long been familiar to us; it was described by Brisson (1760), and named by Linné; yet it was formerly often confused with, or mistaken for, the White-fronted Amazon, to which, indeed, it bears a strong resemblance.

It is of pure white on the forehead and lores; the top of the head is bluish-green, inclining to pure blue; the sides of the head, and the upper part of the throat, also, as a rule, the back of the neck, are ruby or wine-coloured; a spot under

the eye is pale-blue; about the ear greenish-blue; upper tail coverts yellowish-green; the coverts of the primaries are bluish-green; all the tail feathers, except the two centre ones, are pure green, at the base scarlet; all the upper part of the body is grass-green; at the sides and back of the neck each feather is edged with black; the under part of the body is a paler, lighter green; the thigh, the hinder part of the body, and the lower tail coverts, yellowish-green; the beak a waxy-yellow; the end of the upper mandible is a greyish-white (a pale horn-grey sulphur colour at the base); the cere greyish-white; feet yellowish brown-grey; the claws black. Size, about that of a jackdaw (length, 12½in. to 13in.; wings, 6¾in. to 6⅞in.; tail, 3⅝in. to 4in.).

The marks which serve to distinguish this species from the preceding are: The whole of the upper part of the body is grass-green, without the broad black tips on the feathers, which, however, appear narrow and faintly marked on the sides and back of the neck; the red spot on the belly is wanting.

It is a native of Jamaica, where it is said to be rather plentiful, to live chiefly on oranges, and in its habits to resemble others of this family. Many fanciers esteem it as teachable; yet it certainly does not surpass the White-fronted Amazon, and scarcely even equals it.

CHAP. XXVIII.—THE WHITE-BROWED AMAZON.

Psittacus albifrons, Sprrm.

Spectacle Parrot (Ger., *Brillenamazone, Weissstirnige Amazone, Weisszügeliger Kurzflügelpapagei*; Fr., *Perroquet à front blanc, Perroquet à joues rouges*; Dut., *Witvoorhoofd Amazon Papegaai*)—*Description.*

Although described by Hernandez in the year 1651, yet this parrot has been almost up to the present time a rarity in museums as a stuffed specimen. In the trade it has long been one of the better known, though, perhaps, not one of the commonest. Of late, however, it has appeared several times at bird shows.

It is white on the forehead and top of the head, with a blue,

Size, fully that of a jackdaw (length, 12½in. to 13½in.; wings, 6⅞in. to 7⅝in.; tail, 4½in. to 4⅝in.).

It is a native of the Island of Cuba. Dr. Gundlach has given some interesting particulars concerning its habits in freedom, and I may also refer the reader to the remarks on Amazons on page 94: "The young birds in their native place are frequently stolen from the nest and brought up by hand; they are esteemed because they learn easily to repeat words and sentences, become very tame and affectionate, and have pleasing habits and beautiful plumage."

Fanciers among us also praise it as teachable, good-tempered, and easily tamed. "It chatters willingly and continuously," says Mr. K. Petermann, of Rostock, "but mostly incomprehensibly, and though it possesses remarkable power of distinction and an excellent memory, yet it is in every material respect far behind the Grey Parrot, and the most noteworthy of the Amazons." This opinion is decidedly just. The above-named gentleman has a Cuban Parrot of this breed which has never been ill during twenty-two years.

CHAP. XXVII.—THE RED-THROATED AMAZON.

Psittacus collarius, L.

Red-throated Amazon (Ger., *Weissköpfige Amazone, Jamaika-Amazone, Jamaika-Amazonenpapagei, weissköpfiger Kurzflügelpapagei;* Fr., *Perroquet Amazone à gorge rouge, Perroquet Amazone de la Martinique;* Dut., *Witkop Amazone Papegaai*)—*Description.*

The Red-throated Amazon Parrot has long been familiar to us; it was described by Brisson (1760), and named by Linné; yet it was formerly often confused with, or mistaken for, the White-fronted Amazon, to which, indeed, it bears a strong resemblance.

It is of pure white on the forehead and lores; the top of the head is bluish-green, inclining to pure blue; the sides of the head, and the upper part of the throat, also, as a rule, the back of the neck, are ruby or wine-coloured; a spot under

the eye is pale-blue; about the ear greenish-blue; upper tail coverts yellowish-green; the coverts of the primaries are bluish-green; all the tail feathers, except the two centre ones, are pure green, at the base scarlet; all the upper part of the body is grass-green; at the sides and back of the neck each feather is edged with black; the under part of the body is a paler, lighter green; the thigh, the hinder part of the body, and the lower tail coverts, yellowish-green; the beak a waxy-yellow; the end of the upper mandible is a greyish-white (a pale horn-grey sulphur colour at the base); the cere greyish-white; feet yellowish brown-grey; the claws black. Size, about that of a jackdaw (length, 12½in. to 13in.; wings, 6¾in. to 6⅞in.; tail, 3⅝in. to 4in.).

The marks which serve to distinguish this species from the preceding are: The whole of the upper part of the body is grass-green, without the broad black tips on the feathers, which, however, appear narrow and faintly marked on the sides and back of the neck; the red spot on the belly is wanting.

It is a native of Jamaica, where it is said to be rather plentiful, to live chiefly on oranges, and in its habits to resemble others of this family. Many fanciers esteem it as teachable; yet it certainly does not surpass the White-fronted Amazon, and scarcely even equals it.

CHAP. XXVIII.—THE WHITE-BROWED AMAZON.

Psittacus albifrons, Sprrm.

Spectacle Parrot (Ger., *Brillenamazone, Weissstirnige Amazone. Weisszügeliger Kurzflügelpapagei*; Fr., *Perroquet à front blanc. Perroquet à joues rouges*; Dut., *Witvoorhoofd Amazon Papegaai*)—*Description.*

Although described by Hernandez in the year 1651, yet this parrot has been almost up to the present time a rarity in museums as a stuffed specimen. In the trade it has long been one of the better known, though, perhaps, not one of the commonest. Of late, however, it has appeared several times at bird shows.

It is white on the forehead and top of the head, with a blue,

spot on the crown; a narrow scarlet band on the forehead; the lores are scarlet, also the eyebrow stripes, and a wide space round the eye near the beak (the red band on the forehead is sometimes wanting); the back of the head and neck are bluish-green; the cheeks and space round the ear yellowish-green; the bend of the wing and the coverts of the primaries bright scarlet; the edge of the wing is green; the four outer tail feathers are red on both webs at the base; all the upper part of the body is dark grass-green, each feather having a dark edge; the lower part of the body is a faint, paler green, with a faded dark edge to the feathers; the belly and lower tail coverts yellowish-green; the beak greyish waxy-yellow; the skin on the nose yellowish-grey; the eyes yellow, inclining to a reddish-brown; eye cere a dark slate-colour; feet a brownish-grey; claws blackish. About the size of a jackdaw (length, 12½in. to 12½in.; wings, 7½in. to 7½in.; tail, 3¾in. to 4⅜in.). It is a native of Mexico, Honduras, Guatemala, Nicaragua, and Costa Rica.

This Amazon, which has hitherto received but little notice, has lately been described very favourably by Mr. F. Arnold, of Münich: "It speaks a great deal, but only a few words clearly; it learns very quickly, but forgets just as soon. Otherwise it is a delightful household companion, which allows the children to do as they like with it—drive it about in a doll's carriage, &c. It also is fond of teasing in its turn; it climbs up the curtain just to such a height that its little friends cannot reach it, and challenges them with continual cries to pursue it further by the aid of chairs and tables, till at last it walks up and down, with a dignified air, on the curtain-pole at a safe height. Its wishes, such as to have its head scratched, to shake hands, or to receive a bit of biscuit or a piece of apple, must be immediately complied with; or, if these modest desires are not attended to, it withdraws, and rejects all efforts at reconciliation by pecking with its beak. It destroys everything it can reach; but, if it be scolded, it knows how, with wonderful sagacity, to disarm the intention by a great show of affection. On this account it has been, and continues to be, the favourite with all the members of the family." In this we have confirmation of the opinion as to the talent of the smaller Amazons which I have already expressed.

CHAP. XXIX.—THE RED-MASKED AMAZON.

Psittacus brasiliensis, L.

Red-masked Amazon (Ger., *Rothmasken-Amazone, Rothmaskirter Kurzflügelpapagei*; Fr., *Perroquet Amazone à masque rouge*; Dut., *Roodmasker Amazone Papegaai*)—*Description.*

This Amazon, which belongs to the larger species, is also among the most interesting. It is one of those described by Edwards, and named by Linné; yet the older writers have given no further information concerning it, and all knowledge of its habits, indeed of its native land, was wanting until recently.

It is scarlet on the forehead and top of the head (the lores and sides of the forehead a dull scarlet; the middle of the forehead and front of the head pale-red, with a yellowish-green lustre); the cheeks and the space round the ear are of a bluish-red (the streak above the eye and near the ear is of a cornflower-blue); the back of the head and neck green (each feather having a red spot in the centre); the primaries and secondaries more or less yellow on the outer web; the final half of the tail feathers scarlet, with greenish-yellow tips; the two centre ones without red; all the upper part of the body grass-green, the feathers having no dark edges (yet the upper coverts of the wings and shoulders have a bright blackish-blue lustre; the back, rump, and upper tail coverts are pure green); all the lower part of the body is yellowish-green; the upper part of the throat is bluish-red; the beak brownish horn-grey, with a lighter ridge, a blackish point, and a yellowish-grey spot on either side of the upper mandible; the lower beak is a yellowish horn-grey; skin on the nose grey; eyes brown, with an orange-red ring (sometimes it is dark-blue); the eye cere grey-blue; feet grey; claws black. The blackish-blue lustre may be considered as the special mark for recognition. Size, almost as large as a raven (length, 15⅜in. to 17½in.; wings, 8⅜in. to 9⅜in.; tail, 4¼in. to 5⅜in.). It has lately been proved to be a native of Southern Brazil.

In the year 1828 there was a Red-masked Amazon in the collection of living birds belonging to the Emperor of Austria, in Schönbrunn. Several decades later Count Hollstein brought another with him from his travels in Brazil, which then passed into the possession of Mr. Karl Hagenbeck, and was shown at

the great Ornis Exhibition, in Berlin, amongst the collection of Amazons which I have already mentioned several times. The third Amazon of this species was received by Mr. K. Petermann, in Rostock, through the bird dealer, A. Schäffer, in Hamburg. This Amazon is said to become exceedingly tame, and so gentle that one may do all sorts of things to it without its biting. It is not credited with any special talent for speech; yet it does not utter the harsh, ugly cry.

CHAP. XXX.—THE VINACEOUS AMAZON.

Psittacus vinaceus, Pr. Wd.

Vinaceous Amazon (Ger., *Weinrothe Amazone, Taubenhals-Amazone, rothschnäbeliger Kurzflügelpapagei*; Fr., *Perroquet Amazone à couleur de vin, Amazone à bec couleur de sang*; Dut., *Roodbek Amazone Papegaai*)—*Natural History*—*Capacity as Talkers.*

ALTHOUGH this species was known to Brisson (1760), yet it was first described with exactness by Prince Max von Neuwied (1820). The Vinaceous Amazon, as this bird is usually called in the trade, is very beautiful in plumage. The edge of the forehead and lores are blood-red; the forehead is dark-green; the cheeks yellowish olive-green; the head and upper part of the back dark grass-green, each feather with a narrow blackish border; the back of the neck bluish-lilac, each feather tipped with black; the central spot of the wing scarlet (the primaries are broad, and red on both webs); the outer feathers of the tail scarlet on both webs; the whole of the upper part of the body dark grass-green; the throat is marked with a scarlet spot (which, however, is sometimes wanting); the breast and belly are of a dark wine-red (sometimes this extends even over the hinder parts of the body); the thigh and lower coverts of the tail yellowish-green; the beak either a light or a deep blood-red, the point greyish-white; the lower mandible reddish-grey; the cere greenish or brownish-grey; the eyes brown, inclining to orange-red; eye cere greenish or brownish-grey; feet bluish-white; claws horn-grey. About the size of a crow (length,

13⅜in.; wings, 7½in. to 8½in.; tail, 4½in. to 4⅝in.). It is a native of Southern Brazil and Paraguay.

Prince von Wied, Natterer, Azara, and Burmeister have written of this bird, and from their accounts we gather that this species does not differ in its habits from the others. Mr. Petermann, who has also observed them in their native country, met with them several times in large, noisy swarms in the tall, dense primeval forests on the coast of St. Katherine, and has also frequently kept them in cages. When excited they erect the feathers on the back of the neck, and, so Mr. Petermann writes, "their orange-red eyes gleam with uncontrollable defiance; yet they are not wicked, but gentle, and even old ones, which have been tamed by a shot in flight, soon become tame. In captivity they are extremely quiet, but cunning and teachable; yet they learn comparatively little, and do not even speak distinctly. They must, in this respect, take secondary rank among the Amazons."

CHAP. XXXI.—THE YELLOW-CHEEKED AMAZON.

Psittacus autumnalis, L.

Yellow-cheeked Amazon (Ger., *Gelbwangige-Amazone, Herbst-Amazone, Herbspapagei, gelbwangiger Kurzflügelpapagei*; Fr., *Perroquet Amazone, à joues jaunes*; Dut., *Geelwang Amazone Papegaai*) — *Distinguished from the Diademed Amazon.*

The Yellow-cheeked Amazon, although long known, for it was described and pictured by Edwards, and named by Linné, has, even till the most modern times, been mistaken for, or confused with, the Diademed Amazon, not only by the dealers, but also by ornithologists; and this is even still the case. The band on the forehead and the lores is scarlet; the top of the head green, each feather having a bluish-lilac tip (sometimes appearing deep blue); the cheeks are grass-green; the spot on the cheeks a high-coloured reddish-yellow; the feathers of the neck grass-green, finely edged with black; the central spot of the wing scarlet; the outer web of the secondaries red; the

bend of the wing green; only the outermost feathers of the tail with a faded red spot; all the upper part of the body grass-green; the lower parts yellowish-green (sometimes the feathers are edged with black); the beak horn-grey; the point and lower mandible black; the cere whitish flesh-colour; the eyes are red, with a narrow yellow circle round the iris; the eye cere whitish; feet whitish-grey; claws blackish. Size, about that of a crow (length, 14¼in.; wings, 7in. to 7⅞in.; tail, 4in. to 4½in.).

It presents special marks for recognition; it may be distinguished from its fellows, especially from the Diademed Amazon, by the red forehead and lores, the more or less bright-blue top of the head, and the deep-yellow cheek spot; sometimes the throat is marked with red. It is a native of Central America, southerly Mexico, Honduras, and Guatemala, and, according to Dr. von Frantzius, also of Costa Rica. The Yellow-cheeked Amazon was first brought to the London Zoological Gardens in the year 1869, and has appeared since 1878 at several bird shows, and at the bird dealers' now and then. The five specimens which were exhibited at the Ornis Exhibition, in 1879, by Mr. K. Hagenbeck and Miss Chr. Hagenbeck, displayed, in the most marked manner, the points of difference between this and the two most similar species. In respect of talent and capability for training, this parrot holds a secondary rank.

CHAP. XXXII.—THE DIADEMED AMAZON.

Psittacus diadematus, Shw.

Diademed Amazon (Ger., *Diadem-Amazone, Amazone mit lilafarbnem Scheitel, lilascheiteliger Kurzflügelpapagei*; Fr., *Perroquet Amazone à diadème, Perroquet Amazone couronné*; Dut., *Kroonen Amazone Papegaai*)—*Description.*

A NARROW band on the forehead and lores is of dark-scarlet; the top of the head and the neck green; the central spot in the wing scarlet (the secondaries are red on the outer web); the edge and coverts of the wing are green; the outermost tail feathers are deep-red on the outer web; all the upper part

of the body is grass-green, without a dark edge to the feathers; the beak is yellow; the upper mandible along the edge and at the point is blackish; the cere whitish-grey; the eyes dark-brown, inclining to black, surrounded by a large whitish-grey eye cere; the feet and claws are a blackish-grey. Size, about that of a crow (length, 14½in.; wings, 7in. to 7⅔in.; tail, 4in. to 4⅛in.). Its special marks are dark-scarlet lores, and stripe on the forehead; purplish-blue on the top of the head; cheeks and sides of the head emerald-green, with one single yellow spot under the eye. It is a native of the district along the Amazon river, Guiana, Columbia, and Panama.

This species was described and painted by Spix in the year 1825. A Diademed Amazon was amongst the collection of the Emperor of Austria, at Schönbrunn, as early as 1845, and one was received in the Zoological Gardens, in London, in 1871; isolated specimens have appeared in the Berlin Exhibitions since 1876. It agrees in general character with the preceding species.

CHAP. XXXIII.—DUFRESNE'S AMAZON.

Psittacus Dufresnei (Lvll.), Khl.

Dufresne's Amazon (Ger., *Granada-Amazone, Goldmasken*) *Amazone (!), Dufresne's Kurzflügelpapagei;* Fr., *Perroquet Amazone de Dufresne;* Dut., *Dufresne's Amazone Papegaai*—*Description.*

YELLOW lores, blue cheeks, and red on the front of the head, are the distinguishing marks of this species. It is grass-green on the back of the head and neck, each feather having a narrow black tip; the front of the head is scarlet; the lores deep-yellow; the cheeks and upper part of the throat sky-blue; on the back each green feather has a darkish edge; the central spot on the wings vermilion; the first three secondaries have the outer web red; the edge and coverts of the wings are green; the five outermost tail feathers have a large blood-red spot; all the lower part of the body is a lighter green, without the dark border to the feathers; the beak is pale coral-red; the cere reddish-white; eyes orange

red; eye cere white; the feet are a yellowish-grey; claws horn-grey. (Sometimes the whole front of the head is scarlet; the lores, the base of the beak, and the upper part of the throat may be yellow; the cheeks and the throat may also be blue.) Size, about that of a crow (length, 14½in.; wings, 7in. to 7¾in.; tail, 4in. to 4½in.). It is a native of Central and Northern Brazil as far as Guiana and New Granada.

Schomburgk, Prince Max von Wied, Natterer, and others, have written of this species, and, according to them, the particulars of its mode of life are in no respect different from those of the others. A Dufresne's Amazon appeared in the collection of the Emperor, in Schönbrunn, as early as the year 1830; and it has been brought into our markets now and then in later times; nevertheless, it continues to be one of the rarest species.

Travellers differ in their opinion as to its talents, for, whereas the Prince asserts that it is teachable and soon learns to speak, Schomburgk denies this. Mr. Petermann says that it is highly esteemed in Brazil on account of its eminent talent for speaking, and there fetches a high price.

CHAP. XXXIV.—THE PIONINÆ, OR LONG-WINGED PARROTS.

Capacity as Talkers—Distinguishing Marks—Habitat—Importation—Management.

FAR behind the two genera of which we have already spoken stand the Long-winged Parrots (*Pionias*, Wgl.), both in respect of talent for speech and mental capacity; yet they greatly resemble them in physical and other peculiarities, as well as in their manner of life. They really only learn to chatter, not to talk properly. Among the fifty different species which are at present known, only three are speakers; but this by no means proves that none of the others, or even most of them, will not at some time or other prove themselves to be gifted with speech. I shall, therefore, enter the more fully into the general descriptions, researches, and experiences forthcoming as to the genus Pionias.

Their distinguishing marks are—the beak strong, longer than deep, somewhat compressed, with a long, overhanging point, mostly clearly cut, with a much-bent, sharp-edged ridge, distinctly furrowed; the lower mandible is of the same depth, with a broader, more rounded socket-edge, and the gums hollowed; the tongue is thick, fleshy, broad, and ending abruptly; the nostrils are open, rounded; the cere is either set with single bristles or feathered all over; eye cere white; the lores are feathered; the wings are long, pointed, more than twice as long as the tail; the latter is broad, straight, shaped at the end like a bracket, rarely rounded off; the feet are strong, short, with powerful, much-bent claws; the plumage soft, inclining to firmness, consisting of broad feathers, taking in many species the shape of scales on the head and neck; no powdery down; the prevailing colour is green; no central spot in the wings; the body is short, thick, and compact. Size, about that of a crow or starling.

The Long-winged Parrots are more widespread than any other, for they appear in Asia, Africa, and America. Unfortunately, we have as yet but little information concerning their mode of life in freedom; we only know that they inhabit trees preferably, and, except at brooding time, live gregariously, and in large flocks attack and do much harm to the useful crops, feed upon fruits and all kinds of seeds, and, like most of the parrots, build in trees.

The dealers import only one species—the Small Senegal Parrot—regularly and in great numbers; all the others come singly and by chance. The Pioninæ, which, however, are chiefly to be regarded as ornamental birds, have found in Mr. von Schlethtendal, State Councillor, of Merseburg, and in the university bookseller, Mr. Fiedler, of Agram, sympathetic observers and friends. I have myself, in the course of years, kept a considerable number of them. Immediately after importation they are, as a rule, very weak; but as soon as they have recovered from the effects of the bad treatment they receive on the way, they in almost every case show themselves to be strong and hardy; yet they do not appear to live as long as other parrots. Most of them are quiet birds, which move but little, soon become tame and affectionate, but from time to time scream most insufferably. Some of the smaller species are exceedingly gentle and lovable, and, moreover, never utter a disagreeable note. On the whole, they cannot be accounted favourites, because

they are nearly all of a dull colour; yet many species fetch a high price, not only on account of their rarity, but for their beauty and pleasing ways. No results have as yet been attained in the breeding of them, and this is much to be regretted, because travellers have not had an opportunity of observing their natural development.

Their management is simple and inexpensive, for they really eat nothing but seeds and fruit. They are fed with canary seed, oats, sunflower seeds, and hemp; but care must be used in giving the last, especially in warm weather. Good sweet fruit, milky maize heads, and a little green food, as well as green branches to gnaw, are necessary for their health.

CHAP. XXXV.—THE SENEGAL PARROT.

Psittacus Senegalus, L.

Senegal Parrot (Ger., *Mohrenkopf-Papagei, Orange-bäuchiger Langflügelpapagei*; Fr., *Perroquet du Sénégal, Perroquet à tête noire*; Dut., *Senegal Langvleugel Papegaai*)—*Description—Regarded as an Ornamental Bird—Examples of Talkers—Importation.*

The pretty Senegal Parrot is one of the commonest birds in the trade, and arrives in great numbers every year. It is also one of those parrots which have been longest known, for, as early as the year 1455, it was mentioned by Aloysius Cada Mosto, and described, in 1760, by Brisson.

The old male is of a brownish-grey, inclining to black, on the head, cheeks, and upper part of the throat; on the hinder part of the back, the rump, and the upper tail coverts it is of a brilliant grass-green; the quills are of an olive-greenish-brown; wing coverts green, with a brown centre; the shoulder feathers and the small under coverts of the wings are yellow; the tail and all the upper parts of the body are light grass-green; the throat and upper part of the breast grass-green, the rest of the under part of the body being yellow; the breast and the belly are orange-colour, inclining to vermilion; the under coverts of the tail yellow; the beak is dark horn-grey, shading to black-brown; the cere is blackish; the eyes vary from sulphur-yellow to dark-brown; the eye cere is blackish-grey or black;

the feet black-brown; the claws black. The female—head, a lighter brown-grey; the lower part of the body uniformly yellow (without any orange-red); the lower coverts of the tail yellowish-green; otherwise it corresponds to the male. Size scarcely that of a jackdaw (length, 10¼in. to 11in.; wings 5⅝in. to 6¼in.; tail, 2¼in. to 2⅝in.).

It is known to be a native of West Africa and Senegambia, but it probably exists in the far interior of Africa.

The Senegal Parrot is noticeable only as an ornamental bird for Zoological Gardens or special fanciers. The older writers assert unanimously that it has no talent for speech; but this has of late been several times refuted, cases being shown in which the Senegal Parrot has learnt to speak.

These descriptions proceed from the two gentlemen named in the last chapter and from Mr. A. E. Blaauw. The old bird of this species is exceedingly untameable and stupid; with wild screams it throws itself headlong from the perch when anyone approaches, presses itself into a corner, stupid and shy, and utters a peculiar rattling sound; the young birds are easily tamed and very affectionate. One of this kind was able to open any door, was fond of play, and extraordinarily droll, also gentle and good-tempered, allowed one to scratch its head or take it from the cage and pet it; it only learnt, however, to imitate a few words, but it could copy the voices of other birds. Mr. Blaauw, in Amsterdam, says that his Senegal Parrot spoke French prettily, very clearly, and with a soft voice. "It sounds very strange when it mixes up the words and sentences with its natural cries, and at the same time screams articulately."

Immediately after importation, at least in later times, this otherwise healthy and hardy bird becomes very weakly. It becomes ill then from every change of diet; also, as would appear, when given hemp seed abundantly. Therefore, it should at first only get canary seed and oats, and, later on, be accustomed by degrees to hemp and sunflower seed. It must always have the addition of good sweet fruit, but in small quantities.

CHAP. XXXVI.—THE MAITAKA PARROT, OR RED-VENTED PARROT.

Psittacus menstruus, L.

The Blue-headed Parrot (Ger., *Blaukopf, fälschlich blauköpfiger Portoriko-papagei, Schwarzohrpapagei, Schwarzgeöhrter Langflügelpapagei, Maitaka;* Fr., *Perroquet à tête bleue;* Dut., *Blauwkop Langvleugel Papegaai*)—*Distinguishing Marks—Character as a Talker.*

This species, which, as early as 1764, was well depicted by Edwards, and described by Linné, has, however, been constantly confused with others, although it may always be distinguished from its congeners by its blue head, neck, and breast. It is coloured as follows: A broad band of corn-flower blue across the forehead; the top of the head, neck, and back of the neck covered as with blue and green scales; the spot on the ear black (but here also each feather is delicately tipped with blue); the upper part of the back is olive-green; the hinder part of the back, the rump, and the upper coverts of the tail, a pure green; all the quills and their coverts are green; the centre feathers of the tail green, blue at the point, the outer webs blue, and the inner webs at the base red; all the upper part of the body a dark grass-green; the coverts of the wings are a yellow-brownish olive-green; the cheeks, sides of the head, and the upper part of the throat, blue; the upper part of the breast greenish-blue, with a red lustre; the lower part of the breast and the belly olive-green; the under coverts of the tail a dark purplish-red, with a green band and a blue spot at the end; the beak is a blackish-brown, with a red spot at the base of the upper mandible (when old, also on the lower mandible); the cere dark-grey; the eyes grey, inclining to a blackish-brown; eye cere slate-grey; feet whitish-grey, with black scales and claws. The distinguishing marks of the female are not known with certainty. The plumage of the young bird is nearly uniformly green; the forehead and top of the head are, strange to say, red; the throat and upper part of the breast bluish; the beak greyish-yellow, inclining to a reddish-orange. About the size of a jackdaw (length, 10½in.; wings, 6⅝in. to 7⅓in.; tail, 2in. to 2¾in.). According to Finsch, in any stage of plumage it may be recognised by the rump and the upper

coverts of the tail being green, the lower tail coverts having green tips, and the two middle feathers of the tail blue tips.

This Long-winged Parrot is a native of South America, from the South of Brazil to Panama, and lately it has been found in Central America. Sclater says it also lives in Mexico and Trinidad. It is said to resemble the Amazons in its natural habits. Mr. Petermann informs us that "it becomes extremely tame and affectionate, and displays much intelligence, although its talent for speech is small."

Schlechtendal describes it as a good-tempered, rather awkward bird, which soon becomes tame, but has an unpleasant voice. Mrs. von Proscheck, of Vienna, had a Maitaka Parrot which talked, and the wholesale dealer, Mr. Fockelmann, in Hamburg, had such a one, which latter also learnt to whistle prettily. Mr. Fiedler had several which screamed almost incessantly; but these were already old birds. The young Maitaka is, in my opinion, as pleasant a companion as the Senegal Parrot, and, like the latter, learns to chatter a little, but not much.

CHAP. XXXVII.—THE HAWK-HEADED PARROT.

Psittacus accipitrinus, L.

Hawk-headed Caïque, Hooded Parrot (Ger., *Kragenpapagei, Hollen-Langflügelpapagei, Fächerpapagei (f)*; Fr., *Perroquet à cravatte, Perroquet maillé*; Dut., *Havikkop Langvleugel Papegaai*)—*Description—Habitat—Domestic Character.*

THE Hawk-headed Parrot must always be considered as one of the most beautiful and interesting. Its curious hood, or ruffle, of brown and blue feathers, which it erects when excited, so that it forms a circle round the head, gives it a strange appearance. It was mentioned by Clusius as early as 1605, and delineated by Edwards; Brisson was able to describe it from a living specimen in the possession of the Marquise de Pompadour. Linné named it.

It is coloured and marked as follows: The front and top of the head are white; the lores, the part round the ear, the sides of the head, and the upper part of the throat, of a pale

brown, each feather having a whitish spot on the stem; on the back of the head and neck there are broad feathers about 1¾in. in length, light-brown at the base, and with a broad blue tip, which form the movable collar or hood; the back of the neck and all the upper part of the body are dark grass-green; the primaries and their coverts are, however, black, with the outer webs only edged with green; all the lower part of the body is brown, each feather with a broad blue edge; the mandible is a blackish-brown; the upper beak, with a light ridge; the eyes brown, shading to vivid-yellow; the eye cere brown; the feet blackish-brown; the claws black. Although this parrot appears in many varieties of shades, yet it is always easily recognised, and can never be confused with any other. It is one of the most stately parrots, and is almost as large as a raven (length, 14½in.; wings, 6¾in. to 7½in.; tail, 4¾in. to 5½in.).

It is a native of the most northerly part of South America, extending over North Brazil, Guiana, and Surinam.

Burmeister thinks that the Hawk-headed Parrot is delicate, and that it is on this account it appears so seldom in the European markets. This supposition is, however, disposed of by examples of these birds proving themselves exceedingly healthy, and remaining strong and hardy in the cage for many years. Mr. Wigand, of Danzig, describes one which he had for eleven years. As a splendid and curious ornamental bird, it is one of the principal sights of zoological gardens and other resorts for the study of natural history. A Hawk-headed Parrot, belonging to Mr. Wiener, of London, which I had in my care for some time, appeared thoroughly tame, trained, and affectionate, displayed cleverness and intelligence, and said some English words very clearly and with perfect sense. It erected the hood more frequently in delight and pleasure than in anger. It is considered and praised by all who have kept it as being uncommonly quiet, peaceable, and gentle, not treacherous and cunning, nor vicious. Its whole character being cautious, it speaks slowly, pipes loudly and not unpleasantly, yet not frequently, screams piercingly and harshly, but leaves off directly if anyone speaks to it. Mr. Scheuba, of Olmütz, possessed one which chattered the whole day, seldom screamed, and whose talents and capabilities for being trained caused this experienced parrot-keeper and connoisseur to reckon this species among those of the first rank.

The best food for it is seed, with the addition of some biscuit or egg-bread; sweet fruit, and fresh twigs to gnaw. It appears only singly, and seldom in our markets and exhibitions.

CHAP. XXXVIII.—THE ECLECTI.

Distinguishing Marks—As Cage Birds—Management.

The Eclecti, or, as they are called in Germany, "The Noble Parrots" (Eclectus, Wgl.) are large, handsome birds, closely allied to the Amazons as well as to the Pioninæ, though they are distinguished from both by very distinct marks. These marks are as follows: The beak remarkably large and powerful, rather thick and broad, deeply bent downwards at the base, rounded off at the sides and on the ridge; the point of the upper mandible projects moderately; near the point there is a faint indentation; the lower beak is deeper, with a broad socket-edge, the sharp edges towards the end are deeply hollowed out; the tongue is thick, fleshy, ending abruptly; the nostrils are small and round, and towards the cere are mostly covered with the feathers; the circle round the eyes is feathered; the wings are longer than the tail; the latter is broad, almost straight, or rounded off; the feet are strong and short; the claws are powerful and curved; the plumage is firm and hard; the colour green or dark-red; the body compact and stout. Size, that of a raven, or rather less.

They are said to inhabit chiefly New Guinea, the Moluccas, and the Philippine Islands, and they probably extend as far as Celebes on the west, to Solomon's Island on the east, and northwards as far as the Philippines.

On the whole, we may regard their habits as similiar to those of the other larger parrots, only they are probably quieter, less active, more unwieldy, and more silent in freedom, as they are in the cage. Their food, as far as we know, consists of seeds, nuts, stone-fruits, and other soft, sweet fruits. Where they flourish in great number they effect, like all parrots, a good deal of damage. Though their flight is clumsy, they accomplish long distances quickly. They look awkward both in climbing and walking on the ground. When in the forests they are said to be more frequently solitary than gregarious.

Dr. Finsch has divided the Eclecti into two groups—firstly, the green or red species, without marks on the wings, with an almost straight tail, and the skin of the nose covered with feathers; secondly, the yellowish-green species, with marked wings, longer rounded tail, and unfeathered skin on the nose. If this division be maintained, then on no account must the first group be divided into two kinds—green and red; for Dr. A. B. Meyer, the well-known traveller, at present director of the Natural History Museum, in Dresden, has lately made the interesting discovery that two such variously-coloured birds always form one species, of which the green is the male and the red the female. The conclusion at which Dr. Meyer thus arrived, that the numerous green Eclecti shot down by him always proved upon examination to be male birds, and the red ones to be females, was at first much disputed, and even strenuously opposed; nevertheless, it has been established as a fact by the experiments in breeding made by Dr. Frenzel, of Freiberg, as well as by information sent by Dr. Finsch from the place of their habitation.

The Eclecti, especially the male of the New Guinea Eclectus, must be reckoned amongst the best and longest-known cage birds; yet they are almost always imported singly and most of them are very rare. Immediately after their arrival they appear very weak, and need much care to keep them alive and to acclimatise them; but as soon as they have passed, after the first few months, through the dangers of the changed circumstances, they become very healthy and hardy, and, with favourable surroundings, live many years. To their extreme quietness in the cage, of which I spoke before, is probably due the fact that they are not special favourites, though their strikingly-beautiful and brilliant plumage makes them of value as ornamental birds. They do not nearly equal the Grey Parrot nor the Amazon in intelligence, though they surpass the Pioninæ. We have many examples of very tame and affectionate Eclecti, as well as of individuals which have proved highly-talented speakers, though, on the whole, as talkers, they can only take third, or, at the best, secondary rank.

Their management is somewhat difficult, for on their voyage to this country they are accustomed, as a rule, only to soaked rice, bananas, and other soft fruit; but it is well to accustom them as soon as possible, but, of course, very gradually, in the manner described on page 29, to canary seed, oats, some hemp,

NEW GUINEA ECLECTUS.

(*Psittacus Linnæi.*)

and sunflower seed, also raw unshelled rice, and good fruit (the best is cherries, pears, or apples), with the addition of some egg-bread moistened in water, or some hard biscuit; service berries are also eaten with eagerness, and are very wholesome. Branches for gnawing must not be omitted, young shoots of the pine being especially liked. If it be possible to obtain heads of maize fresh from the garden (preferably with the grain still in a milky state), nothing further can be needed for acclimatisation.

Their diseases are the same as those of other parrots; but at first they are apt to suffer from any change of temperature or draughts, coughing, panting, discharge from the nose, and, consequently, inflammation of the organs of breathing; but these, if treated properly, will pass over without danger.

CHAP. XXXIX. — THE NEW GUINEA ECLECTUS OR PARROT.

Psittacus Linnéi, Rss.; P. polychlorus, Sepl. as male,
P. Linnéi, Wgl. as female.

Red-sided Eclectus, or Red-sided Green Lory, male bird so-called (Ger., *Grünedelpapagei, grosser grüner Edelpapagei, and, erroneously by the dealers, Wachsschnabellori oder Wachsschnabel*; Fr., *Grand Perroquet vert, ou Lori Perruche à flancs rouges*; Dut., *Groote groene Edelpapegaai*)—*Linnean Eclectus, or Linnean Lory, female so-called* (Ger., *Linné's Edelpapagei*; Fr., *Perroquet de Linné*; Dut., *Linné's Edelpapegaai*)—*New Guinea Eclectus or Parrot* (Fr., *Perroquet de la Nouvelle Guinée*; Dut., *New Guinea Edelpapegaai*) — *Description — Habitat—Importation—Domestic Character.*

It is an extraordinary sight to see a pair of these large birds sitting together and "billing and cooing," for they are so different in appearance, and those who have not studied the matter can scarcely be persuaded to believe that they are mates; indeed, I may here casually remark that the wholesale dealers will even now hardly credit it.

The male is grass-green, the upper and lower parts of the body being alike; the primaries and their coverts are

lustre; the primaries, their coverts, the border of the wing and the small under coverts of the wing, indigo-blue; the tail is scarlet, blackish at the base, at the end, both above and below, lemon-yellow; all the upper part of the body a dull scarlet: the breast and belly violet-blue; the lower coverts of the tail lemon-yellow; the beak black; the eyes dark-brown; the iris a light or brownish-yellow; the feet grey, with black scales and claws. Size, exactly the same as the preceding (length, 14½in. to 15in.; wings, 9½in. to 9⅞in.; tail, 4½in.). Distinguishing marks are the different shading of the red, the broad yellow tip to the tail, and, in particular, the yellow coverts under the tail. Native of the Gilolo Islands.

In other respects this species is said to resemble the New Guinea Eclectus. The female was mentioned by Müller in 1776, named by Gmelin in 1788, and described by Kuhl. The red female of Gilolo is somewhat more frequent in the market than that of the New Guinea, but, nevertheless, it only appears singly.

CHAP. XLI.—THE CERAM ECLECTUS OR PARROT.

Psittacus intermedius, Rss.; P. intermedius, Bp. as male; P. cardinalis, Bdd. as female.

Male bird hitherto known as, Ger., *Mittlerer grüner Edelpapagei and Mitteledelpapagei; not been distinguished by the dealers—Female called the Crimson Lory, Blue-breasted Lory* (Ger., *Mittelerer rother Edelpapagei und Kardinaledelpapagei*; Fr., *Lori d'Amboine*)—*Ceram Eclectus or Parrot* (Fr., *Perroquet de Céram*; Dut., *Ceram Edelpapegaai*)—*Description.*

The male of this species greatly resembles those of the two preceding, being, indeed, almost exactly alike, so that, according to Dr. Meyer, all three varieties might be included in one.

The male of the Ceram Eclectus is a dark grass-green; the primaries are indigo-blue; the secondaries the same, but green on the outer web; a narrow border of sky-blue on the wings; the lower wing coverts and the plumage on the shoulders, scarlet; upper mandible red; the point yellow; the lower beak black; the eyes blackish-brown; the apple of the eye orange-red; the feet

ashen-grey, with black scales and claws. The distinguishing marks are the darker green; the narrow blue border to the wing; only the three outermost tail feathers bluish on the outer web. The size is not noticeably smaller than the two preceding (length, 12⅝in. to 13⅜in.; wings, 8in. to 9⅛in.; tail, 4½in. to 4⅞in.). The female is of a dark-scarlet; on the upper part of the body more of a cherry red; the band across the back dark-blue, with a violet lustre; the edge of the wing, the small under coverts of the wing, the primaries and their coverts, blue; the upper side of the tail red, the reverse side orange-yellow, the tip both above and below of bright yellow; all the lower part of the body dark-blue; the under covert of the tail orange-red. The last mentioned is said to be the chief mark of distinction (length, 12¾in.; wings, 8in. to 8¾in.; tail, 4⅝in. to 5in.).

They are natives of the Ceram Islands. The male was first described by Bonaparte, 1854; the female, however, had already been described by Brisson, and named by Boddaert. The cock rarely appears in our markets: I possessed one for several years which Dr. Platen had brought over. The female scarcely ever appears in the trade.

CHAP. XLII.—THE GREAT-BILLED ECLECTUS.

Psittacus megalorrhynchus, Bdd.

Black-shouldered Parrot (Ger., *Grossschnabelpapagei, Schwarzschulter-Edelpapagei*; Fr., *Perroquet à épaulettes noires*; Dut., *Zwartschouder Edelpapegaai*)—*Distinguishing Marks.*

The species of which I am now about to speak may be distinguished from the preceding at a glance, for the feathers of their wing coverts have shaded edges, and, consequently, the wings are not so uniform in colour, but are peculiarly marked; the beak is decidedly larger, and mostly altogether red. The females are not red, like those of the previously-mentioned species, but do not, as far as we know at present, differ at all, or only very little, from the male.

The Great-billed Eclectus is grass-green; the plumage on the

upper part of the back edged with a pale-blue; the hinder part of the back and the rump sky-blue; the flights ultramarine-blue, the inner webs having a dark edge; the coverts of the primaries and secondaries marine-blue; the last four or five green, black at the ends, with a broad orange-yellow border on the inner and outer webs; the remaining large covert feathers black, deeply bordered on both webs with orange-yellow; the tail feathers are dark-green, olive-yellow at the tip; the reverse of the tail is all olive-yellow; the lower part of the body is completely olive-yellowish green; the breast and sides of the belly more yellow; the beak vermilion, the point whitish; the eyes dark-brown; the eye cere a blackish-grey; feet yellowish-brown, with black scales and claws. Size, about that of a raven (length, 14¼in. to 15⅝in.; wings, 8½in. to 9¾in.; tail, 5in. to 6in.).

They are natives of the easterly Moluccas, but it is not yet certain how far they extend. The species was mentioned by Brisson, Buffon, and others, as early as the year 1760, and described by Böddaert in 1783. The older writers make no mention of it. We have as yet unfortunately little information concerning the mode of life. The travellers, Dr. A. B. Meyer and von Rosenberg, tell us that this parrot lives alone in the forests far from the dwellings of man, and utters loud cries when anyone approaches. No researches have been made as to its food, breeding, &c.

It only appears singly in our markets; indeed, the largest number known to have been imported at one time was six, which Dr. Platen brought from Celebes. It is said to speak well, but as yet we have no evidence on the point.

CHAP. XLIII.—MÜLLER'S PARROT.

Psittacus Mülleri, Tmm.

The White-billed Parrot (Ger., *Müller's Edelpapagei, Weissschnabelpapagei*; Fr., *Perroquet de Müller*; Dut., *Müller's Edelpapegaai, Molenaar*)—*Description.*

This is the best known of the smaller Eclecti, for, although by no means frequent or numerous, yet it is occasionally imported.

It is grass-green; the head a pure and vivid green; the back of the neck and the upper part of the back is rather a yellowish olive-green; the middle and hinder part of the back and the rump marine blue, the upper coverts of the tail yellowish grass-green; the inner web of the quills blackish; the outer web green, finely edged with yellow; the covert feathers the same; the smaller covert feathers at the bend of the wing and the upper coverts of the shoulder are broadly edged with blue; the feathers of the tail are grass-green above, edged with yellow, on the reverse side they are an olive-greenish yellow; all the under part of the body is olive-greenish yellow; the mandible coral-red or vermilion; eyes a pale-yellow, inclining to brown; the feet a greyish-yellow; claws blackish. The female is said to be alike, and only to be distinguished by its darker eyes. The young bird may be recognised by its white beak. The special marks are: The vivid olive-green yellow colour on the back of the neck, the fore part of the back, and the under part of the body; the blue on the hinder part of the back and rump, and the small blue covert feathers below the wing; the black marks on the bend of the wing and the upper coverts of the wing are wanting.

It is a native of Celebes, the Sulu Islands, and Sangir Islands. This species was exhibited in the Museum of Leyden, without mention of its native place; and in the year 1828 Dr. S. Müller procured one of them in the Island of Bouton, in the Strait of Malacca, where, as was afterwards proved, it never lives in freedom. In 1884 it was described and named by Temminck. Up to the present two varieties have been distinguished—the Red-billed and the White-billed Müller's Eclectus. From the researches of Dr. Meyer, whose opinions are supported by Dr. Platen, the white-billed birds are the young ones. Of its habits in breeding nothing is known. It is said to build its nest in hollows in steep, inaccessible cliffs. Those Müller's Eclecti which come into the market are, therefore, mostly old birds. Dr. and Mrs. Platen brought over twenty head with them, but, unfortunately, these parrots not presenting an attractive appearance, received but little welcome from our breeders, and I never learnt whether anyone at that time was induced by my recommendation to make a trial of breeding; no results have, however, been obtained. It is occasionally kept as a cage bird. It then sits lazily still throughout the day, and, therefore, does not excite any great admiration in parrot lovers. We have no

information as to its capacity for speech, but, for aught that is known, it may develop that talent well. We have, however, an example of its longevity, for a Müller's Eclectus, in Halberstadt, attained the age of eighty-five years.

CHAP. XLIV.—THE COCKATOOS.

Genera—Natural History—Temper—Talking Capacity—Importation—Management.

THE Cockatoo is among the best known and, in a certain sense, most favoured of the parrot tribe. The reminiscences of youthful days of which I spoke on page 3 have special reference to the Cockatoo. Cockatoos and Macaws have, indeed, been brought to Europe from the most ancient times, and are among the most characteristic of the beauties of tropical nature. The group, or lesser family, of parrots which includes the Cockatoos consists of the following genera: True Cockatoos (*Plectolophus*, Vgrs.); Long-tailed Cockatoos (*Calypthorrhynchus*, Vrgs. *et* Hrsf.); Macaw Cockatoos (*Microglossus*, Gffr.); Dwarf Cockatoos (*Nasiterna*, Wgl.); Cockatiel (*Callipsittacus*, Lss.). However, only three genera come within the limits of this work, for I must omit the Long-tailed and Dwarf Cockatoos.

The Cockatoos have in general the following distinctive marks. Firstly, they are distinguished from all, or nearly all, other parrots by their feather crest, which appears in all without exception, but which is formed in various ways in the different species. Next, they have the strongest beak of all parrots, well-developed wings, and a short, straight tail, though in this last respect the Long-tailed Cockatoos are an exception.

They are natives of Australia and the islands of the Indian Archipelago. They are more frequently to be found in small woods than in the dense primeval forests. Being thoroughly tree-birds, they climb cleverly and fly well, but walk awkwardly on the ground. Their habits are similar to those of the Amazons (see page 96). Nearly all the various species live gregariously, and only the largest singly or in couples; sometimes they assemble in extraordinarily large flocks, and then they raise a

fearful screaming such as is never heard from any other bird. Travellers especially mention one trait which is common to the Amazons and some others—that is, the sympathy they show for a companion which has been shot. With shrill cries of lamentation they flutter round it, and do not fly away until the sportsman has brought down others of their number. Their food consists of nuts and kernels, less frequently of fleshy fruits, besides all kinds of seeds, tubers, and, of course, maize and other grain. Like the other parrots, they build their nests in hollow trees, but some use holes in cliffs and rocks; the breeding time is during our autumn and winter months, that being the spring of the antipodes. The larger species are said to lay two or three, the smaller four to six, eggs. After nesting time the flocks feed on the crops of the settlers, and effect great damage. For this reason, as well as for their delicious flesh and their feathers, they are hotly pursued. The settlers destroy them with guns, and the natives with a missile weapon known as the boomerang. Hence they are for the most part driven from the inhabited places, and forced to retreat to the bush.

Buffon speaks emphatically in their praise. He declares that their beauty is enhanced by their pleasing ways and gentle behaviour; that they are not only pert, merry, and droll, but also active and lively; that in learning (*i.e.*, aptitude for being trained) they appear to surpass all other parrots, but that they are far behind most species in talent for speech. Other authors also, including those of our own day, speak favourably of Cockatoos. "Their curiosity is unbounded," writes Lord Buxton; "indeed, one might say that they regard man and his doings with the greatest interest, perhaps not totally devoid of contempt." Mr. Friedel says: "The Cockatoo is more a thinking and philosophising bird than any other, and, on account of its intense individuality, needs especially careful management, though this unfortunately seldom falls to its lot. In zoological gardens and menageries, with large numbers of similar birds, nothing of the kind can be entertained; and in families which foster vanity and love of display by means of the bird and its cage, no one really cares for it; in both cases the Cockatoo repays such neglect by sulkiness of manner. Among middle-class people, where, although petted, it is quite as much misunderstood, it soon, by means of its great cunning and power of comprehending its surroundings, becomes master of the situation—that is, of the female members of the family, and, with its

deafening scream, which renders resistance impossible, it begins a reign of terror in the household. If, however, it be once actually reduced to obedience and discipline, it knows how to disarm anger by its coaxing and comical tenderness. To a discriminating lover of birds, who is able to take account of its character, and will treat it as a sagacious companion, it displays an intelligence in comparison with which that of the dog, usually placed in the highest rank amongst animal endowments, must be accounted decidedly inferior."

One of the most sympathetic observers and zealous connoisseurs of Cockatoos is Mr. Ernest Dulitz, of Berlin, of whose description of the birds I will here avail myself: "No one who for any considerable time has noticed a really tame Cockatoo, with its beauty, its varying, pleasing, and impudently lively manner, will fail to regret that the most splendid of all parrots should so rarely be chosen as a companion and cage bird. (This arises from the cause mentioned on page 35 with regard to parrots generally.) A Cockatoo which cannot conceive any affection for its keeper, nor meets any return for the love of which it is capable, appears a cross, distrustful bird, with which, unless some change takes place in its surroundings, no one can make friends; but it is just in this peculiarity of character that its high intellectual talents may be recognised. An Amazon or a Grey Parrot is contented to have an indifferent understanding with its master, and from time to time to allow familiarities according to its humour, even though it may not return them. It is otherwise with the Cockatoo; it either loves its master with an ardent, passionate love, or it is at war with him, though very old birds that have often changed hands may be an exception to this rule. Having in the course of some years kept fifteen different species of Cockatoos, I unhesitatingly assert that no other parrot, of all those that come into the market, possesses such notable qualities, and is so likely to content an amateur who intelligently cares for and observes birds, as a Cockatoo, no matter of what species, provided, however, that it is already tame, or at least may easily be tamed. Unfortunately, such birds are by no means plentiful, and, it appears, have of late become more rare. At the present day, when ships bring over often hundreds at a time, the price has fallen to one-half and even one-fourth of their cost some fifteen or twenty years ago; yet it must not be expected that such Cockatoos will indiscriminately become a source of pleasure to their several possessors. To attain this

desirable end there is no other way than going to a trustworthy dealer and asking him for one which he knows for certain to be capable and tame. It is hardly possible in this case for any mistake to arise, for the experienced dealer knows each bird perfectly. But of course one must not hesitate as to price, all the less because the bird may prove a means of delight to its owner for years to come. If my advice were followed, it would not be long before amateur bird fanciers would choose the much more beautiful and engaging Cockatoo as a companion, rather than an Amazon or any other of the speaking kinds."

Dr. Lazarus, on the other hand, does not speak very favourably of cockatoos, for he writes: "An amateur who for any length of time has had an opportunity of keeping and becoming acquainted with the veritable talking birds—*i. e.*, Amazons and Grey Parrots—will find some difficulty in maintaining his preference for Cockatoos. Every bird of the last named family must in the end become wearisome, owing to its want of speaking powers; whereas the larger species, the Red-crested and Leadbeater's Cockatoo, which certainly display an interesting and attractive manner, render themselves altogether unbearable in a room by their ear-piercing cries, which very few of them ever entirely leave off. In spite of many who speak enthusiastically of Cockatoos as cage birds, I on this account emphatically recommend that they should be kept only in large parks or spacious courts, or at least in anterooms, where they cannot greatly annoy either their owners or the neighbourhood by their screaming. I am convinced that by far the greater number of amateurs who have had the opportunity of being acquainted with the habits of Cockatoos would agree in my opinion."

Mr. A. E. Brehm, however, speaking of the highly gifted intellect of the Cockatoo, says that it can put several words together so as to make sense, and apply whole sentences to suitable occasions; and that it is impossible not to recognise in it a high degree of understanding.

From other descriptions, especially those of Mr. Fiedler, University bookseller, of Agram, and Mr. A. E. Blaauw, of Amsterdam, as well as from my own experience, I find that the Cockatoo is certainly much more highly gifted than many other parrots, but, as regards speaking, assuredly not in the same degree as the Grey Parrot, and the more notable speakers among the Amazons. There are Cockatoos which learn to speak

single words, or even sentences, very well; but they do not even approach the readiness and extent of knowledge of words possessed by the former.

Apart from its beauty, which is greatly enhanced when, in unwonted excitement, the bird erects its variegated crest, as well as some of the feathers on the body, a healthy Cockatoo which feels itself contented and comfortable is one of the merriest birds imaginable. Its liveliness and pleasing ways, and, still more, its comical behaviour, surpass description. Nodding and bowing in the drollest manner, lifting its variegated feathers in changeful play, it gambols, tumbles, and climbs with amusing vivacity, imitating other birds, not only in their movements, but in the words they have learnt, and, above all, in their cries. Mr. A. E. Blaauw states, however, that his experience leads him to think that, when several Cockatoos are kept together they scream less frequently: "These gregarious birds like to see each other, they exchange bows and erect their crests; in short, they find life less tedious, and tediousness is the chief cause of the screams of a cockatoo." With affectionate treatment, contrary to other parrots, the Cockatoo soon becomes surprisingly tame and gentle. But there are some not only wild and uncontrollable, but even extremely vicious. A Cockatoo, for example, which is always gentle to its master may, however, bite strangers; indeed, it has been found that a bird, hitherto good and affectionate, has all at once, without apparent reason, become wicked and furious. In such cases its bites may be extremely dangerous. Besides, there are instances in which Cockatoos show a remarkable memory for injuries received; they have borne in mind for years an act of punishment or teasing, and have revenged themselves at a favourable opportunity.

The comparatively small number of Cockatoos which were formerly imported alive into Europe were taken from the nests by the natives and reared by hand, but this is no longer the case. Cockatoos, like most other tropical birds, are caught in large numbers in nets, and exported to Europe by wholesale buyers. All species now come into the market annually in considerable numbers, and the prices have risen a good deal.

We find these beautiful birds principally as an ornament in zoological gardens and other collections. That it has not attained to more general favour is probably due, apart from the causes mentioned by Mr. Dulitz (p. 139), to the fact that such

a large bird needs more space than every household has to spare; that it is accounted a dreadful screamer, does not belong to the most notable talkers, and finally, that the bite of a large Cockatoo, when wild or badly trained, are feared as dangerous. It is, therefore, rarely found in private dwellings, except in the gorgeous cages of a large drawing-room, ante-room, or the like. In spite of this, however, as may be seen from the above descriptions, they have their special fanciers, who show great partiality for them, closely observe and study them, and enthusiastically esteem them as valuable cage-birds.

The diet of Cockatoos is very simple; they must have chiefly seeds, hemp, canary seed, oats and maize, also stale dry bread, biscuit, or egg-bread, and good fruit, especially apples; boiled rice, which was formerly so much given, should be avoided. An acclimatised Cockatoo of any species is one of the hardiest of birds, and can be kept without danger through the winter in a room without a fire. With good management it attains to an extreme old age. With regard to its cage, it must be borne in mind that it can do astonishing things with its beak, which can be used as hammer, pincers, or screw-driver, and with its cleverness and cunning it succeeds beyond belief in opening cage doors, loosing the foot chain, &c. "Foot chains and their fastenings, stands, wire grating, food and drinking vessels, strong wooden frames, and zinc linings, are destroyed; it can even learn to undo a double screw," says Fiedler. Many efforts have been made to find a means of correcting this habit, but as yet unsuccessfully.

The word "Cockatoo," in Karl Hagenbeck's opinion, is not a mere imitation of a natural sound. Dr. A. B. Meyer says it means "pincers," or "crab's claw," and has reference to the beak.

CHAP. XLV.—THE TRUE COCKATOOS.

Plectólophus, Vgrs.

Distinguishing Marks.

The True Cockatoos are distinguished as follows: The beak strong, slightly arched; the upper mandible deeply hollowed out, and the point strongly bent inwards—a broad, somewhat round ridge, and occasionally faint longitudinal furrows; the lower beak is mostly somewhat deeper, with an upward curved socket edge, the sharp edges straight, and at the end sharply bent upwards; the socket has a circular indentation; the nostrils are small, round, open in the narrow cere, often set with short feathers; the tongue is thick, fleshy, with a broad, blunt, rounded end; the eyes prominent, very round, and expressive; bare circle round the eye white; lores feathered; the wings are long and pointed; the tail, medium length, broad, straight, or slightly rounded towards the outside, and sometimes towards the inside. The plumage is as soft as silk, each feather having a rounded tip, in rare cases with powdery down; a crest formed by the long feathers of the forehead and top of the head, variously shaped, and when the bird is roused by excitement capable of being erected or spread out like a fan; feet strong and large, with powerful hook-shaped claws. The prevailing tone is white, with variegated markings; the figure compact, about the size of a jackdaw or crow.

Two of the species are distinguished by their very long upper beak, and are called Long-billed or Nasecus Cockatoos [*Licmetis*, Wgl.]. This species is found in Indo-Australia.

The birds are imported in numbers alive, and being more or less valued as cage birds, they form an important article of commerce. It has not yet been determined whether they possess more talent than other parrots for speech. Their natural voice is, however, shrill and piercing.

CHAP. XLVI.—THE LESSER SULPHUR-CRESTED COCKATOO.

Psittacus sulfúreus, Gml.

Small Cockatoo, Java Cockatoo (Ger., *Kleiner gelbgehäubter, Kleiner Gelbhauben, Kleiner gelbbäckiger, Kleiner gelbwangiger und Gelbwangen-Kakadu, Salonkakadu, gelbwangiger Kakadu mit gelber Haube;* Fr., *Petit Cacatois à huppe jaune, Petit Cacatois blanc à huppe jaune;* Dut., *Kleene Geelkuif Kakketoe*) —*Description.*

THE Sulphur-crested Cockatoo has, from antiquity to the present time, been one of the greatest favourites among the well-known parrots. It was described by Brisson as early as the year 1760, treated of by Seba in 1764, and named by Gmelin in 1788, and it had been previously mentioned by Aldrovandi and Gessner. It is of pure white, with a deep sulphur-yellow crest, divided into two parts, bending towards the back, but with the ends curved towards the front (the first three or four feathers are white, the rest a vivid yellow, so that the forehead appears white, and the lovely yellow only becomes visible in excitement, when the cockatoo erects its crest); there is a large round spot near the ear of sulphur-yellow, inclining to orange; skin on the nose white; eyes a deep dark brown; naked skin round the eye bluish-white; feet blackish-grey; claws black. The female answers to the same description, but is said by Dr. Platen to have a light reddish-brown iris. Rather less in size than a crow (length, 11in. to 12½in.; wings, 8in. to 9½in.; tail, 3½in. to 4in.). It is one of the smallest of the Cockatoos. It is a native of Celebes, Bouton, Lombok, Timor, Floris, Sumbawa, and the islands in Tomini Bay.

The travellers Wallace, Meyer, and lately Platen, have observed its habits in freedom, but give no particulars differing from those mentioned in the Introduction to this work. S. Müller and von Martens frequently found it, as well as the Amazons, &c., in captivity amongst the natives, and kept on perches, or forked sticks, with a double ring of buffalo horn fastened on the leg.

Buffon describes its droll behaviour, lively and expressive nods, and the raising and dropping of its crest; and praises it as being gentle, tractable, and unusually affectionate towards its mistress. It is also said to be extremely clean, and therefore

very beautiful in its white plumage. Mr. A. Röse speaks of one which said "Good Charles," and also danced, and when taking leave would cry, with pretty bows, "Good-bye." Every cockatoo of this species, without exception, soon becomes tame without trouble. This species is extremely affectionate, and never treacherous nor given to biting; it is also one of the healthiest and most hardy of cage birds. Its talent for speech, however, is not great, and only a few words may be expected from it.

CHAP. XLVII.—THE GREATER SULPHUR-CRESTED COCKATOO.

Psittacus galeritus, Lth.

Great Yellow-crested Cockatoo, Great White Cockatoo (Ger., *Grosser gelbhäubiger Kakadu, grosser Gelbhauben-Kakadu, grosser weisser Kakadu mit gelber Haube*; Fr., *Grand Cacatois à huppe jaune, Grand Cacatois blanc à huppe jaune, Cacatois à crête jaune*; Dut., *Reus Geelkuif Kakketoe of Groote Geelkuif Kakketoe*)—*Description.*

This handsome cockatoo was one of those birds collected on Cook's voyage, which were named and described by Latham in 1790. The old writers give no noteworthy particulars concerning it, yet it certainly had been imported alive in very early times. Like the above-mentioned bird, it is all white; the feathers of the forehead, front of the head, and the first feathers of crest, are pure white, the rest are long, sharply bent backwards, and then upwards; the finely cut feathers of the crest are sulphur-yellow; the spot on the cheek yellowish-white; the quills and tail feathers are yellow underneath; beak black; cere white; eyes black, dark-brown, or reddish-brown; a narrow white featherless circle round the eye; feet blackish-grey with black scales and claws. (The plumage sometimes has a yellowish tone on the breast and under part of the body also, but, more rarely, a rose-coloured shade.) Size: fully that of a crow (length, 16½in. to 17½in.; wings, 12⅔in. to 14½in.; tail, 6½in. to 6¾in.). It is a native of Australia—not towards the west—but extending throughout Tasmania. Concerning its life in freedom, the remarks which I have made in the Introduction about cockatoos

apply to it. The cockatoos suffer from the same cruel method of pursuit as parrots generally; for this reason principally they become shy and mistrustful, though by nature they are harmless and affectionate birds.

The cockatoo under notice is one of the commonest objects of the bird market, yet it is not seen so frequently as the Lesser Sulphur-crested Cockatoo. With proper management (see Introduction, page 7) it is healthy and hardy, attains a great age in the cage, learns to dance, and do other tricks, but only speaks a few words, and can laugh like a human being. It is especially necessary to be careful in dealing with it, for many Greater Sulphur-crested Cockatoos are extremely vicious; even those which otherwise behave well are inclined to bite strangers. Mr. Dulitz describes a hen which he possessed as pleasing, affectionate, and clever: "It outdoes any cat in stealing and pilfering dainties, and is exceedingly fond of all sorts of tricks and practical jokes, draws my wife's needles out of her knitting, &c. At first it only said its name, afterwards it learnt, 'Well, where is my Martha?' but never anything more." As a distinction of sex, Mr. Dulitz can only mention with certainty that the male utters a dissyllabic and the female a monosyllabic cry, which latter sounds less harsh.

CHAP. XLVIII.—THE GREATER WHITE-CRESTED COCKATOO.

Psittacus leucólophus, Lss.

The Greater White-crested Cockatoo (Ger., *Weissgehäubter oder Weisshäubiger Kakadu, grosser weisser Kakadu mit weisser Haube, Weisshauben-Kakadu*; Fr., *Grand Cacatois à huppe blanche*; Dut., *Witkuif Kakketoe*)—*Description.*

This, again, is a species known from ancient times, which has been much written about and well described, and yet with regard to which many errors prevail, while, as to its habits, we have no knowledge. Even in Aldrovándi's work we find a picture of the Great White-crested Cockatoo, though it is represented with an upright tail like that of a hen. Pigafetta also speaks of it, Brisson and Latham describe it

minutely, and Bechstein, though shortly, speaks of it as a cage bird. All unmeaning or inappropriate scientific names had been dropped, it was necessary to seek a new one, and the above name of Lesson's (1831) was applied to it. It is pure white, with a long, straight, broad crest, falling towards the back, without any yellow feathers; the quills and tail feathers are light yellow underneath; the beak black; the cere covered with white feathers; eyes black, dark-brown, or deep-red; a broad bluish-white naked circle round the eye; the feet blue-grey, with black scales and claws. Almost as large as a raven, but sometimes much smaller (length, 11¾in. to 14½in.; wings, 10in. to 11in.; tail, 5in. to 6½in.).

Its habitat appears to cover a considerable region. It is found in the Eastern Moluccas, but over what extent is not yet known with certainty. The White-crested Cockatoo is said to speak better than other species. Lord Buxton, who bred a cross between this species and the Leadbeater Cockatoo in freedom, in his park, thinks the White-crested Cockatoo is the most talented and least cunning of all. In particular, these birds develop an astonishing ingenuity in opening any kind of locks on cage doors or foot chains. Mr. A. E. Blaauw says, however, that it is among the worst screamers, and can really make a most distressing noise. It appears in the markets less frequently than its fellows.

CHAP. XLIX.—THE BLUE-EYED COCKATOO.

Psittacus ophthalmicus, Scl.

Blue-eyed Cockatoo (Ger., *Brillenkakadu, Salomon-Kakadu, Kakadu mit blauem Augenkreis, blaäugiger Kakadu, Nackt-augen-Kakadu, Kakadu mit gelber hängender Haube;* Fr., *Cacatois ophthalmique, Cacatois à yeux bleus, Cacatois à lunettes;* Dut., *Blauwoog Kakketoe*)—*Description.*

This cockatoo has only been known since the year 1862, when a living specimen was presented to the Zoological Gardens, Regent's Park, and described and drawn by Dr. Sclater in the "Proceedings of the Zoological Society of London." It is white; the feathers on the forehead are white, and then come

long, light-yellow crest feathers, hanging towards the back; the reverse side of the quills has the inner web yellow, and the reverse of the tail feathers at the base is yellow; the beak black; the cere grey; the eyes dark brown; a large featherless blue circle round the eyes; the feet grey, with black scales and claws. Generally it is nearly as large in size as a raven, but often much smaller (length, 12¾in. to 14in.; wings, 10in. to 10¾in.; tail, 5½in. to 6½in.).

It is a native of Solomon Islands, New Ireland, and New Britain. In the last-named place it is said by Layard to be exceedingly common, to be killed in large numbers, and to afford a very savoury soup. It is also frequently tamed by the natives. It is still rare in the trade, as well as at bird shows.

CHAP. L.—THE RED-CRESTED COCKATOO.

Psittacus moluccensis, Gml.

Rose-crested Cockatoo (Ger., *Molukken-Kakadu, rothhäubiger Kakadu, Rothhauben-Kakadu*; Fr., *Cacatois à huppe rouge*; Dut., *Rooduif Kakketoe*)—*Physical Characteristics—Speaking Capacity.*

This handsome cockatoo, which Edwards described in 1751, and pictorially delineated, which Gmelin moreover named scientifically in 1788, has, like many other birds, been much confused, or mistaken, by the old authors.

The forehead, head, and sides of the neck are pure white; the front crest feathers white, the next vermilion on the outer web, and white at the point and inner web; the rest have the outer web dark, and the inner web light, vermilion. All the upper and under parts of the body are white, with a rosy shimmer, and a yellowish tone over them in a bright light; the quills are light yellow on the reverse side; the tail feathers, on that side, are orange-yellow; the lower and hinder part of the body is rose-coloured; the beak black; the cere a dark bluish-grey; the eyes black or dark-brown; eye cere bluish-white; the feet a blue blackish-grey; scales and claws black. Almost as large as a raven, it appears larger than it really is on

account of the thick plumage, which is often ruffled (length 15⅝in. to 17¼in.; wings, 11⅜in. to 13⅜in.; tail, 6⅝in. to 7in.). It has the peculiarity of being able to ruffle not only the tuft, but also the long chin feathers.

It is indigenous to South and West Australia. On account of the pursuit it is subjected to when in freedom, this cockatoo, like its fellows, has become exceedingly shy and cautious. It is frequently taken from the nest and reared by hand.

With good treatment it reaches a great age. I have known one which was nearly one hundred years old. In general it is considered affectionate, capable, and at the same time talented in speaking. Mr. Fiedler says it is gentler, and does not cry so shrilly, as the others; it will follow its master like his shadow, and deserves to be valued for its pretty ways as well as for its beauty. Dr. Lazarus, on the contrary, found from experience that a cockatoo of this species screamed worse than any other, for its cries could be heard many hundred yards away. At such times—that is to say, when it hung in the open air, in the ring of a parrot stand, with erect flaming crest, bristling peach-coloured feathers on the chin, throat, and neck, and with outspread wings and tail—it was indeed a beautiful sight, but its ear-piercing shrieks were unbearable. Another cried less loudly and continuously, but at several intervals in the day so monotonously, that it was on that account just as wearisome. "The first could easily bite through the strongest chains, and its cries became at last so annoying that the neighbours seriously complained, and I was obliged to part with it. But I shall always regret that it was not possible for me to keep such an affectionate and beautiful bird. Of the three Red-crested Cockatoos which I have possessed, the last was easily taught to imitate whistling, for it soon learnt to repeat signals and melodies with a soft, flute-like voice. Whenever a barrel organ was heard in the forecourt, it tried to follow separate airs, and if it did not succeed easily in this, yet it always at once caught the time and tune. As to speaking, however, it could only say two phrases." Mr. G. Hoffmann received a young cockatoo of this species which developed a high talent for speech. It learned to repeat several sentences well, and with great expression. At the same time it never screamed unpleasantly, but uttered a not unpleasant murmur. The very varied behaviour of the different specimens of this species depends, as may easily be understood, upon whether they have been taken from the nest and reared by

LEADBEATER'S COCKATOO.

(*Psittacus Leadbeatteri.*)

hand, or caught when they are already old, and then perhaps ill-treated. In the latter case it will display the more unpleasant qualities in a marked manner, and in the former the more agreeable ones. In the latter case, too, it is more obstinate and untractable than almost any other parrot.

Most birds of this species are already very tame when they come into the market. Dr. Platen brought over twenty head with him; but in general the Red-crested Cockatoos are not frequently imported.

CHAP. LI.—LEADBEATER'S COCKATOO.

Psittacus Leadbeateri, Vgrs.

Leadbeater's Cockatoo (Ger., *Leadbeater's Kakadu, Leadbeater's Kakatu, Inkakakadu;* Fr., *Cacatois de Leadbeater, Cacatois à huppe tricolore;* Dut., *Driekleur Kakketoe of Leadbeater's Kakketoe*)—*Distinguishing Marks—Domestic Character.*

This cockatoo, which is in truth the most beautiful of all, was first described by Vigors in 1831. It is marked as follows: A narrow band of rose-colour on the forehead; the feathers on the forehead and front of the head white, with a light rose-colour at the base; the crest is formed by sixteen pointed feathers bent towards the front, which are vermilion at the base, then a broad stripe of yellow, again red, and then white at the end, so that the folded crest appears white, and only when the crest is erected in excitement can the splendour of the three colours be seen; the back and sides of the head, the throat, lower part of the back, and all the under parts of the body, light rose-colour; the upper part of the back and the wings are white; the inner web of the flights and all underneath are a dark rose-colour; the tail is white above, and underneath at the base, rose-colour; the beak is a yellowish-grey white; the cere and nostrils are hidden by little rose-coloured feathers; the eyes are black, deep-brown, or reddish-brown; the eye cere is yellowish-white; the feet bluish-grey, with black scales and claws. It is about the size of a crow (length, 12¼in. to 13½in.; wings, 10in. to 10½in.; tail, 5½in. to 6in.). The female is said by Gould to have a shorter crest, a narrower yellow band, and to be whiter underneath, with a tinge of rose-colour.

It is a native of South and West Australia. Gould says it is a striking ornament to the primeval forests there, and appears at certain times in large flights at particular places. Its voice is not so shrill and piercing as that of other cockatoos, but rather soft and plaintive; neither is it so noisy and excitable.

Opinions concerning the different specimens of this bird differ just as much as in those of the cockatoos already treated, and, of course, from the same cause. Although in general Leadbeater's Cockatoo is gentle, affectionate, and peaceable with other birds, yet there are some among them which are so indescribably wild and vicious that every attempt at training them must fail. Mr. A. E. Blaauw writes that a Leadbeater's Cockatoo, which he had just received after the tiring journey from London to Amsterdam, came at once on to his outstretched finger, erected its splendid crest when desired, and chattered and piped most charmingly. Moreover, it was just as gentle towards strangers; yet there were some individuals whom it could not bear and always pecked and screamed at without apparent reason. Dr. Lazarus finds that the Leadbeater's Cockatoos come into the market very little, or not at all tamed, and that they are much less vivacious, pleasing, and gifted than the others. In spite of great trouble, he was neither able to tame his own nor to teach them to speak a single word, not even to whistle a simple call. At the same time they were distressing screamers. Moreover, the forcible taming which is always successfully tried with Jacos, Amazons, &c. (see page 37), made a Leadbeater Cockatoo, on the contrary, only the more wild and vicious. And, though this bird belonged to the exceptions of which I have before spoken, yet it is significant to find that it will not be tamed even by hunger and thirst. On the whole, this species coincides in all material respects with the preceding varieties. It cannot, indeed, be reckoned amongst the most eminenty gifted speakers, for a Leadbeater's Cockatoo will probably learn at most to chatter a few words or sentences.

A specimen of this kind was first placed in the Zoological Gardens, in London, in 1854, and since 1863 it has appeared in our bird shops often enough to be considered a well-known object to fanciers. Its brilliant appearance misleads many a purchaser, who, on acquiring it, is at a loss how to manage it, and consequently gets rid of it again as soon as possible.

CHAP. LII.—GOFFIN'S COCKATOO.

Psittacus Goffini, Fnsch.

Goffin's Cockatoo (Ger., *Goffin's Kakadu oder Goffin's Kakatu*; Fr., *Cacatois de Goffin*; Dut., *Goffin's Kakketoe*)—*Description.*

THIS cockatoo has a white forehead and white lores; the feathers of the crest are white, rose-coloured at the base and light yellow underneath; the quills are yellowish-white on the inner webs, and on the outer sulphur yellow; the tail yellow underneath; all the rest of the feathers white, with rose-coloured down on the head, throat, and breast; the beak whitish horn-grey; the cere and nostrils are covered with little white feathers; the eyes blackish-brown, dark brown, or cherry-coloured; a broad circle of bluish-white round the eyes; the feet blackish-grey, with black claws and scales. It is nearly the size of a crow (length, 12¾in. to 13½in.; wings, 9⅝in. to 10⅜in.; tail, 4in. to 4¼in.). It resembles the Blood-stained Cockatoo, but is not red at the lores, it is also white round the beak, and is smaller. It is not yet known what region this species may claim as its habitat. Dr. Finsch described it, in 1863, from living specimens in the Zoological Gardens of Amsterdam and Rotterdam. It is not one of the rarest species, but appears from time to time in the market, although singly. Dr. Platen imported three, and a short time ago Mr. Abrahams, wholesale dealer, of London, had a couple for sale which were said to speak English. Mr. Fiedler says it resembles the Leadbeater's Cockatoo in character, is gentle, quiet, and affectionate, so that a child might play with it, but its screeching, which continues for hours at a time, is unbearable.

CHAP. LIII.—DUCORPS' COCKATOO.

Psittacus Ducorpsi, Hmbr. et Jacq.

Ducorps' Cockatoo (Ger., *Ducorps' Kakadu oder Ducorps' Kakatu*; Fr., *Cacatois de Ducorps*; Dut., *Ducorps' Kakketoe*)—*Distinguishing Marks—Habitat—Domestic Character.*

THIS bird has a short erect crest, the point being turned away from the front, the reverse side of the feathers and both sides at the base being light yellow (in some specimens a pale reddish-yellow), otherwise the whole of the body is white, except the

inner side of the flights, which is pale yellow, and the inner side of the tail feathers, which is of more pronounced yellow; sometimes the whole of the otherwise pure white plumage has a yellowish tinge: the beak is greyish-white; the cere and nostrils are set with little white feathers; the eyes are black, dark brown, or dark red, a large bluish-white circle round the eye; the feet are greyish-white, the scales and claws blackish. The size is rather larger than a jackdaw (length, 12in. to 13½in.; wings, 8¾in. to 10⅜in.; tail, 5¼in. to 5⅝in.). It resembles Goffin's Cockatoo, but is distinguished by the shorter crest, and by the feathers on the head, throat, and breast being other than red at the base. It may be distinguished from the Red-vented Cockatoo by the absence of the red coverts underneath the tail. It is indigenous to the Solomon Islands. It was described and drawn by Hombron and Jacquinot in 1830, but is still rare both in museums as a stuffed specimen as well as alive among the dealers. Layard observed them in the Island of Bougainville on the mangrove trees, on the fruit of which they subsist. Strange to say, it has nearly always happened that the birds which have come into the possession of the fanciers—for example, Mr. Fiedler, Mr. Linden, and the Baroness Sidonie von Schlechta, of Vienna—have been hens, which have laid several eggs. The above-named lady describes one as follows: "I brought the cockatoo home wrapped up in a cloth, but the way it dashed itself against the bars of the cage did not lead me to expect the establishment of a very friendly footing between us. But how astonished was I when, after I had put off my hat, it seemed quite quiet, and allowed me to take it on my hand. The puzzle was afterwards solved, for whenever I put on my hat, or wore a bandage on my head for headache, it became either shy or wicked; the dealer from whom I had bought it used to wear a round cap, and towards this man the bird had borne a grudge. It was only after a length of time that it began to know me with that or other hats, and when I called to it would recognise me and nod expressively. Its favourite food was roast potato, nuts, and oats, as well as a gruel made of polenta flour and water. It said several words and sentences very prettily, in a gentle childlike voice, but quickly and vivaciously." Mr. Linden also writes of a Ducorps' Cockatoo which he had, that it was tame and affectionate, and was especially charmed by the sound of a lady's voice; it laid an egg every year.

CHAP. LIV.—THE ROSEATE COCKATOO.

Psittacus roseicapillus, Vil.

Rose-crested Cockatoo, Rosy Cockatoo (Ger., *Rosakakadu, Rosenrother Kakadu, rosafarbner Kakadu, rosafarbner Kakatu;* Fr., *Cacatois rosalbin, Cacatois rose;* Dut., *Rose Kakketoe*)—*Distinguishing Marks—Habitat—As a Cage Bird.*

One of the commonest birds in the market, the Roseate Cockatoo is also one of the greatest favourites. It is of a light rose-colour on the forehead, top of the head, and crest: the reverse side of the crest feathers is of a dark rose-colour; the back of the head, throat, cheeks, and all the lower part of the body dark rose-colour; the back, shoulders, and wings are of dark ashen-grey; the hinder part of the back, the rump, and the tail coverts, both upper and lower, are of greyish-white; the tips and the reverse side of the flight feathers blackish-grey; the tail is light-grey on the top, getting darker towards the tip, and blackish-grey underneath; the beak greyish white, with a lighter point; cere and nostrils covered with rose-coloured feathers; eyes dark brown, black, rose, or blood-red, and a broad white circle round the eye; the feet are ashen grey, inclining to a brownish flesh-colour, with black scales and claws. It is as large in size as a crow (length, 12in. to 12½in.; wings, 9⅜in. to 10½in.; tail, 4⅜in. to 5¼in.). The female has not yet been distinguished with certainty, for the marks pointed out for the purpose are said to be unreliable. Its habitat is the greater part of Australia, with the exception of the West, and in the mountain ranges it is found more than 700ft. above the sea. It was first described and named by Vieillot, in 1818. Gould found it in large numbers in Namoy, to which place it is not indigenous, but is said to have migrated there of late. This traveller, and also Captains Sturt and Elsey, saw it in flocks of from fifty to a hundred. They speak with enthusiasm of the splendid sight afforded by the picturesque flight of numbers of such birds. The young are very frequently stolen from the nest and brought up by the natives, who then take them to Sidney for sale. These travellers often saw them half tame living in the yards of the settlers with the hens and pigeons. Moreover, whole flocks of these cockatoos are caught in large nets during the time of migration; therefore it is one of the commonest objects of the bird market.

As it has of late been often described and observed as a cage bird, I must introduce only one such account, and I choose that of Miss M. Reuleaux, an affectionate and enthusiastic friend of birds: "Our cockatoo, which we have named 'Rosa' on account of its colour, at first sat still and silent in its cage, and was regarded as dumb. Without really having any belief in its capabilities, I repeated its name to it with a decided pronunciation; but days afterwards there was heard, to our astonishment, from the adjoining room, where the cage stood, the word, 'R-r-rosa!' After this the bird was no longer considered stupid, but everyone taught it something; thus it soon learnt to say 'Come in,' if anyone knocked at the door. In order to make it understand the sense of the word, I used to knock on the food vessel, on which it was at first very frightened, and then drew back some steps with erected crest; but before long it knocked with its beak itself, and then called out, 'Come in.' The servant, when cleaning the room in the morning, used sometimes to try to get the bird to speak, and, if it maintained an obstinate silence, she would say, 'You are a blockhead!' Ere long it would repeat 'Blockhead,' or perhaps only 'Block, block.' Then it learnt several words more or less distinctly, as well as my name, Mathilde, which is difficult to pronounce. This charming bird developed day by day, and we became as fond of it as if it had been a human being. If we left it alone in the room it became silent and gloomy; but as soon as anyone approached the door it began to scream in order to attract attention; whoever entered, it became most joyfully excited, and pressed its head against the wires to be scratched. If, however, no one went near, it grew impatient, whistled and piped in a high key, and said all the words it could think of. From being caressed it learnt to say by itself, 'Pretty fellow! pretty fellow!' with an especially droll intonation. This affectionate bird unfortunately, soon died of cramp." Observations in many directions have proved that the Roseate Cockatoo, even if not one of the most capable speakers, still belongs to those cage birds which, on account of their cleverness, drollness, and docility, are especially suited for friendly relations with human beings. Unfortunately, even the tamest and most affectionate give vent at times to their disagreeable cry. It is extremely fond of lying on its back and playing with a piece of wood, or some such thing, in its claws, turns somersaults and does other tricks, and, if it pinches its master's nose or ear for fun, it is

most careful not to hurt. It is, undoubtedly, an affectionate and pleasing companion in a room, and the more it advances in taming and training the less frequently is its annoying cry heard. Its capability does not extend beyond one or two sentences or half-a-dozen words.

CHAP. LV.—THE SLENDER-BILLED OR NASECUS COCKATOO.

Psittacus nasica, Tmm.

Slender-billed Cockatoo, the Nasecus Cockatoo, the Long-billed White Cockatoo (Ger., *Nasenkakadu, Kleiner Nasenkakadu, Langschnäbeliger Kakatu*; Fr., *Cacatois nasique, Nasiterne*; Dut., *Neus Kakketoe*)—*Description.*

The Nasecus Cockatoo was described and drawn by Temminck in 1819. It certainly presents an extraordinary appearance, on account of its long projecting upper mandible, and the name which has been given it for this reason is really in some degree apt. The band on the forehead, the lores and the stripe round the eye are scarlet; a small rounded white crest, the feathers at the base having rosy down; a yellow spot behind the eye; all the rest of the body is white; on the head and throat the feathers also have rose-coloured down; the inner side of the flight feathers is whitish-yellow, on the reverse side light-yellow; the tail is of a decided light-yellow on the inner webs and reverse side; the spot on the upper part of the breast, and all the feathers at the base, are a dark rose-colour; the thigh is of pale rosy-red; the beak bluish-white, with a long projecting sharp point; the cere and nostrils are covered with little rose-coloured feathers; the eyes are black, dark, or light-brown, a broad bluish-white circle round the eye; the feet bluish-grey, with black scales and claws. In size fully as large as a crow (length, 17¾in.; wings, 10½in. to 10¾in.; tail, 4½in. to 5in.).

It is a native of South Australia. It is said to subsist chiefly upon orchids, tubers, and roots, which it digs out of the ground by means of its curious beak; otherwise its habits do not differ from those of the preceding species. In its movements, flight,

and gait it appears, however, more rapid and graceful, and is said to be rather a ground than a tree bird. Its nest is built in the hollows of gum-trees, and it is said to lay two eggs. Large swarms of them roost at night in the tall forest trees. They cause great damage to the crops; they are on this account greatly pursued, and, like their congeners, have almost everywhere been driven back into the bush. Many young ones are stolen from the nest, and brought up by hand; but more frequently, the old ones are caught in flocks by means of nets.

In the cage it usually appears sulky and ill-tempered, and at the same time is one of the worst of screechers. The majority learn only to say a few words, but some are said to be extraordinarily gifted in speech. A Nasecus Cockatoo belonging to Mr. Max Strahl became exceedingly tame, shook hands, and kissed, and when it was allowed to come out of the cage its joy and caresses knew no bounds. It made funny little leaps on the ground with its outspread fan-shaped tail, at the same time uttering peculiar notes. Mr. Müller-Küchler had a couple so tame that they accompanied him for long walks in the open air, flying from tree to tree, but would come at a call, and caress and kiss him. In their picturesque flight they often soared high into the air, and when pursued by a bird of prey the male mounted, screeching, to such a height that it was lost to sight, and thus escaped its pursuer. Taken when they are old, they are stupid, and very difficult to tame, very excitable, but not really vicious. The bird is very common in the trade.

CHAP. LVI.—THE BARE-EYED COCKATOO.

Psittacus gymnópis, Sol.

Bare-eyed Cockatoo (Ger., *Nacktaugen-Kakadu*; Fr., *Cacatois à yeux nus*; Dut., *Naaktoog Kakketoe*)—*Distinguishing Marks*—*Rarity.*

According to the description of Mr. Blaauw, the Bare-eyed Cockatoo is coloured as follows: The forehead is a pale rose colour; the straight, pointed crest is white, but reddish-yellow at the base; the lores are almost blood-red; the cheeks are a dirty yellow; all the rest of the plumage white, having rose-

coloured down on the feathers of the head and breast; the quills and tail are sulphur-yellow underneath; the beak is horn-white (not protracted like that of the Nasecus Cockatoos); the eyes dark-brown; a bare circle of blackish-blue is round the eye (above the eye the feathers are movable like eyebrows, so that they sometimes come down to the eyes and only leave visible the bare skin under the eye). This gives the cockatoo an exceedingly good-humoured expression. Size: about the same as the Nasecus Cockatoo; but in shape it resembles the Digging Cockatoo.

It is indigenous to South Australia. It was first made known in the year 1871, by Dr. Sclater, and described from a specimen in the Zoological Gardens, in London.

"When I received the Bare-eyed Cockatoo," writes Mr. Blaauw, "it was very shy, and would allow no one to approach it; but it soon evinced curiosity when I busied myself with the other cockatoos. Then it began to touch my finger with its beak when I held it out to it. In an exceedingly short time it became tame, came flying on to my shoulder when I called it, and let me caress it. It also became accustomed to flying about in the open air, so that by soaring aloft it could always follow me; if it lost sight of me it searched about with complaining cries, and gave loud expression to its delight, and revelled in caresses when it would find me again. Its flight was easy and rapid, in picturesque movements, and with upright crest; it liked to tumble about in a high wind, but, on the other hand, disliked rain. It moves gracefully on the ground, running or jumping, and sometimes, with erected crest, it indulges in a comical little dance. Its natural voice is heard in protracted owl-like cries, which, however, it only utters in the evening and during flight. I consider this species one of the most affectionate and gifted of all the cockatoos."

This description of a bird which is still rare appears to me so interesting that I have given it at full length, the more so that the Bare-eyed Cockatoo, of which there are only two specimens in the London Zoological Gardens, has of late been imported occasionally. Thus, Charles Jamrach offered one for sale in 1877, three in 1881, and J. Abrahams one in 1881.

CHAP. LVII.—THE MICROGLOSSUS, OR MACAW COCKATOO.

Microglossus, Gffr.

Distinguishing Marks.

THE Macaw Cockatoo is thus designated because it unites the characteristics of the two genera known by these names. The distinguishing marks are as follows: The beak is larger than that of any other parrot, much longer than it is deep, opening wide, closely compressed at the sides; the ridge is almost like a keel, bent down in a half-circle, with a long narrow point, turned inwards, the sharp edge has a rounded bow, a rectangular indentation, and a very broad socket edge; the nostrils are round and small, and, like the cere and lores, covered with little velvety feathers; the tongue is dark-red, fleshy, cylindrical, the upper side having a spoon-like depression, with a horny black point, shaped like an acorn; the sides of the head and round the upper mandible, below the eye as far as the ear, and down to the base of the lower beak, featherless; the wings are rather long, with short points; the tail is long, broadly rounded off; the feet are powerful, short, and thick; the claws are not strong, and but little bent; the plumage is soft, each feather rounded off, mixed with powdery down; the crest consisting of long, narrow, finely-cut feathers, bent upwards and towards the back; at the base of the lower beak there are long feathers. In colour it is black, and in size larger than a raven.

CHAP. LVIII.—THE GREAT BLACK COCKATOO.

Psittacus aterrimus, Gml.

Alecto Cockatoo, Great Palm Cockatoo[a] (Ger., *Schwarzer Rüsselpapagei, Araraka-kadu, schwarzer Araraka-kadu*; Fr., *Cacatois Alecto, Microglosse ou Arara noir à trompe*; Dut., *Ara Kakketoe*)—*Description.*

A LIVING specimen of this bird presents a rare and peculiar appearance. Dr. Finsch states that it greatly resembles the macaws, and yet is decidedly a cockatoo. It is deep black all over the body, with a faint green tinge; the whole plumage is

filled with a fine dust-like powdery down, which makes its appearance almost grey. The crest is described in the generic review; the beak is black, the ridge and sides a faint bluish-black; the featherless skin under the eyes, and near the beak, is of a dark orange colour, inclining to blood-red, with lighter flesh-coloured veins; the feet and claws black. The two sexes are said to be alike in outward appearance, save that the hen has a shorter beak. In size it is rather larger than a raven (length, 26½in. to 31½in.; wings, 15in. to 16½in.; tail, 10in. to 11½in.).

It is indigenous to the north of Australia, and the neighbouring islands of the Malay Archipelago. Van der Meulen was the first to describe this bird in 1707, and was followed by Edwards, in 1764. Gmelin, in 1788, furnished the first drawing of it, and gave it its scientific name. Wallace supplies information as to its life in freedom. Its cry is a protracted, shrill, but plaintive, piping. It lives in low wooded districts, where it is found in couples or in small families; its flight is slow and noiseless; its food, seeds, together with the kernels of the canary-nut tree, the hard shells of which it is able to open with its powerful beak. Dr. C. von Martens observed it in captivity in Bahia: "A droll fellow, which sits there stiffly, with a red face, powerful beak, and a constantly erected feathery crest. On the approach of a stranger, as well as from pleasure, it utters rattling cries." According to other travellers, it lives in the tops of high trees, whether growing in woods or apart. It is cheerful and agile, and speeds on its way with powerful strokes of the wing. The couples are very shy. The young are frequently taken from the nest and brought up by hand, yet they seldom come to Europe. In the year 1860 Mr. Westerman, Director of the Zoological Gardens in Amsterdam, had a Macaw Cockatoo, which had been fed with canary-nuts on the voyage, and was with difficulty accustomed to oats, &c., on which, however, he afterwards throve. Dr. Max Schmidt speaks of the great strength of its beak; it bit a porcelain vessel to pieces, for example, and even made a hole in a cast iron pan. It eats seeds, and the mealy part of maize, and likes raw meat, but must have its food thoroughly bruised and crushed. Its voice reminds one of the creaking of a door, and travellers describe it as particularly jarring. It should be fed according to the directions given on p. 29, but it is also fond of nuts and fruit. It has been occasionally offered for sale of late years, by the great dealers. Mr. A. E. Blaauw conjectures

that the purely black birds, with bright red cheeks, shorter crest, and shorter beak, are the old males; and the lighter birds, with long beaks, which had remained unchanged after being in captivity for two years, are the hens. Dr. Platen imported three splendid specimens of this species, which were very tame, and spoke some words.

To the amateur this bird is of little importance, as it can only be regarded as a curiosity for zoological collections, or for fanciers.

CHAP. LIX.—THE CALLIPSITTACUS, OR COCKATIEL.

Callipsittacus, Lss.

Distinguishing Marks.

This name has been given to a genus of the cockatoo family which, like the Macaw Cockatoos, shows a marked distinction from the rest of the parrots. Corresponding with its German name, this parrot has a long graduated tail, from which the two central feathers extend pointedly to some distance. Gould, Schlegel, and Finsch, in spite of this peculiarity, include it amongst the cockatoos, and I also follow this classification, although the species has of late been sub-divided and reckoned amongst the Flat-tailed Parrakeets. The distinguishing marks are as follows: The beak is similar to that of the real cockatoos, only weaker, the ridge more compact and angular, the point not so protracted; the nostrils round, open, with edges turning upwards, in the well-defined cere; the tongue short, thick, rounded at the point, with a spoonlike cavity; the eyes proportionately small and round, and a featherless circle round the eye; the lores feathered; the wings unusually long and pointed; the tail as described above; the feet of moderate size; the claws rather weak, but sharp; the plumage soft; the crest feathers long, narrow, of a fibrous nature, the longest rather turned upwards; the chin feathers below the under beak are long and broad. Other marks may be found in the description of the species.

CHAP. LX.—THE COCKATIEL.

Psittacus Novæ-Hollandiæ, Gm.

Crested Ground Parrakeet, Crested Grass Parrakeet, Cockatoo Parrakeet, Coccatile, Coccateel, Joey (Ger., *Nymfensittich, Nymfenkakadu, blos Nymfe, Korella, Kakadille, Falkenkakadu, Keilschwanzkakadu, Neuholländischer Keilschwanzkakatu*; Fr., *Callopsitte, Perruche callopsitte, Nymphique;* Dut., *Wigstaart-Kakketoe of Kakatilje*)—*Description.*

As a common object of the bird market, the Cockatiel could hardly present any interest to the reader but that it has lately been observed that some of them learn to speak a few words. It is a pretty but odd-looking bird, and is of value to the fancier because it is peaceable in the aviary and breeds without difficulty. Otherwise it is extremely stupid, and may become wearisome by reason of its continued monotonous cry.

The Cockatiel was described and named by Gmelin in the year 1788. The male bird is of a bright light-yellow on the crest, front of the head, lores, cheeks, chin feathers, and upper part of the throat; near the ear there is a yellowish-red spot; the upper part of the body is of a brownish ashen-grey; the hinder part of the back and the upper coverts of the tail are light ashen-grey; the wings blackish-grey, with very broad white longitudinal stripes, underneath brownish-grey; the central feathers of the tail light-grey, the rest dark-grey, underneath all black; all the under parts of the body lighter than the upper, a pale brownish ashen-grey; the under coverts of the tail a lighter and purer grey (the shading of the plumage varies from almost pure ashen-grey to an olive-greenish grey-brown); the beak horn-grey, brown at the base, the cere grey; eyes dark-brown; grey circle round the eyes; feet light ashen-grey; claws black. The female has a small yellow spot on the forehead; the top of the head and the crest greyish-yellow; front part of the cheeks ashen-grey; a dark orange-yellow spot at the ear; chin feathers greyish-yellow; the hinder part of the back and the rump ashen-grey, finely veined with yellow; all the rest of the upper part of the body a brownish ashen-grey; the broad longitudinal stripes on the wings are not pure white, but yellowish; the upper coverts of the tail are grey, veined with yellow; the under parts of the body are wholly of a lighter pale yellowish-grey; the tail

greyish-black, veined with yellow, grey underneath, also veined with yellow; the hinder part of the body and the under coverts of the tail with broad transverse undulating lines of yellow. The plumage of the young birds resembles that of the adult female, but is of a darker brownish-grey; the spot on the ear of a dull brown yellowish-red; the young male bird has already a pale yellowish colour on the cheeks; the belly and tail underneath are brightly veined with yellow; the lower side of the wing has a broad white transverse stripe. In size it is scarcely as large as a jackdaw (length, 12in. to 13in.; wings, 6¾in. to 6¾in.; tail, 5⅝in. to 6¼in.).

It is found throughout almost the whole of Australia. Its abode is principally in the broad inland plains, yet it appears at irregular intervals in different districts as a migratory bird, or perhaps as a bird of passage.

The development of this bird has been closely observed in captivity, and the account given by Gould has been fully confirmed. It has been bred since the year 1846, and may be found in many aviaries or cages as a brood bird. It lays four, six, or even eleven eggs, and, as in captivity it regularly rears two, three, or even more broods, it may also be supposed to do the same in freedom. At the same time, it is one of the healthiest and most hardy cage birds, and has often been left throughout the winter in rooms without a fire, or even in the open air. A description of the breeding is given in my books mentioned on page 4.

In a cage, the Cockatiel, as a rule, appears very stupid and shy; in its native land, on the contrary, it is accounted very easily tamed and gifted in speech. If one wishes to make a trial of this bird, it is necessary to take a young Joey which can fly and feed itself, and teach it to speak according to the directions given on page 41 and following pages. Such a bird becomes tame surprisingly soon; it is also affectionate, and, as has been remarked, learns some words, though with a thin child-like voice; it can also learn to pipe airs and to whistle the songs of all sorts of birds. Joeys are annually imported in considerable numbers, as well as being bred rather numerously; it is not, however, very numerous in the market. So far as I know, speakers of this species have never been offered for sale.

CHAP. LXI.—THE LORIES AND LORIKEETS.

Trichoglossinæ.

Distinguishing Marks—Habitat—Life in Freedom—Importation —Management—Talking Capacity.

THE Lories and Lorikeets constitute a sub-division among the parrots which differs greatly in character and peculiarities, as well as in the nature of its food, from all others of this family. In the first place, they strike us as the most splendid in colour and brilliancy, and as being specially pleasing in shape; next, they unite a curiously clever and pert manner with odd, hasty, violent movements; and, further, they show general irritability and have a shrill harsh cry.

The following distinguishing marks may be mentioned as common to the two genera which here come under our notice—the Broad-tailed, or True Lories (*Domicella*, Wgl.), and the Sharp-tailed Lories, or Lorikeets (*Trichoglossus*, Vgrs.): Beak compressed at the sides; socket edge rising up in a slanting direction; the inner point of the beak without the file-like ridge which is found in almost all other parrots; but the special distinction is the brush-like tongue, or rather the tongue furnished with papillæ.

It is found in Australia and the surrounding islands, the Indian Archipelago (not, however, including the Sunda Islands), and Polynesia.

In accordance with the peculiar form of its tongue, it subsists on sweet juicy fruits and other soft parts of plants, the honey of flowers, and, without doubt, on animal food, insects, shell-less animals, &c. Stone fruits and all sorts of nuts must be difficult, if not impossible, for them to eat, on account of the form of the beak, but especially in the absence of the file-like edge; many species, however, eat mealy or oily seeds, at least when in captivity. As yet but little inquiry has been made into their habits. Of course, it is clearly shown by their food that they are tree birds. They live, as far as we know, gregariously, sometimes in flocks consisting of several varieties. They present a splendid sight in their variegated plumage while scrambling about in a blossoming gum-tree. Their flight is rapid and skilful; on the branches they run and hop more than they climb; on the ground they move oddly, sideways, hopping, nodding, and making other comical gestures. Many species are

said to build their nests, in company, in the hollows of gum-trees. Travellers have given little or no account of their habits in breeding. Although the lories scarcely occasion any harm worth mentioning to the crops, or, at any rate, to the more valuable fruits, and though, moreover, their flesh is not agreeable, yet they have been greatly pursued of late years, for which reason, and on account of the felling of the gum-trees, they are in great part driven back, like the cockatoos, &c., from the inhabited districts. Formerly the natives killed them in order to ornament themselves with their heads, which they strung in rows, and the settlers shot them occasionally for the sake of their brilliant plumage; they were also taken from the nest in small numbers, reared by hand, and brought to market. Now, however, they are taken in nets in whole flocks for export to Europe. They are also frequently kept as cage birds in their native countries, especially in India, and frequently chained to a ring made of cocoanut shell or buffalo horn, and they are often found to have such a ring attached to the foot when they arrive here.

The importation is now rapidly increasing, and, as may easily be supposed, these beautiful and interesting birds have many admirers. Unfortunately, there are serious hindrances to their more general adoption as pets; on the one hand is their high price, and, on the other, their real or supposed delicacy of habit, so that, in fact, only enthusiastic fanciers, who do not scruple to provide a troublesome and expensive diet, can keep them. Until a short time ago it was not thought possible to preserve them alive for any length of time; but experience has shown this notion to be erroneous. Within the last ten years or less, at least one species, the Blue Mountain Lory, has been acclimatised in many aviaries, and bred through several generations. Similarly, numerous other species have proved themselves very hardy in captivity if managed properly, and these have been of the species which do not become accustomed to seeds, but which subsist solely on fruit and soft food.

Mr. Scheuba, head master of the Grammar School at Olmütz, ranks high among the connoisseurs and judges who have observed lories, and to him chiefly we are indebted for valuable information as to the peculiarities of this bird and advice as to its management. I will, therefore, first quote from his works:

The delicacy of the lories, or rather the opinion that all the bristle-tongued parrots are exceedingly delicate, is due to the

fact that these birds are nearly always treated ignorantly, and that they are, as a rule, accustomed to a food (*i.e.*, boiled rice) which may perhaps be suitable to them in hot countries, but which in our climate is only too hurtful. It contains little nourishment, so that the birds have to eat great quantities of it, and thereby incur disorders of the digestion; at the same time it soon becomes sour, and, given cold, the abundance of the pap chills the stomach; when, in addition to this, the other food given on the voyage—soaked sago, bananas, and other tropical fruit—fails, and our northerly kinds are given instead, fresh diseases are contracted by the already sickly bird. Since I have replaced the rice with more suitable food I have found, after several years' experience, that the lories, on the whole, and without the exception of any species, are not delicate, and especially when they arrive healthy, and have been fed during the voyage on stale moistened and then well-squeezed wheaten bread (for example, breakfast roll or Viennese bread). Good egg-bread also is wholesome, but must only be given in moderate quantities; children's biscuits or rusks (but baked without potash) are preferable. These articles must not be given soaked or moistened in milk—not that in itself cows' milk is injurious to lories, but it often happens that the cattle are fed on flatulent food, such as the refuse of cabbage and turnips, &c., and then the milk may be very injurious. Hence lories may only be considered as likely to live if they take hemp and canary seed as their chief food. For the Broad-tailed Lories, which are difficult to habituate to seed, I have mixed crushed hemp with the moistened roll, and thus accustomed them to a seed diet.

All brush-tongued parrots are accustomed to seeds the more easily as they are taken young. The experienced animal dealer, Fluck, of Vienna, says that, as long as lories are accustomed only to soft food, they manifest a habit which makes them unendurable to an amateur—hanging on the wires of the cage, they eject fluid excretions so as to make the room filthy. But Scheuba says that this only happens occasionally, as for instance, after large quantities of soft food have been taken, such as moistened roll or soft fruit, and that it ceases as the bird becomes accustomed to seeds. As a wholesome food he recommends maize boiled according to the directions given on page 29, five or six grains to be given daily to each bird; but better, in my opinion, is fresh milky maize, though, of course,

this can only be obtained for a short season, also oats, canary seed, millet, and grass seeds in fresh ears. Good soft fruits are absolutely necessary for all lories, and Scheuba gives pieces of the best figs; but I consider good fully ripe cherries, pears, apples or grapes, according to the season, as healthier, especially sound, carefully-picked mountain ash or service berries. As a green food, Scheuba recommends pine twigs and fresh ears of corn, but willow twigs and the juicy stalks of the wild vine may also be given; for the winter I recommend tradescantia occasionally. Scheuba gives all his lories, once or twice a week, a drink of sugar and water; in case of sickness he gives it several times a day. He keeps the East Indian species in a temperature of 65deg. to 70deg. F., and the Australian birds keep well in 58deg. to 60deg.; but heed must always be taken lest the air be too dry, and, therefore, a vessel with water should be placed on the cage, or a large wet sponge hung above it. It is said to be better to surround the cage with large leafy plants, which ought to be kept very damp; but these must be so arranged that the lories can never eat the leaves. Every two or three weeks Scheuba syringes his lories with rum and water (1 part to 4) or white wine and water (1 part to 3), but both must be of the best quality. They also like to bathe themselves, but are not so eager in this respect as other parrots; they like it best when they can upset the bath, and then roll about in the wet sand. Draughts and cold must be carefully avoided after the bath. Dangerous influences, such as tobacco smoke, or touching the feeding vessels with fingers soiled with snuff, &c., are more injurious to lories than to any other kind of parrot. In truth, not merely judicious but also affectionate treatment is necessary to their well-being. Excitement or terror, pining for a caretaker, or grief at neglect, may cause sickness or even death. Some of them must certainly be considered bad screamers, but, like other parrots, as soon as they make some progress in training they gradually cease their cry.

"As regards their talent for speech," writes Mr. Scheuba, "the most contradictory opinions prevail. One says the Black-bonnet Lory is almost incapable of being taught, another says the same of the Ceram Lory, and a third of the Lady Lory, and so on; in my opinion, considering the great talent of all the species, even of the smaller ones, such as the Ornamental Lory, &c., the development depends on the method used at the beginning and on the idiosyncrasy of the bird. This, I can

perceive, for example, in a striking manner in the case of my two Blue-breasted Lories, for whereas the older never utters a sound which even faintly resembles a word, the other, which is certainly a very young bird, goes on chattering all sorts of things. Anyone wishing to teach a lory to speak must keep it separate, away from the allurements and cries of others. Difference of sex, in respect of speech, is certainly unimportant. In my opinion, the lories, at least the larger species, are not surpassed by any other parrots in capability for training and teaching. It cannot be denied that there are among them some birds which are morose and impracticable, nor that they may be completely spoiled by ill-judged treatment, and made ill-tempered, self-willed, and obstinate." The old writers, even Seba, as early as the year 1734, then Edwards, and Buffon down to Bechstein, speak highly of some species as speakers, and this is confirmed by the traveller, Dr. A. B. Meyer, who observed them in their natural haunts, and who adds that they may be reckoned among our best talking parrots, only they need long and tiresome training, and one must constantly notice them.

In addition to the commendable qualities already mentioned, Mr. Scheuba speaks of their comical play and wrestling, when first one and then another lies on its back and tries to drive away the other with beak and feet; also of their slim, pretty forms, and the total harmlessness of their bites in comparison with those of many species, and especially of the large parrots. He thinks that they must continue to attract admirers in increasing numbers.

CHAP. LXII.—THE BROAD-TAILED, OR TRUE LORIES.

Domicella, Wgl.

Description.

The Broad-tailed, or True Lories, are the prettiest and most charming of their family. Although active and lively, they are gentler than their congeners with the pointed tail. Their special marks are as follows: A powerful beak, mostly as deep as it is long, compressed at the sides; the upper mandible has a rounded ridge, much bent point, and is slightly hollowed out; the lower beak also compressed, with straight socket edge,

sometimes slightly hollowed; the sharp edges are not hollowed out; the tongue is thick and fleshy, with a spoon-like depression near the front; it has fibrous, movable papillæ; the nostrils are round and open, situated in a narrow cere; eyes dark-brown, inclining to orange-red; nearly always a featherless circle round the eye; feet powerful; claws much bent; the wings long and pointed; the tail short and rounded, consisting of feathers equally graduated; the plumage close, composed of somewhat hard feathers on the neck, but on the throat and upper part of the body they are long; sometimes there is an irregular crest. The colours are brilliant; there is probably no outward distinction between the sexes; the body is slim. Size, varying from that of a sparrow to a jackdaw.

They are widely diffused over the Moluccas and Polynesia. Scarcely any inquiries have been made into their life in freedom, but, so far as is known, it agrees with the descriptions already given. The smallest species are said to subsist, at least at times, entirely on the honey of flowers.

Some of them belong to those ornamental birds which have been known and imported from ancient times, and which are numerously kept in their native countries in cages or on foot-chains, and form an article of commerce which, in later times, has greatly increased. The majority can with difficulty be accustomed to seed as a diet. Some never take it, therefore they are more difficult to keep in captivity than the Sharp-tailed Lorikeets. Of course, the danger is greatest when they are being inured to the change of food and of climate. When they are acclimatised, they prove to be hardy, though they cannot, as was remarked before, bear cold or draughts as well as others of the tribe. We find a considerable number of speakers among their ranks, and, in my opinion, if they are more frequently imported, and their needs in captivity more observed, they will all, or all the greater species, prove gifted with speech, though, of course, only to a moderate extent. In proportion to their advancement in taming and training their shrill and often wearisome cry ceases.

CHAP. LXIII.—THE BLACK-BONNET LORY.

Psittacus atricapillus, Wgl.

Black-bonnet Lory, Blue-headed Lory, Purple-capped Lory (Ger., *Violettköppiger Lori, Schwarzköpfiger Lori, Schwarzkappenlori, Schwarzstirniger Frauenlori, Erzlori, Schwarzköppiger Breitschwanzlori*; Fr., *Perruche Lori à calotte noir, Lori à collier*; Dut., *Purperzwartkop Loeri*)—*Distinguishing Marks—Domestic Qualities.*

This parrot is peculiarly beautiful, and ranks high among the bristled-tongued species, for it is one of the most talented and longest known. It was described by Seba as early as 1734, and drawn first by Edwards and then by Brisson; but Wagler, in 1832, was the first to give it the proper scientific name.

It is deep black on the forehead and crown of the head; on the back of the head there is a scarcely noticeable tuft of longer violet-black feathers; the lores, sides of the head, throat, and neck are dark carmine; the shoulders, back, upper coverts of the wings, and tail, a lighter blood-red; the wings a dark grass-green; shoulders a yellowish-brown; quills green, inner web yellow, the points black; the reverse side of the wing blackish-grey, with broad, yellow, transverse stripes; the bend and the small under coverts of the wings dark-blue; tail carmine-red, and broad purplish-brown bordered at the tip; the tail, on the reverse side, somewhat lighter; all the under part of the body a pale carmine; a bright-yellow spot on the breast; the thigh blue; the beak orange-red; the cere blackish; the eyes brown, brownish-yellow, inclining to yellowish-red, with a narrow light-yellow ring round the pupil; a featherless blackish circle round the eye; the feet blackish-grey; claws black. (The spot on the breast is sometimes only dappled red and yellow, and is often completely wanting, the green wings are sometimes spotted with yellow, the hinder part of the back is greenish-yellow, and other variations occur). Size, about that of a jackdaw (length, 10$\frac{3}{4}$in. to 11$\frac{3}{4}$in.; wings, 5$\frac{3}{4}$in. to 6$\frac{3}{4}$in.; tail, 3$\frac{1}{2}$in. to 4$\frac{1}{4}$in.). As far as we know at present, it is indigenous only to Ceram and Amboyna.

Although scarcely anything is known of its life in freedom, yet we have detailed information as to its existence in captivity. According to the account of Dr. E. von Martens, they are brought from Ceram or Amboyna to Java, and then to Europe,

and bear the first part of the journey well, but not the latter part. Of late the wholesale dealers have had them sent over direct.

Buffon speaks of it as a cage bird, and praises it as being affectionate and eminently talented. He says it learns to speak more easily and more clearly than any others of the lories, but that it is delicate and hard to keep. Bechstein speaks in similar terms. According to him, it is even said to be "the most teachable, tamest, most pleasing, and affectionate of all parrots. It talks constantly, but thickly, like a ventriloquist, imitates, with a clear pipe, whatever is whistled to it, and always wants to be noticed and petted, as well as tended and cared for. All its movements are hasty."

In these words we have a true description of the bristled-tongued Parrots, and the facts established by the experiences of many enthusiastic amateurs confirm the statements of the older writers, with this exception, however, that by no means all lories belong to the most talented and best speakers. Like the rest, the Black-bonnet Lory is able to learn to repeat a few words or even sentences, which it brings out quickly and hurriedly, with a clear high voice. Although one of the best-known objects of the bird-shop, yet it is by no means common, but is only imported singly now and then. Being a peculiarly ornamental bird, it is often found in the possession of persons of position, and is usually a great favourite. Many of them, however, render themselves intolerable by their incurable screaming, though their cry is not so shrill as that of their congeners, but sounds more like piping. In several cases it has lived for many years in a cage. Thus the Black-bonnet Lory belonging to the Princess Charles of Prussia, which, after her death, was in the possession of the Prince, must have lived about twenty years in the cage.

As regards diet, I must refer to my Introduction, and will only add that this is one of the lories which are most difficult to accustom to seed.

CHAP. LXIV.—THE LADY LORY.

Psittacus lori, L.

Blue-tailed Lory (Ger., *Frauenlori, Rothnackenlori, Blauschulteriger Breitschwanzlori*; Fr., *Perruche Lori des Dames, ou Lori à scapulaire bleue*; Dut., *Blauwstaart Loeri*)—*Description.*

Not unnaturally most of the birds, and particularly the parrots, which enlisted the affection of mankind in olden times continue to be cherished in the present day. This is above all the case with the Lady Lory. Described by Edwards in 1751, named by Linné in 1761, and treated by various authors, from Seba and Buffon to Bechstein, it has been lauded by all as being at once very beautiful, extremely affectionate and highly gifted. In this opinion parrot connoisseurs and keepers still agree, and, though not classing it higher than its congeners, they yet rank it at least on a level with them, especially with the Black-bonnet Lory. It also, in many respects, resembles this latter species.

It is of a deep black on the top and back of the head; the lores, sides of the head, band round the neck and throat, carmine; the back of the neck and the shoulders deep blue, with a purplish tinge; the middle of the back, the rump, and the upper coverts of the tail, scarlet; the upper part of the back has a bluish-black transverse band; the quills are dark grass-green on the outer side, and of a deep yellow on the inner, the tips black, the reverse side blackish-grey, with a yellow transverse band; the upper coverts are green, and the lesser coverts on the bend of the wing bluish; the small coverts underneath and the feathers on the shoulders are scarlet; the basal half of the tail feathers is scarlet, the end half deep blue; the reverse side is red at the base and dull olive-yellow at the tip; the throat, breast, and belly, deep blue, with a violet tinge; the sides of the breast and belly are scarlet; round the thigh, the hinder part of the body and the under coverts of the tail, light-blue; beak orange, inclining to carmine; the cere dull yellow; eyes brown to yellowish-red, featherless skin round them brownish-yellow; feet and claws black. Nearly as large as the Black-bonnet Lory (length, 10½in to 11in.; wings, 5⅞in. to 6⅛in.; tail, 3½in. to 4in.). There are varieties in colour, in which the blue mark on the upper part of the breast and throat

is wanting, with a red stripe in the blue feathers on the shoulder, a black transverse stripe across the reverse side of the centre of the tail, blue on the back and sides of the neck, with black under coverts to the wing, and many other deviations from the above. The size is also undecided. It is not yet determined whether these differences arise from age, sex, or locality. It is known to be a native of New Guinea, Waygiou, Mysol, Salawatti, and Batanta.

Dr. Meyer informs us that it is very abundant in New Guinea, and is frequently kept in the cage, and learns to speak extremely well.

Mr. Scheuba has a Lady Lory which is strongly attached and affectionate, kisses, lays itself on its back on the hand, allows itself to be played with, and even frolics like a kitten, and in moments of delight it pipes merrily; at other times, occasionally even by night, it whistles rather sharply and shrilly. In comparison with other lories this one, although quite as lively, appears calmer and more even-tempered. It speaks a good deal, and says everything in a deep voice, as if from the throat of a weather-beaten sailor. It likes best to chatter at night, and then sticks its head into its food vessel. It seems also disposed to whistle songs if taught them. Dr. Platen brought over ten specimens in his collection. Unfortunately, in the trade and in exhibitions this beautiful species is still very rare.

CHAP. LXV.—THE CERAM LORY.

Psittacus garrulus, L.

Chattering Lory, Crimson Lory (Ger., *Lori mit gelbem Rückenfleck, Gelbmantellori, Ceram-Lori, Breitschwanzlori mit gelbem Rückenfleck;* Fr., *Perruche Lori de Ceram;* Dut., *Ceram Loeri*)—*Description.*

The Ceram Lory was formerly rare in the trade, and only very recently has it been imported at all frequently. Although it is one of the birds longest known (mentioned by Clusius as early as 1605, described and named by Linné, and well drawn by Edwards, Brisson, &c.), yet, until the present time, very different opinions have prevailed as to its talent. Buffon notices the

difficulty which the Dutch had at first in bringing the bristled-tongued Parrots, and especially this species, alive to Europe.

The Ceram Lory is scarlet, with a splendid metallic lustre, and a triangular spot of deep lemon-yellow, set in green, upon the upper part of the back; the quills are green on the outer side, vermilion on the inner, about one-third, towards the point, black; the secondaries are black on the inner side, only being red at the base; the large upper coverts are olive-green; the bend of the wing lemon-yellow; the small coverts of the wing on the reverse side are also yellow; the tail is red, dark green at the tip; on the reverse side purplish-brown, and dull yellow at the end; all the under part of the body is uniform red, save that it is green about the thigh; the beak and the bare skin round it orange-red; the skin on the nose bluish-grey; eyes yellowish-brown, inclining to reddish-yellow; a bluish-red featherless circle round the eye; feet greyish-black; claws black. In this species also there appear variations, as the spot on the shoulder extends more or less, sometimes is a dull red, and is sometimes wanting; the tail green, shaded off to a bluish-black or quite blue. Size, nearly as large as the Black-bonnet Lory (length, 10½in. to 11in.; wings, 5½in. to 6½in.; tail, 3½in. to 4in.). It is a native of the north-easterly Moluccas.

Its rarity in the trade, in spite of the wide extent of its habitat, and the frequency with which it is stolen from the nest and brought up by hand, probably arises from the fact that it is a great favourite with the natives themselves, and often kept and traded in. The opinions of the more modern amateurs and bird connoisseurs will not in the meantime be the less interesting.

One of the most eminent among them, Mr. E. von Schlechtendal, pronounced this species to be one of the worst of screamers, and of no great capability; but this judgment is opposed to that of Mr. A. E. Blaauw, who thus remarks: "Some years ago, I had a Ceram Lory which displayed considerable talent. First of all, it imitated all sounds which struck its fancy, learnt to say many words, and repeated them with a gentle voice, and, one might say, almost with comprehension, so fittingly did it apply them. It loved me passionately, and would become enraged if any stranger touched me while it sat on my shoulder. It would dash at the person, and bite and scream so that I had some difficulty in soothing it again. It could distinguish quite well whether the stranger touched my person, my

chair, or anything near me—in the latter case it remained quiet. It was always excitable and violent, and any who approached it, or ventured on liberties, it punished by pecking at. Its voice had not the metallic sharpness of the other lories; but by force of ever repeating the same tone, it became, like them, unbearable. However, as soon as I took it out of the cage, it grew quiet. What it esteemed as the greatest treat was sugar and water, which it quickly lapped up with its long, movable tongue."

Mr. Heer, of Striegau, described it in similar terms. "My Ceram Lory," he said, "gives me much pleasure. It is exceedingly lively, and chatters continually; when it is silent it likes to hang by the feet from the perch, so that its body swings downwards. Although I often hold it unrestrained on my finger at the open window, and, though it can fly well, it never occurs to it to escape. I never before had so tame a bird. It eats moistened Vienna roll with sugar, and is passionately fond of sugar and water. It takes especial pleasure in creeping between my coat and vest."

Mr. Scheuba thinks that the incapacity of learning which the Ceram Lory shows in comparison with the others is due to the great attention which it pays to its surroundings; it is never silent, and is always screaming, though not very shrilly. "Mine is large, healthy, and rather impetuous. It does not do much in the way of talking, for it only says the often-heard word, 'Wait, wait'; but this is probably caused by its having made friends with a Black-bonnet Lory, so that the two heed nothing else but one another, and converse continually in their natural cries. If I put them together they show infinite affection towards each other, but I am obliged to put a speedy end to the association, for the rough, violent Ceram so sets upon the weaker Black-bonnet, that the latter is obliged to fly from its overwhelming caresses. The former takes little pleasure in human society. Casually I may here remark that it has several times laid eggs in its cage."

Mr. C. Linden informs us that a lory of this species in his possession pipes prettily.

CHAP. LXVI.—THE RED LORY.

Psittacus ruber, Gml.

Moluccan Lory (Ger., *Scharlachrother Lori, blos rother Lori, Blauschulteriger Breitschwanzlori*; Fr., *Perruche Lori rouge, Lori rouge*; Dut., *Roode Loeri*)—*Description—Talking Capacity.*

THE Red Lory, as it is usually called, was first described by Brisson in 1760, and was named by Gmelin. S. Müller (1776) describes the pleasure he took in watching these beautiful red birds clambering about the trees while they ate the fruit and screamed incessantly.

This lory is of a brilliant scarlet; the first four quills are black on the outer web, the rest increase gradually in redness, the last three or four are dark blue, red at the base, and rose colour underneath; there are two indistinct black transverse bands across the wing; the hindermost covert feathers on each side of the back form a large blue spot; the tail is a dull purplish-brown, duller on the reverse side; the under coverts of the tail and a large spot behind the thigh brilliant blue; the beak yellowish-red; cere blackish-grey; eyes brown to yellowish-red; featherless skin blackish; feet blackish-grey; claws black. It is a native of the Moluccas, but it is not found on the Aroo Islands. Wallace saw it often in Amboyna, where it is found in large numbers on the blossoming trees, sucking the honey from the flowers.

Mr. Scheuba gives the following interesting description of the species: "One Red Lory is quite unparalleled in speaking talent; at the same time, it is extremely tame, affectionate, and gentle, kisses, and takes especial pleasure in being brought to me in bed in the morning, here tumbling about with delight and revelling in various antics. Moreover, it is very active, and cannot bear to be long in one place; thus, it climbs all about my body, then jumps on the table, tears a bit of paper to pieces, or runs down the leg of my trousers to the ground, hops away, and then returns just as quickly to mount again. In the cage it often lies on its back, and, with feet and beak, plays with bits of wood, which it tears to fine shreds. It speaks with a feminine voice of high pitch, hurriedly and quickly, often for more than a quarter of an hour at a time; frequently with a voice which suddenly changes, as if two persons spoke together, but then it sounds as if one heard it from a distance, and only a few

words can be understood. Otherwise, it speaks very distinctly and clearly many words and whole sentences. It has learnt all it knows from other speaking parrots, from someone talking to it, or from the other birds, during the cleaning of the cages and the giving of food. Nearly every day it chatters something fresh which it has picked up in this way; thus it talks nearly the whole day, but mostly in the evening, when its cage is covered. It can laugh in the most deceiving manner. If I go by night into the aviary to look after anything, and some bird wakens and cries, this one seldom joins in it, but calls out in an angry tone, 'Be still, you rascal!' or, in a tone of astonishment, 'Well, what's the matter?' In all this is displayed the talent and teachableness of the bird, and I could go on telling many tales about it—how it bites my finger as I take it back to the cage, and when I let the sliding door fall, runs away with a triumphant "Ha!"; how well it can express pleasure or grief, longing or delight, &c. It eats the finest wheaten bread mixed with biscuit, boiled maize, service berries dried and then moistened, besides hemp seed, oats and wheat half ripe in the ear, figs, and other fruit; it also gets fresh pine shoots. If it has eaten a great deal, it brings back the food, as if ruminating, in order to masticate it again comfortably."

To the present time, the Red Lory is one of the rarest in the market. Dr. Platen brought over seven specimens.

CHAP. LXVII.—THE BLUE-BREASTED LORY.

Psittacus coccineus, Lth.

Blue Diademed Lory (Ger., *Blaustirniger Lori, Diademlori Blaubrüstiger Breitschwanzlori*; Fr., *Perruche Lori violette et rouge*; Dut., *Blauw en roode Loeri*)—*Description—Domestic Character.*

It is greatly to be regretted that this lory, of which Mr. Scheuba, the noted connoisseur of Broad-tailed Lories, speaks as the most surpassingly splendid in colour, should be among the rarest in this country, especially as it has been known for a long period.

The head, throat, and front of the neck are carmine; across the crown of the head, from one eye to the other, there is

BLUE-BREASTED LORY.

(Psittacus cœlestcus.)

a blue band; above and below the eye, reaching down to the neck on either side, there is a dark blue stripe; the neck and shoulders are blue; the hinder part of the back is dark carmine; the rump and upper coverts of the tail, purple brownish red; the quills red with black tips, a dull red on the reverse side; across the wing there is a black transverse band; the larger upper coverts of the wing, red, with a broad black edge; the coverts on the shoulder, purplish black; the edge and the lower coverts of the wing, red; the tail a dark reddish brown, the inner webs scarlet; all the lower part of the body carmine; the lower part of the breast and the belly striped transversely with dark blue; the thigh, blue, with red transverse stripes; the under coverts of the tail red, with blue spots; the beak a dull waxy yellow; the cere, bluish; eyes, reddish amber; featherless skin round them, blackish; feet, a bluish ashen grey; claws, black; size, nearly as large as the Black-bonnet Lory (length, 10¼in. to 10⅝in.; wings, 6in. to 6¼in.; tail, 4⅜in. to 4¾in.). It is a native of the Sangir Islands. This lory was described and named by Latham in 1790; older writers make no mention of it.

Mr. A. B. Meyer informs us that he has found them occasionally in the Island of Celebes, and that they are brought by the native dealers to Manado for sale; and it frequently happens that they are then lost. In all the islands thereabout a lively trade is carried on in simple objects of art and natural curiosities—such as baskets, &c.—and among these the lories form an important item, because they are generally held in great favour as household pets. "A Blue-breasted Lory which I had," Dr. Meyer says, "was tame and affectionate towards my wife, but ill-tempered to me. It learnt, like all the lories, to speak just as clearly as other parrots, but not so easily and well as the cockatoos and eclecti; it prefers screaming and screeching instead of repeating the words and sentences which it knows. Most lories die on the journey, and therefore one sees them but seldom in Europe."

Mr. Scheuba adds the following particulars concerning a Blue-breasted Lory of his: "It is the quietest and most silent of all, and only utters its cry in the evening, and then it is not nearly as sharp and shrill as that of the others, but is rather a twittering or chattering; only when frightened does it utter screaming sounds. It is extremely easily frightened, and then very difficult to soothe. Otherwise, it is a very nice bird, showing great affection; and it is assuredly one of the most

pleasant of the lories, for it is neither unclean of habit nor will it scream, and it soon learns to speak. Its talent, however, must not be rated very high, for it sits rather motionless and unsympathetic upon its perch. Another, which I got afterwards, was scarcely half the size, and with less blue on the hinder part of the body, not dull in parts on the wing, but, on the contrary, almost yellowish red. Figs and heads of millet are the favourite food of the first-mentioned bird, which has the peculiarity of going regularly at eleven o'clock at night to its food vessel and eating hemp, although the room may be in total darkness."

In Dr. Platen's collection there were seven specimens; but usually it is extremely rare in the trade.

CHAP. LXVIII.—THE SHARP-TAILED LORIES OR LORIKEETS.

Trichoglossus, Vgrs.

Description.

This family of magnificent and brilliant plumaged birds contains many species, yet up to the present it is only known to include two which are speakers; but these are to be accounted as the most interesting of all parrots, for they are distinguished in various ways; they are beautiful, peculiar, and affectionate in manner, healthy and hardy, and one of them has bred several times in captivity, and is, moreover, the only brood bird in the whole group of lories.

As, in all probability, other species may in course of time prove to be gifted with speech, it is proper that I should speak first of the Sharp-tailed Lories in general. They have the following distinguishing marks: The beak is usually as deep as it is long, compressed at the sides; the upper mandible has an angular ridge, an overhanging point, which gradually becomes narrower, and is hollowed out gently but distinctly; the lower mandible has a socket edge, which goes up in a slanting direction; the sharp edge is straight, not hollowed out; the tongue is thick and fleshy, with a spoon-like cavity on the upper side near the point, and covered with flexible papillæ capable of

being extended; the nostrils are small, oval, and uncovered in the distinct narrow cere; the eyes are usually dark and bright, but proportionately small; the lores and the circle about the eye is feathered, only round the eye there is a narrow featherless rim; the feet are short, powerful, with thick toes, and much bent nails; the wings are long and pointed; the tail is wedge-shaped, broadly graduated, wide at the base, the feathers regularly decreasing in width and rounded at the point. The sexes do not differ at all in plumage, and the young birds but little; the body is slim, and about the size of a sparrow or jackdaw.

They are natives of Australia, Polynesia, New Guinea, the Moluccas, and Papua. They live gregariously, probably even in the breeding season, but when this time is past they assemble in exceedingly large flocks of the various species, and migrate or take to flight as birds of passage. They fly rapidly and skilfully, with deafening cries, alight upon the gum trees, and will not be driven away even by shots, only hurrying from one tree to another when alarmed. On account of the felling of the gum trees as cultivation advances, and the constant pursuit they are subjected to, they have already been greatly reduced in numbers, and driven back into the bush, and have become so shy and cautious as no longer to approach the settlements. On the ground they have an odd sidelong jump, but in trees they climb, or rather creep, rapidly among the branches. According to the observation of travellers, their food consists chiefly of the honey of flowers, and in the case of the three smallest species this is probably true; the larger species feed principally on seeds, with sweet fruit, as has been proved by those in captivity. They can hardly do harm to the crops; their life in freedom is otherwise scarcely known. Of late several species have been imported more frequently, inasmuch as they are caught by whole flocks in nets, at certain times, or when migrating, or at the drinking places, &c. The following species is a good representative of those kinds which come under notice in this country, and shall therefore be dealt with as fully as possible.

CHAP. LXIX.—THE BLUE MOUNTAIN LORY.

Psittacus Swainsoni, Jard. et Slb.

Blue Mountain Parrot, Swainson's Lorikeet, Blue-bellied Lorikeet (Ger., *Lori von den blauen Bergen, Gebirgslori, Blaubäuchiger Keilschwanzlori fälschlich blauer Gebirgslori, Pflaumenkopfsittich (!)*; Fr., *Perruche Lori de Swainson, Perruche à bouche d'or*; Dut., *Swainson's Loeri*)—*Importation—Description—Hardiness—Breeding—Treatment—Talking Powers.*

THE Blue Mountain Lory affords a striking example of the importance to which the love of birds, and the pursuit and results of their breeding, may attain, not only as a matter of science, but also of practical business. As already mentioned elsewhere, the whole account of the importation and breeding of this bird is very interesting. First described and drawn by Buffon in 1783, and named by Gmelin, it was at that early date kept in captivity, and was imported into Europe alive by Joseph Banks in 1771. It is probable that since that time it has been brought over occasionally. A couple were sent to the Zoological Gardens in London in 1868; but the regular importation only dates from the year 1870, when it was commenced by the wholesale dealer, Charles Jamrach, of London.

The Blue Mountain Lory is of a purplish-blue on the head and throat; the back of the head has a faint brownish tinge; a broad yellowish-green band appears on the back of the neck; all the upper part of the body is of a dark grass green; the upper part of the back is more or less dappled with red and yellow (each feather having a red or yellow transverse spot); the quills are green on the outer web, and black on the inner; blackish grey on the reverse side, with a broad light yellow transverse band; the shoulders and under coverts of the wing vermilion; the bend of the wing green; the edge of the wing marked as if covered with red and yellow scales; the tail feathers green, yellow on the inner webs; on the reverse side a dull brownish yellow, the inner webs light yellow; the breast and neck vermilion, the sides of the breast yellow; the belly dark blue; the thighs, the hinder part of the body, and the under coverts of the tail, red, dappled with yellow and green; the beak is a brilliant red; the skin on the nose bluish, inclining to dark brown; the eyes orange, inclining to amethystine red; a red brown circle round the eye; the feet brownish-grey;

claws blackish. It is fully the size of a jackdaw (length, 13in. to 13¾in.; wings, 5⅞in. to 5¾in.; tail, 4¾in. to 5⅛in. It has lately been proved to be indigenous throughout the whole of Australia and Tasmania.

When Charles Jamrach imported the first couple, and sold them to Mr. E. Linden of Radolfzell for ten guineas, he saw, as an experienced dealer, that this species of bird must be hardy, because it lives chiefly on seed; and, in truth, with the exception of a few failures at first, the supposition has proved correct. This splendid bird is more and more frequently imported, can be easily managed, and, after a short time, bred with good results. It would be too wide a digression to enter upon the breeding more particularly. Mr. A. Heublein, sculptor, of Coburg, was, in 1873, the first to make the attempt; and then several other bird fanciers reared Blue Mountain Lories, Mr. K. Petermann, merchant, of Rostock, having even bred them to the third generation.

Its splendid colours, its uncommon lively, charmingly droll manner, no less than its aptitude for breeding, have gained for the Blue Mountain Lory numerous friends in an exceedingly short time, and from amateurs and breeders everywhere obtained for it a cordial welcome. In fact, one can scarcely imagine more beautiful and charming birds than a pair of these lories as described by Dr. Frenzel and Mr. Scheuba, as they hop sideways in a circle, with droll gestures, nodding their heads expressively, then rolling over and wrestling, shaking hands, and nibbling one's finger without really biting, &c. They would be much greater favourites if they did not so often utter their distracting piercing cry, which can only with difficulty be silenced. Although strong and hardy, the Blue Mountain Lory must be carefully protected from dangerous influences; thus, it must never be kept in too hot a room, and any sudden change of diet must be strictly avoided. However, as I said before, with proper treatment it lives, and is healthy for many years in captivity.

Its food consists of seeds, especially canary seed, oats, and a little hemp, with some moistened and well-squeezed-out egg-bread, or stale wheaten bread; instead of the latter, cake or biscuit may sometimes be given. It is essentially necessary that good sweet fruit should be given daily. Great caution is needed in giving green food; but, on the other hand, twigs for gnawing may always be supplied.

According to our present knowledge, the Lory of the Blue Mountains will always be of great value as an ornamental bird, and for breeding purposes, but, in spite of this, it could not find a place in this work if it had not been proved beyond doubt to be gifted with speech. The first announcement of this fact, however, was not only met with head-shaking and surprise, but in several instances with positive disbelief, for throughout the whole family of Sharp-tailed Lories not one single speaker had hitherto been known. To Mr. K. Petermann, as already stated, we not only owe the breeding of this species, through several generations, but also the first announcement of their talent for speech. In the great bird show of the Ornis Society in Berlin, in 1879, there was a young lory belonging to the above-named breeder, which was healthy, beautiful in plumage, and exceedingly tame, imitated the note of the hawfinch, whistled several calls, and pronounced pretty clearly, or at least so that it could be understood, the name of his mistress, "Bertha," the eldest daughter of Mr. Petermann. Next we were told of a Blue Mountain Lory, which was gifted with a talent for speech, belonging to Dr. Frenzel, metallurgical chemist, of Freiburg. Then Mr. E. Rüdiger, of Darmstadt, informed us that a bird of this species in his possession said the words "Come here," and "Get away with you!" Hence we may assume that, sooner or later, we shall witness a great advance in this species. When we consider that the Blue Mountain Lory, if kept singly and managed properly, not only belongs to the speaking parrots, and is one of the most beautiful and gentle of birds, but also becomes uncommonly tame and affectionate, we may, indeed, expect that it will attain great importance in the future, both as an ornamental and breeding bird as well as a speaker.

Anyone wishing to tame it, and teach it to speak, should attempt to obtain one bred in this country and while still very young, for these prove much more manageable and teachable than those imported when old, while those, again, which have had mates are exceptionally hard to train after separation.

CHAP. LXX.—THE ORNAMENTED LORY OR LORIKEET.

Psittacus ornatus, L.

Ornamental Lory (Ger., *Blauohriger Keilschwanzlori, Schmucklori;* Fr., *Perruche Lori ornée;* Dut., *Blauwoor Loeri*)—*Its Extraordinary Beauty—Description—Habitat—Rarity in the Bird Market—Character in Captivity—Talking Capacity.*

FEW fanciers could be unaffected at the sight of this beautiful little bird. I thought, when I first saw it, that it was the most beautiful of all the brilliant and splendid lories. Mr. Scheuba expresses himself in similar terms, and the old authors seem to be of the same opinion, for they called this bird "The Paradise Parrakeet." I gave it the popular name of Ornamented Lory, by which it is universally known, in accordance with the Latin appellation.

It is among those parrots which have been long known. Edwards sketched it as early as 1747, Brisson described it in 1760, and Linné named it. However, we had no particulars of its life in freedom, nor of its habits in captivity, till lately.

It is violet-blue on the forehead and top of the head; the back of the head inclines to blackish-blue; round the back of the head and across the nape of the neck there is a scarlet band marked faintly as with scales of black; the lores and a spot near the ear are blackish-blue; on each side of the throat there is a broad bright-yellow stripe; all the upper part of the body is a dark grass-green; every feather on the fore part of the back has a broad yellow transverse stripe; the quills are green on the outer web; the inner web is of blackish-grey, dark grey on the reverse side; the shoulders and under coverts of the wings are a deep yellow; the centre feathers of the tail green, the outer ones are greenish-yellow at the tip, and at the basal half the inner webs are scarlet; the cheeks and throat are scarlet; the front of the neck and the breast the same, marked with broad black stripes; the belly dark green; the sides, hinder part of the body, and under coverts of the tail, marked as with green and yellow scales; the beak red; the cere blackish; eyes dark brown, inclining to reddish-brown; the featherless skin round them bluish-black; feet dark grey; claws black. In size it is scarcely as large as a thrush (length, 8⅝in. to 9⅜in.; wings, 4½in. to 4⅝in.; tail, 2⅝in. to 3in.).

It is a native of Celebes and the Togian Islands. Dr. A. B. Meyer found it there in abundance, and sometimes in very large flocks, which flew away with rapid strokes of the wing, uttering short shrill cries. The natives keep them in numbers, chained to a little stand before the doors of their huts by means of a ring made of cocoanut-shell, and feed them with rice and bananas. The above-named explorer informs us that this bird (like several other lories) has a perceptible and not unpleasant smell of musk.

With us it is, unfortunately, among the rarest in the bird market; moreover, the dealers have had troublesome experiences of it, for most Ornamented Lories die suddenly in spite of their arrival in apparently perfect health and in good plumage. This, however, I am convinced, arises solely from improper treatment, and I therefore call attention to the remarks on this point at page 8 of my Introduction. If these lories arrive in a healthy state, they are just as easily kept as the Blue Mountain Lory, for they only require the same care and diet, and resemble it in nearly every other respect.

They have, however, already found friends who take an interest in them. Mr. Heer, of Striegau, writes as follows: "My male Ornamented Lory is a nice bird, very tame, and reminds one very much, in its actions, of the Blue Mountain Lory. It also appears to be very teachable, for it has picked up all sorts of words from other birds, which it imitates; it chatters most, and many things, in the evening." Mr. A. Eberle writes of a couple, belonging to the bird dealer, Franz Petzold, of Prague, that the male spoke Italian, which it had probably learnt from the sailors on the voyage. "Among my bristle-tongued parrots," says Mr. Scheuba, "the Ornamented Lories are not only by far the most splendid in colour, but also the liveliest, most impetuous, and restless; there is not the least trace of timidity or shyness in them, even with strangers. When anyone approaches their cage, they at once come near to the wires and greet the visitor with somewhat shrill cries, and, if the old cock can, it catches a firm hold, with claws and beak, of any garment which has come too close, or else of the hand, and from which his grasp can only with difficulty be disengaged, and not even then, however, without his giving a few painful pecks. If neglected, it attracts attention by loud cries; then, if anyone draws near, it expresses its joy by nodding its head and bowing, and, frequently while doing this, it catches

the end of the pinion with its foot, so that the wing is somewhat raised, and puts its head between the wing and the breast. In the same way it tries to chatter all sorts of things, but nothing but the words 'Parrot' and 'Wait, wait!' can be clearly distinguished. Its food consists of oats and boiled maize (of which latter it is passionately fond), as well as service berries and figs; it gnaws eagerly the tops and needles of pine twigs. In other respects this species resembles those previously mentioned; it is also of value as an ornamental bird, and can certainly be bred as well. It seems easier to train in speaking, yet its capabilities scarcely extend beyond a few words.

As already mentioned, the Ornamented Lory is very rare in the trade. A specimen was first brought to the Zoological Gardens of London in 1873, and in Dr. Platen's collection there were twenty-eight specimens; but usually it is only imported in couples or in small numbers.

CHAP. LXXI.—THE MACAWS.

Sittace, Wgl.

Known as Speaking Parrots from Ancient Times—Suited for Ornamental Purposes — Distinguishing Marks — Habitat — Life in Freedom—Food—Character in Captivity—Talking Capacity.

THE Macaws are of special interest to the readers of this work, first because they belong to those speaking parrots which have been known from the most ancient times—we find them described even by Aldrovandi and Gessner—and, secondly, because they all, without exception, have the capacity of learning to speak. The greater number, and the larger among them, have the same relation to parrot lovers as have the cockatoos; inasmuch as, for the same reasons (see p. 147), they are not suitable for keeping in cages in the drawing room, but must, like them, be regarded rather as ornamental birds for ante-rooms, gardens, or verandahs, or even for the fowlyard and park. For this purpose, however, they are very acceptable, as almost without exception they are extremely healthy and hardy. Hence, also,

they are much esteemed in zoological gardens and natural history collections.

The following may be given as their distinguishing marks: Beak very large and strong; upper mandible much bent downwards, with a long overhanging point, and distinct indentation; the lower mandible deeper, with broad but slightly curved socket edge, abrupt point; the ridge is flat, and has not a sharp edge; the tongue is thick, somewhat larger in its anterior part, lower down fleshy, with fine longitudinal furrows on the upper side, between which, upon the projecting ridges, grow little blunt papillæ in rows, at the back four pairs of warts of unequal sizes, and a slightly notched edge slanting outwards in an oblique direction. The nostrils are round, set in the bare cere, the latter being covered only in some specimens with little feathers; the cheeks, with the region round the eye, and near the lower mandible, are unfeathered, but some have rows of little feathers under the eye; the wings are long and pointed; the tail long, sharp, cuneiform; the feathers graduated, each being rounded at the tip; the feet powerful; legs short and thick; claws large and much bent; the plumage firm and hard, without the powdery down; shape thickset, but much larger in appearance (owing to the long tail) than it in reality is; size, varying from that of a pigeon to a domestic fowl.

They are natives only of America, where they are found from the North of Mexico as far as South Brazil and Paraguay. The dense primeval forest is their abode, especially in the lowlands along the streams and rivers, but also in the mountains to an elevation of nearly 12,000ft. They live in couples, and after the nesting season in families; many assemble from time to time, sometimes several species together, in large flocks. In their flight they cleave the air rapidly, but, in the case of the larger species, heavily; their gait on the ground is awkward, in a sidelong direction; but, on the other hand, they climb rapidly and nimbly in the branches. All kinds of tree fruits and seeds, especially palm nuts, hard as stones, which they break with their powerful beaks, form their food. They sometimes fly to great distances, and attack the crops of the settlers with destructive effect. They are eagerly pursued, as well on account of the damage they do as for their plumage and the food furnished by their flesh, which, however, is of no great delicacy. For this reason they have become exceedingly sly, and have

learnt how to hide themselves so cunningly in the thick tops of the highest forest trees, that they can with difficulty be shot. They have been almost universally driven out of the inhabited districts. Their nests are made in the hollows of gigantic old trees, and are occupied yearly by the same couples. They lay but two eggs, which are hatched by the hen only.

The majority of those imported are young ones, taken from the nest by the Indians, reared by hand, and brought to the seaports; consequently, nearly all the macaws which come into the market are fully, or at least half, tame.

In captivity they are, as stated before, exceedingly healthy and hardy, and, at the same time, good-tempered and affectionate; but, on the other hand, a macaw, when vicious, is extremely dangerous. An account of these birds, by the best connoisseur in this subdivision of parrots—Mr. Fiedler, university bookseller in Agram—will be found interesting. He has kept a variety of species for many years, and declares emphatically that it is a mistake to suppose that macaws are not suited for keeping in a room. "On the contrary," he says, "I can assert with confidence that none of them are screamers, and may, in truth, be kept in the room even of a nervous lady. Of course, one must not buy the first macaw that comes to hand, but one which is still young, and which is capable of receiving affectionate treatment and training. Such a bird will not only become uncommonly tame, allow itself to be caught and petted by a child, and fly into the open air and come back at call, but will never once screech." In contrast to this account, however, a macaw in the Zoological Gardens, where it is sometimes wrongly treated by the attendants and very frequently teased by the public, may become an incorrigible screamer and a really vicious bird.

The macaws learn to say many words, often whole sentences, with a loud, powerful, but usually an indistinct utterance. In capacity for speech they are, on the whole, a long way behind the Grey Parrots and Amazons, as well as the Alexandrine Parrakeet, which is more nearly related to them; although otherwise they are indeed very intelligent birds. The smaller species, again, are greatly surpassed by the larger in both respects.

The macaws are fed similarly to the Amazons and Grey Parrots. The larger species are mostly kept singly, fastened by a chain to a stand, and the smaller species in couples in

breeding cages. Nearly all the known species are imported alive. With suitable treatment, the macaws, especially the intermediate and larger ones, attain, even in captivity, an astonishingly great age.

CHAP. LXXII.—THE HYACINTHINE MACAW.

Psittacus hyacinthinus, Lth.

Hyacinthine Macaw (Ger., *Grosser blauer Arara, Hyazinth-Arara, oder hyazinthblauer Arara*; Fr., *Ara hyacinthine, Ara Maximilien*; Dut., *Maximilian's Ara*)—*Description*—*Habitat*—*Rarity.*

THIS magnificent bird, with its powerful beak, can neither escape notice nor be mistaken for another; it is well suited for zoological gardens. Its whole body is dark cobalt blue, lighter on the head and throat, but darker on the crown of the head, back of the neck, wings, and tail; the quills have a blackish edge on the inner web, and are of shining black on the reverse side; the larger under coverts of the wings black; the tail feathers black on the reverse side; the beak black; eyes blackish-brown; the lores feathered; the eye cere and the bare skin round the under mandible orange yellow; the feet blackish-brown; claws black. Its size is about that of a domestic cock, but longer in appearance (length, about 39½in.; wings, 14½in.; longest tail feathers, 18in. to 22½in.).

It is a native of Central Brazil as far north as the Amazon River. It was described by Latham in 1790, and Azara also treated of it. Even in its native country it is rather rare, being found only in pairs or families. Until lately it was very scarce in Europe. In the Zoological Gardens in London it first appeared in 1867. The principal zoological collections have by degrees obtained specimens, and two may be found in the Berlin Garden. Miss Hagenbeck has occasionally exhibited one of these splendid birds. Dr. Finsch says he has heard one murmuring words of some foreign language in a deep bass voice.

HYACINTHINE MACAW.

(Psittacus hyacinthinus.)

CHAP. LXXIII.—THE MILITARY MACAW.

Psittacus militaris, L.

Green Macaw (Ger., *Soldatenarara, rothstirniger Arara, grosser grüner Arara, auch militärischer Arara*; Fr., *Ara militaire*; Dut., *Groene Roodvoorhoofd Ara*)—*Description—Habitat—Talking Capacity—Domestic Character.*

THE popular name, which is also contained in the Latin appellation given by Linné, is probably due to the peculiar purplish-brown stripes on the cheeks of this bird, bearing some resemblance to a pointed moustache, as well as to its brilliant plumage. It is said to have been mentioned by Garcilasso de la Vega as early as 1609; and was well described and drawn by Edwards in 1747.

It is scarlet on the forehead and front of the head; the top and back of the head are grass-green; the shoulders of pale yellowish olive-green; the hinder part of the back, the rump, and the upper coverts of the tail sky-blue; the quills dark blue, olive green on the inner web, and on the reverse side wholly olive-greenish yellow; the coverts of the primaries and secondaries and the bend of the wing dark blue; the small under coverts of the wing green, the largest olive-greenish yellow; the tail copper-brown, the inner webs edged with olive-yellow, about one third towards the tip blue; the two outermost feathers quite blue, and the reverse side of all tail-feathers olive-greenish yellow; all the rest of the body above and below olive-green; the under coverts of the tail blue; the beak black; eyes greyish-yellow; the bare cheeks are flesh-coloured, with four narrow stripes of purple-brown feathers, which unite to one spot at the under mandible. Medium size, much smaller than the dark blue Arara (length, 24⅝in. to 30¼in.; wings, 13¾in. to 16⅜in.; tail, 12⅜in. to 16in.).

It is a native of Bolivia as far as the north of Mexico, principally in Columbia, Peru, Ecuador, Panama, and Central America. It is found in the low-lying hot plains, as well as in the Andes to an elevation of nearly 12,000ft., and sometimes also in the West Indies and Jamaica, when on its migrations.

Buffon gives no further particulars of it, but Bechstein saw it,

with F. Thieme, the dealer, in Waltershausen, and describes it as unusually teachable and talkative: "It at once learnt to repeat everything, called all the children in the house by name, was patient, obedient, lively, and distinguished greatly above the Blue and Red Macaws. It is also more expensive than they, and is considered a greater rarity." It is sometimes seen in the bird shops and at shows; the principal zoological gardens have it, and there it proves very hardy, for in Frankfort-on-the-Maine a Military Macaw has lived for nearly fifteen years. One sits unchained on a stand in the Gardens at Hamburg, and never attempts to fly away. The Military Macaw appears in extraordinarily varied sizes in the shops of the wholesale dealers, and hence it has occurred to men of science to divide it into two varieties. This, however, is of no importance to the amateur, for he can buy a large or small Military Macaw according to his fancy.

CHAP. LXXIV.—THE RED AND BLUE MACAW.

Psittacus macao, L.

Red and Blue Macaw (Ger., *Arakanga, hellbrother Arara, scharlachrother Arara, grosser gelbflügeliger Arara, Makao*; Fr., *Ara rouge, Ara Macao*; Dut., *Groote Geelvleugel Ara*)—*Anciently known—Destructiveness—Description—Domestic Character.*

This species was described by Gessner in 1557, and by Aldrovandi in 1599, and is amongst the best known, both with regard to its habits in freedom and its life in captivity. Alexander von Humboldt, Schomburgk, and Arthur Schott may be named among travellers who have observed it. According to them all the general facts descriptive of the life of the macaw in freedom apply especially to this species. The settlers shoot these macaws without mercy, on account of the damage they do to the maize and other crops; the natives pursue them unceasingly for the sake of their brilliant plumage, but their flesh is of little value. A tree in which the nest is built passes among the Indians as an inheritance from father to son, and is inhabited by the birds annually, though the nest is always robbed. The macaws imported belong, almost without exception, to these young

hand-reared birds, and are, consequently, tame when they arrive, and capable of further training.

The Red and Blue Macaw is scarlet on the top and sides of the head; the hinder part of the back, the rump, and the upper coverts of the tail, are sky-blue; the quills and their coverts blue, blackish on the inner web; the larger upper coverts of the wings, together with the long shoulder feathers, are orange-yellow, with a green spot at the tip; the bend of the wing blue; all the upper part of the body scarlet; the tail feathers sky-blue at the tip, the two outermost all blue; then this colour gradually decreases, so that on the two centre feathers it only appears as a little spot; all the reverse side is also scarlet, only the under covert of the tail is blue; the upper mandible is horn-coloured greyish-white, with a black spot at the base; the under mandible black; the eyes yellowish-white; the featherless cheeks whitish-flesh coloured; the feet blackish-grey, with black claws. In size it is almost as large as a domestic cock (length, 39½in.; wings, 14½in. to 16½in.; tail, 19½in. to 24½in.). It is a native of northerly South America, Bolivia, North Brazil, Guatemala, and Honduras, and is found also in Mexico and Peru.

Bechstein gives full details of its life in captivity, but states only those facts which I have already mentioned in my introduction. This macaw is splendid to look at, can be accustomed to fly in and out of the house, is said to be very amenable to training, and learns to repeat words exceedingly well; nevertheless, it not unfrequently proves very vicious, so that children should on no account be left in the room alone with it. More recent observation of it has disclosed nothing new. The Red and Blue Macaw is one of the commonest objects in zoological gardens. According to Dr. Max Schmidt, one in the Garden at Frankfort-on-the-Maine lived more than twenty years. It is to be found in almost every bird show. A Red and Blue Macaw, shown by one Mr. Czarnikow in the Ornis Exhibition in Berlin in 1879, was in splendid plumage, uncommonly tame and affectionate, and was said to know more than one hundred words.

CHAP. LXXV.—THE RED AND YELLOW MACAW.

Psittacus chloropterus, Gr.

Green-winged Macaw (Ger., *Grosser grünflügeliger Arara, dunkelrother Arara, Grünflügel-Arara;* Fr., *Ara chloroptère, Ara aux ailes verts;* Dut., *Groote Groenvleugel Ara*)—*Description—Habitat—Longevity.*

This species is distinguished from the preceding only by the plumage being, on the whole, of a much darker red, and by its being green, not yellow, on the shoulders and upper coverts of the wing. It was first described by Gessner, then in 1760 by Brisson, and named by Gray in 1859. It is dark scarlet on the head, and on all the rest of the upper part of the body, each feather on the back of the neck and the fore part of the back being edged with green; the middle and lower part of the back, as well as the upper coverts of the tail, are sky-blue; the primaries dark blue, the inner web black, the reverse side purplish-red, the coverts dull blue; the coverts of the shoulders and wings a dull olive-green; the small coverts under the wing red, with a broad green edge; the broad tip of the tail, and both the outermost feathers, dark blue; all the lower part of the body a dark scarlet; the under coverts of the tail sky-blue; the upper mandible whitish horn-grey, with a black spot at the base; the lower mandible black; the featherless cheeks white; the eyes yellow, or yellowish pearl-grey; the feet are blackish-brown, with black claws. In size it is somewhat less than the preceding (length, 30¾in. to 32¾in.; wings, 15½in. to 16½in.; tail, 12⅝in. to 18⅝in.).

It is found in the district extending from South Brazil, the Amazon river, and Guiana, as far as Panama and Uruguay. It is common in the trade and in zoological gardens, and can be kept in excellent condition for more than ten years; but, of course, for a much longer period when receiving suitable treatment from a connoisseur.

CHAP. LXXVI.—THE BLUE AND YELLOW MACAW.

Psittacus ararauna, L.

Blue and Buff Macaw (Ger., *Blauer gelbbrüstiger Arara, Gemeiner blauer Arara, Ararauna, grosser gelb und blauer Arara*; Fr., *Ara bleu, Ararauna*; Dut., *Blauwgeele Ara*) —*Description—Habitat—Domestic Character.*

The common Blue Macaw, as it is usually called in the trade, was described as early as 1558 by Thevet, and afterwards by Gessner and Aldrovandi. These authors also give details of its life in captivity, its food, and other peculiarities, which correspond with what we know of it now, though, of course, in accounts of the kind many fictions have crept in. Later writers, including Buffon, have also treated of it at length.

It is olive-green on the forehead, and front of the head as far as above the eyes; the top and back of the head is greenish-blue; the cheeks and the region round the ear of a deep orange-yellow; the stripe on the cheeks, and the upper part of the throat, black; the quills and tail feathers are olive-yellow on the inner web, with black edges; all the rest of the upper part of the body blue; all the under part a deep orange-yellow; the wings and tail are olive-yellow on the reverse side, and the under coverts of the tail blue; the beak black; the cere, the stripe near the beak, the lores, and the eye cere, flesh-coloured, usually powdered; below the eye there are three lines of small black feathers, three similar lines in front of the eye, the former horizontal the latter perpendicular; the eyes greenish-white, or greenish pearl-grey; the feet brownish-black; claws black. In size it is nearly as large as a domestic cock (length, 37½in.; wings, 14⅜in. to 15⅜in.; tail, 19½in. to 21½in.).

It is a native of South America from Honduras to Peru, and is also found in Bolivia and Uruguay. Of late, it has been largely imported; it is common in the bird market, and is usually seen in zoological gardens.

According to Dr. Schmidt and some others, it is very hardy. Linden states that a Blue and Yellow Macaw of his shows great intelligence, is very cunning, and has learnt to say many things, but particularly distinguishes itself by its capability of learning quickly. The dealers esteem it as the best speaker among the macaws.

CHAP. LXXVII.—THE SMALL OR BROWN-FRONTED MACAW.

Psittacus severus, L.

Green Macaw (Ger., *Anakan, Rothbug-Arara, Zwergarara, Arara mit rothem Handgelenk;* Fr., *Ara vert, Ara à front chatain;* Dut., *Roodhand Ara*)—*Description—Life in Captivity—Imitative Powers.*

THE Green Macaw, as it is usually called in the trade, was described by Markgraf in 1648, and afterwards by Brisson; it was named by Linné. It is coloured in the following manner: The narrow band on the forehead, the stripe on the cheeks, and the stripe on the upper part of the throat near the lower mandible, are reddish-brown; the head and back of the neck dark grass-green, each feather having a broad blue edge; the quills a dull blue; the inner web and tips blackish; the secondaries edged with green, all copper-red on the reverse side; the greater coverts dull blue; the coverts along the bastard wing form a broad scarlet border; the tail feathers reddish-brown, about one-third from the tip, dull blue, and coppery-red on the reverse side; all the rest of the upper part of the body dark grass-green; all the lower part of the body dull green; the beak black, with a lighter horn-grey point; the cere and featherless cheeks a yellowish flesh-colour, set in front of and below the eye, and as far as the ear, with rows of little black feathers; the eyes yellowish-white, inclining to yellow; feet blackish-brown; claws black. In very old birds the edges of the wings, and the small and central under coverts, are scarlet; the greater coverts coppery-red; and there are some red feathers about the thigh. In size, it is somewhat larger than a pigeon (length, 20½in.; wings, 8¾in. to 10¼in.; tail, 8½in. to 9⅝in.).

This macaw is a native of a large district of southerly Brazil, and extends as far as Panama; it has also been shot at the upper course of the Amazon.

Buffon wrote much of its life in captivity. He praised the Small Macaw, not only as a beautiful and rare bird, but also on account of its gentle and endearing ways; it is able to imitate the human voice, as well as the cries and whistling of other birds, but learns the former more easily, and does it more

clearly than the large macaws. It listens to other speaking birds, and learns from them. Its voice, however, is not so strong, and it is said not to be able to pronounce the word "Macaw" as clearly as the larger species. It is common in the trade, and is frequently seen at exhibitions, though usually singly; it is seldom found with amateurs, but often appears in zoological gardens.

CHAP. LXXVIII.—ILLIGER'S MACAW.

Psittacus maracana, Vll.

Illiger's Arara (Ger., *Rothrückiger Arara, Rothstirniger Arara, Marakana;* Fr., *Ara à joues rouges, Ara d'Illiger;* Dut., *Illiger's Ara*)—*Rarity—Description.*

ILLIGER'S MACAW was described and named by Vieillot in 1816; yet, though nearly as common in the trade as the preceding species, we have, to the present time, no details of its life in freedom, nor of its habits in captivity. It is of a dull vermilion on the forehead and hinder part of the back; the crown of the head is a dull greenish-blue; the rump and upper coverts of the tail yellowish-green; the quills sky-blue, the inner webs being brownish-yellow; the reverse side of the quills and the large under coverts of the wings a dull olive-yellow; the tail feathers are brownish-red at the basal half, the tip half greenish-blue; the reverse side a dull olive-yellow; all the rest of the upper part of the body olive, inclining to grass-green; all the under part of the body the same; the middle of the belly and the hinder part of the body a dull vermilion; the beak blackish-brown; the upper mandible lighter, greyish at the base and point; the unfeathered cheeks reddish, inclining to sulphur-yellow, set with rows of little, black, bristly feathers; the eyes orange, with a greyish-brown ring round the iris; the feet a reddish-brown flesh-colour; claws black. It is about the size of a pigeon (length, 16⅜in.; wings, 7⅜in. to 8½in.; tail, 7¼in. to 7⅞in.). It is a native of South Brazil, and is found near the mouths of the rivers.

Like the preceding, this species is to be seen occasionally in zoological gardens and at exhibitions. Dr. Schmidt writes of

one which lived fifteen years in the Zoological Garden at Frankfort. Dr. Frenzel, of Freiburg, had a couple which bred, but they, unfortunately, did not succeed in rearing the young. This bird is, on the whole, as great a favourite as the Small Macaw.

CHAP. LXXIX.—THE NOBLE MACAW.

Psittacus nobilis, L.

Noble Parrot (Ger., *Kleiner grüner Arara, Blaustirniger Arara, Blaustirn-Arara;* Fr., *Ara noble, Petit Ara vert, Ara pavouane;* Dut., *Blauwneus Ara*)—*Description—Cleverness as a Speaker.*

This species is the best known and greatest favourite among the small macaws. It is marine blue on the forehead and on the upper edge of the eye; all the rest of the upper part of the body is dark grass-green; the inner webs of the quills are of a dull olive-green, the reverse side of the quills olive-green; the covert feathers on the bend of the wing, along the under part of the wing, and on the bastard wing, as well as the small under coverts of the wing, scarlet; the largest under coverts of the wing olive greenish-yellow; the reverse side of the tail also olive greenish-yellow; all the under part of the body dull grass-green; the upper mandible horn greyish-white; the under beak horn brownish-black, with lighter tip; the featherless cheeks white, without the row of small feathers; eyes orange-yellow; feet dark grey; claws blackish-brown. In size it is nearly as large as a pigeon (length, 13¼in.; wings, 6⅝in. to 7in.; tail, 5½in. to 6⅝in. It is a native of Central Brazil.

The Noble Macaw was first described and made known by Linné in 1764. The Prince von Wied informs us that, although it is rather shy, and nowhere very common, yet he had seen it in small flocks on a cocoanut palm in the middle of a village, and had heard its loud cry in flight. Burmeister says it resembles its congeners in every respect. Though extremely rare in the trade and at exhibitions, it may usually be seen in zoological gardens. Mrs. H. von Troschek, of Vienna, who is a great admirer of these birds, informs us that a couple in her

possession are unsurpassed in tameness and affection, and that the male might compete with the best Grey Parrot in talent for speech. "It sings, laughs, knocks, and when I call, 'Come in!' asks, 'Where is the mistress?' &c. In all, it has learnt about fifty words, and it is astonishing how correctly it can apply them. It plays with an Amazon Parrot after the manner of two puppies tumbling each other about." This couple was in the possession of Mrs. von Proschek for years, and made several attempts at breeding, but unfortunately always without success.

CHAP. LXXX.—THE PALÆORNITHINÆ, OR NOBLE PARRAKEETS.

Palæornis, *Ngrs.*

Distinguished for Form and Colour, for Talent in Speech, and for Breeding in Captivity—Description—Habitat—Varieties—Hardiness.

The Palæornithinæ, or, as they are called in Germany, the Noble Parrakeets, have become in several respects of great value to the amateur; indeed, they have been admired and highly esteemed from the most ancient times, on account of their special peculiarities. Their superiority lies in their pleasing form and beautiful colours, as well as in their eminent talent for speech, and intelligence in general; and, at the same time, in their unusually great aptitude for being tamed and trained; and to these qualities may be added the advantage that many species of the genus breed more freely in the aviary than any others.

While the Macaws, which belong also to the Long-tailed Parrots already described, cannot be classed exactly among true cage birds, the Palæornithinæ form, in the group of parrakeets proper—of which we are about to treat—the most prominent and, strictly speaking, the only family among whose members we meet with very talented talkers. They may, therefore, properly take precedence of the other species of parrakeets, which, indeed, are far behind them in this respect.

The following may be regarded as their chief distinguishing marks: The beak powerful, as long as, or longer than, it is deep; the basal half of the upper mandible set angularly, with a

shallow longitudinal furrow; sides only slightly compressed, the point bent sharply downwards and overhanging, with a small indentation; the lower mandible with broad rounded socket edge; the tongue thick, fleshy, with broad, blunt point; the nostrils small, uncovered, in a narrow cere; eyes large and round, with a power of dilating or contracting the pupil to an extraordinary extent with every varying sensation; the lores and region round the eye feathered; the wings long and pointed; flights obtusely rounded at the end, rarely quite pointed; the tail graduated, in the shape of a wedge, the two centre feathers usually much longer than the rest; the feet short and stout; the plumage rather hard, without powdery down; body strong, yet slim. Size, varying from that of a thrush to a pigeon. Flight exceedingly skilful and rapid, with quick strokes of the wing, hovering when about to descend; a waddling gait, yet not so inelegant as that of its congeners. They climb rapidly and gracefully.

They extend over a wide region, and are natives of Africa and Asia; one species being found even in both hemispheres, whereas most of the others inhabit only a small circuit. Comparatively few observations have been made as to their life in freedom; and here I have pleasure in drawing attention to the fact that the process of breeding has been carried on in captivity, and has given opportunities for studying the development of several species. The Noble Parrakeets are said to live almost without exception gregariously, different varieties, however, never being intermixed.

As regards nesting, they resemble the other parrots, inasmuch as they build their nests in the hollows of trees, but some species use also holes in rocks or walls. The brood is said to consist of two eggs, and each couple produces several broods consecutively. They chiefly inhabit the plains along the rivers, where thick forests grow, but are also found in more open plains or hilly neighbourhoods, and several species are reported to have been met with in the mountains at a height of 11,000ft. Their food consists of all kinds of seeds and fruits. After the breeding season they assemble in greater or lesser numbers, and in their search for food attack the crops of rice and maize. On this account an exterminating war is waged against them, and they therefore display great craftiness and caution. They hide themselves most cunningly, aided by their green plumage, in the dense tops of the highest trees, remaining perfectly motionless till one after

another flies secretly away. In countries where they are not pursued, as in India, they are, however, so bold that they build their nests in trees standing in the open spaces in thickly populated towns, or in the holes of lofty buildings.

Travellers tell us that in their native lands many varieties may be seen half tame in the villages, where they not only build as mentioned above, but also are fed with the domestic fowl. These parrakeets are great favourites among the natives, and are often seen with them, in cages or chained to rings. Many species are taken from the nest and reared by hand in great numbers, but the majority of those imported are certainly birds which have been captured by means of large nets at drinking places and the like. These latter are also easily tamed and trained; and of those which come to us, not only do the young birds, taken from the nest and brought up by hand, but even those caught when old, become in a comparatively short time tame and affectionate, and prove themselves possessed of an aptitude for being trained.

Among the various species of the Noble Parrakeets the capacity for speech differs in an extraordinary degree, even in individual birds of one and the same species; yet, as in the case of the great Short-tailed Parrots, it is to be remarked that by far the greater number have proved themselves good speakers, and but few are incapable of good training.

The above remarks especially concern one group, the so-called Alexandrine Parrakeets; the charming, easily bred Blossom-headed or Rose-headed Parrakeets (*Psittacus Palæornis cyanocephalus*, L., and *P. rosiceps*, Rsseu., *P. rosa*, Bdd.), the peculiar and beautifully-coloured Malabar Parrakeet (*P. peristerodes*, Fnsch.), &c., have not as yet proved themselves gifted with speech. Of course, I must exclude those which do not speak, and confine myself to the description of the Alexandrine Parrakeets.

They are healthy, hardy birds, which may be easily kept for years in a cage with simple management, being fed only with seeds—such as hemp, oats, canary-seed, and maize—with the addition of good fruit, and some biscuit and egg-bread. To this simplicity of treatment is joined the above-mentioned quality of special interest to readers of this work—namely, that they are among the best speakers; and some species come near, or even excel, the Amazons and Grey Parrot, besides which they are exceedingly tame, amiable and gentle. They may, on the other hand, be reckoned among the worst screamers, and sometimes

cannot be quieted by any means; moreover, they are incorrigibly destructive to wood, completely wrecking every part of the cage or stand which is not of metal; and they bully other birds most inexcusably. If handled carelessly, again, they may prove very vicious biters, and no bird becomes more obstinate, wicked, and spiteful than an Alexandrine Parrakeet, if treated ignorantly or improperly.

Some of the varieties described belong to the more common species in the trade; others, on the contrary, are very rare. As birds are frequently imported which are not perfectly coloured, and as the amateur may purchase one which has been bred in this country, I may remark that all these parrakeets get their fully coloured plumage very late, seldom before they are two years old.

CHAP. LXXXI.—THE RING-NECKED ALEXANDRINE PARRAKEET.

Psittacus torquatus, Bdd.

Ring-necked Parrakeet, Rose-ringed Parrakeet (Ger., *Halsband-Edelsittich, Kleiner Alexandersittich, Alexanderpapagei, Halsbandsittich*; Fr., *Perruche à collier rose, Perruche Alexandre à collier de l'Inde, Perruche Alexandre à collier du Sénégal*; Dut., *Kleene Alexanderparkiet of Halsband Edelparkiet*)—*Familiar to the Ancients—Its Beauty—Talent for Speech—Description—Habitat—Selection in Purchase.*

WHEREVER in ancient literature a parrot may be spoken of, this is always the species meant. Writers, from Pliny down to Aldrovandi and Gessner, give descriptions and drawings of it. Many errors concerning it have, however, crept in. It was said, among other things, to be a native of America, and was described as consisting of many varieties. We have records of its importation to Europe in the time of Alexander the Great. Buffon, Bechstein, and others, have written of its habits in captivity.

Thus, from ancient times even to our own day, it has been admired and esteemed, not only for its capacity for speech, but also for its beauty. More recently, as a cage bird, we have discovered a special attraction in it, namely, its capacity for

breeding. For this reason its natural development has been more closely observed than had ever been done before, notwithstanding the wide range of its habitat, its frequent appearance among us, and its familiarity as one of the best and most anciently known birds.

The adult male of the Ring-necked Alexandrine Parrakeet is grass-green on the forehead, crown, and sides of the head; the narrow lores black; the back of the neck and head is a delicate mauve; round the hinder part of the neck there is a broad rose-coloured band, and on the throat a light yellow band; the spot on the chin is black, and from it, along the sides of the head, runs a black stripe which grows narrower towards the back of the head; the back is a yellowish olive-green; the hinder part of the back, and the upper coverts of the tail, grass-green; the quills dark grass-green, the outer webs having a narrow light yellow edge, the reverse side ashen-grey; the two central feathers of the tail bluish-green; the remainder yellowish-green, the inner web dull yellow, all on the reverse side dull yellow; all the rest of the under part of the body yellowish-green; the beak blood-red (or the upper mandible red, the under mandible black; or the upper one a blackish purple-red, the under one black); the eyes light yellow, surrounded by a featherless red cere; feet blackish-grey, with black claws. In the adult female: The crown and sides of the head are green, much darker than in the male, with a slightly noticeable yellowish shade; only a narrow grey band on the neck (the rose-coloured band on the neck, and the black spot on the chin, are absent); all the upper part of the body is a faint, dull olive-green, not so bright as in the male; the hinder part of the back is a dull light green; the upper mandible red; the under mandible blackish-grey; eyes light yellow. The young male resembles the old female, but is a paler green; it has neither the neck band nor the chin spot, and only gets these in the second year. It is about the size of a small domestic pigeon (length, 14½in. to 15⅞in.; wings, 4⅜in. to 6⅞in.; the longest feathers of the tail, 4⅜in. to 10in.; the outer feathers of the tail, 2in. to 3½in.).

It is a native of Asia and Africa; in the former continent it extends from Bengal to Nepal, Cashmere, Tenasserim, and Upper Pegu, as well as over Ceylon; in the latter, from Senegal to Abyssinia, to 16deg. north and 7deg. south, it is found to an elevation of 11,000ft. In South Africa it has colonised

itself, having been introduced either purposely or by chance. The dealers distinguish between the birds from the different continents: the adult full-plumaged birds from Asia having red, and those from Africa black, beaks.

There can scarcely be any other parrot so frequently stolen from the nest, and reared by hand, as this; and, therefore, it not only comes into the market very numerously, but most of the Ring-necked Parrakeets are already tame enough to perch on the finger. This is especially the case with the Indian birds, for most of those sent from Senegal or Ceylon are caught in nets in great numbers when old.

The Ring-necked Parrakeet is, indeed, of great value as a cage bird, for whether taken from the nest when young, or caught when old, it soon becomes very tame, in the first case surprisingly soon. In some cases it learns at once to speak well. There is a case on record where a parrakeet of this species acquired a hundred words, and, indeed, whole speeches; moreover, it learnt to pronounce several languages, English, German, and French, clearly and distinctly, and at the same time exhibited extraordinary cleverness and intelligence. The disagreeable qualities of the Noble Parrakeets, mentioned on p. 199, are, however, always found, even in the most accomplished speakers. On the other hand, an advantage possessed by these birds is their great hardihood, for they have been successfully kept in the open air throughout the winter.

Mr. Photograh Otto Wigand, of Zeitz, was the first to breed the Ring-necked Alexandrine Parrakeet, and to describe the plumage of the young birds and its change of colour. By the observation thus afforded all previously disputed points were fully cleared up.

Whoever wishes to buy a Ring-necked Parrakeet should choose, if possible, a young and uniformly green bird; it is immaterial whether it may afterwards develop the colours of an adult male or female. An old, wild bird, which screams at every approach, should be avoided. The food mentioned on p. 199 should be given. With regard to taming and training, attention should be paid to the remarks on p. 34, *et seq.*

CHAP. LXXXII.—THE MAURITIUS ALEXANDRINE PARRAKEET.

Psittacus eques, Bdd.

Mauritius Alexandrine Parrakeet (Ger., *Halsband-Edelsittich von Mauritius, breitschwänziger Halsband-Edelsittich, Ritter- oder Reiter-Edelsittich;* Fr., *Perruche Alexandre de l'Isle de Maurice*; Dut., *Mauritius Edelparkiet*)—*Description—Rarity—Character in Captivity.*

THIS species is dark grass-green, without the greyish-green lustre; a narrow band of blue on the neck; on both sides of the throat there is a yellowish-vermilion spot; the stripe on the chin black; the narrow lores black; the back and rump are not bluish, but a bright dark green; the large feathers on the shoulders, and the small coverts under the wing, are a bright yellow; the tail feathers are dark green, without the blue lustre; the inner web a dull yellow; all the reverse side a dull orange-yellow; the two central feathers of the tail are slightly prolonged; all the under part of the body grass-green (the breast without the greyish-green); the upper mandible red; the under mandible blackish-brown; the eyes light yellow; the eye cere orange-yellow; the feet grey; claws black. The female is similarly marked, but without the band on the throat and the lores lines; when old, there is a black stripe on the lower cheek; the beak is uniformly blackish-brown. In the plumage of the young bird all the under part of the body is of pale yellowish-green; the upper mandible is reddish-brown at the base; in other respects it resembles the female. The size is somewhat less than that of the species previously described (length, 15in. to 16in.; wings, 6⅜in. to 6¾in.; the longest feather of the tail, 5⅞in. to 7¾in.; the outer feathers, 2½in. to 3in.).

It is a native of Mauritius. Although very similar to the preceding species, and chiefly distinguishable by its colour, yet it has been positively asserted by Dr. Finsch and others to be a special variety, and as such I must, of course, treat of it. It was scientifically named by Boddaert, in 1783, and later on described and drawn by Brisson and Buffon.

The brothers Newton, who are travelled observers, have made a few remarks concerning its life in freedom. According to them, it resembles its congeners, of which mention has previously

been made. It appears but very rarely in the market, and is then, perhaps, frequently confused with others. A Noble Parrakeet of this species which was in my possession became extremely tame and affectionate, and learnt to speak well.'

CHAP. LXXXIII.—THE GREAT ALEXANDRINE PARRAKEET.

Psittacus eupatrius, L.

Alexander Parrakeet (Ger., *Rothschulteriger Edelsittich mit rosenrothem Halsband, Grosser Alexandersittich, blos Alexandersittich, rothschulteriger Edelsittich, Hochedelsittich*; Fr., *Grande Perruche Alexandre, Grande Perruche d'Alexandre*; Dut., *Groote Alexander-Parkiet*) — *Description* — *Habitat* — *Character in Captivity.*

ALTHOUGH not so common in the market as the preceding species, and though very rarely imported until lately, this parrakeet is nevertheless universally known, and appears to be essentially a larger copy of the other. It was first described and delineated by Edwards (1747-1764), and scientifically named by Linné.

The adult male is grass-green, the hinder part of the neck and the upper part of the breast having a faint greyish-green shade; on the back of the neck there is a broad rose-coloured band, this unites at both sides of the neck with a black band, which begins at the base of the under mandible and covers the upper part of the throat; the back is pure green; the smallest covert feathers under the wing form a large brownish cherry-coloured spot; the tail feathers are bluish on the basal half, dark olive greenish-yellow on the reverse side; beak dark purplish-red; eyes yellowish-white; feet flesh-colour; claws blackish. The female has no red on the neck, and no black band on the upper part of the throat; yet it has the red spot under the wing; the beak is red. As to the plumage of the young bird (that is, in the state in which they come into the market), the upper part of the body is more a greyish olive-green; the under part yellowish-green; there is no trace of the band on the neck and throat, nor of the spot on the shoulder; the eyes are yellowish-white. It is fully the size of a pigeon (length, 15¾in.

to 17¾in.; wings, 7in. to 8¾in.; longest feather of the tail, 8in. to 12¼in.; outer feathers of the tail, 2⅞in. to 3½in.).

It is found throughout East India and in Ceylon, and is said to be especially numerous on the Indian Peninsula.

In Ceylon the young are frequently taken from the nest, brought up by hand, and trained. This species is esteemed there, as among us, as affording one of the most accomplished speakers and, in all respects, cleverest parrots. Several admirers and connoisseurs have lately described its habits in captivity, especially Mr. E. Lieb, of Palmyra, in South Russia, and Dr. Steinhausen, of Strasburg. The former speaks of this parrakeet as exceedingly clever and intelligent, but remarks that its cry is unbearable, even the shrill voice of the Amazon Parrots being trifling in comparison. Dr. Steinhausen adds, however, that it is terrible to the ears of its keeper only when it feels wearied, dull, and uncomfortable, or wishes for something which is temptingly held out to it, or if it is annoyed at the appearance of a stranger. "At other times it is extremely affectionate, takes its food from one's mouth, gives kisses, and chatters almost the whole day—talking, although without great variety, but with exceeding clearness and with a pleasing voice; the feeling tone which it gives, for example, to the word 'Girawa'—its name—being specially noticeable. The similarity of its voice to that of a human being, its capability of expressing tenderness, and of varying the tone, is astonishing, and the infinite longing expressed in it is often most touching. We must also mention in its praise that it always keeps its plumage clean and smooth. If a walnut (a fruit of which it is very fond) be given to it, it makes a peculiar use of the empty shell. It will not then drink in any but the following fashion: It holds the shell with its beak, and fills it carefully with water, and then returning to its feeding place, sips this." Several attempts have been made to breed this species, but, up to the present, without success. It commends itself as a general favourite by reason of its beauty, tameness, and gentleness; and, if treated properly, it will become so in a much greater degree than is now the case.

I have to caution the amateur not to disregard the remarks on training made on page 34, nor to buy without consideration such an arch-screamer as is described above. Otherwise, he must not reckon on being rewarded for the trouble he may take with the bird.

CHAP. LXXXIV.—THE JAVAN ALEXANDRINE PARRAKEET.

Psittacus Alexandri, L.

Javan Parrakeet, Jew Parrakeet (Ger., *Rothschnäbeliger Edelsittich mit rother Brust, Rosenbrüstiger Alexandersittich von Java, blos Alexandersittich von Java, javanischer, Edelsittich, blos Alexandersittich (!), Rosenbrustsittich;* Fr., *Perruche Alexandre de Java, Perruche à poitrine rose;* Dut., *Java Alexander Parkiet*)—*Description—Rarely Imported Alive—Interesting as a Cage Bird.*

THREE species of these parrots very closely resemble each other, and therefore have received the common name of Rose-breasted Alexandrine Parrakeets. Until lately they were, in Europe, regarded as of little importance to the amateur. They were reported to have little intelligence, and not to be good-tempered; but later keepers and connoisseurs have given a very favourable account of them.

The Javan Alexandrine Parrakeet has a black band on the forehead, and black lores; the top and sides of the head are greyish-green; a broad black stripe appears on the chin and cheeks, and extends across the middle of the throat; the nape and hinder part of the neck are grass-green; the flights grey on the inner web, and ashen grey on the whole of the reverse side; there is a large oblong spot of olive-yellow on the wing; the tail is green, with a pale yellow tip; the two central feathers blue, all on the reverse side a dull yellow; all the rest of the upper part of the body is of an olive yellowish-green; from the throat to the centre of the belly dull rose-colour; the rest of the under part of the body yellowish-green; the beak red; the cere white; the eyes light yellow; eye cere yellowish-grey; the feet brownish-grey; claws blackish. Size, somewhat less than that of the Ring-necked Alexandrine Parrakeet (length, 12⅝in. to 13⅜in.; wings, 5¼in. to 5¾in.; longest feather in the tail, 4⅝in. to 5⅛in.; outermost feathers of the tail, 2in. to 2⅜in.). It is a native of Java, Borneo, and probably also of Sumatra and Malacca.

This bird was one of those of which specimens were collected during Osbeck's journey in 1757, and was first described by Odhel in 1760, and named by Linné. It must therefore be

accounted as the true Linné's Parrakeet, and most certainly is not the parrakeet which has been known in Europe from the time of Alexander and Cæsar; for this, as I remarked on page 209, was the bird now called the Ring-necked Alexandrine Parrakeet.

As this parrakeet, like all those previously described, is kept as a cage bird in its native country, and said to be a highly prized favourite, it is astonishing that it should be so rarely imported alive. Bechstein described it as "the most charming, teachable and talkative of parrots, and unusually tame, gentle and affectionate in its ways." Some years ago, I had a Javan Alexandrine Parrakeet, but derived little pleasure from it, for it neither became tame nor proved itself teachable. Schlechtendal experienced the same thing; yet a second parrakeet of this species which he had proved very talented, learning to say things without any special teaching, and being exceedingly tame. The Baroness S. von Schlechta, of Vienna, seems to be the greatest admirer of the Javan Alexandrine Parrakeet. She has had five specimens, and speaks of them all as being exceedingly affectionate. Of one hen she says: "Not a note is disagreeable, or even harsh; every one is clear and bright. It does not display towards me the least trace of viciousness or ill-temper, but allows itself to be caressed and fed from the mouth. It laid at short intervals as many as forty-two eggs, which were all, however, soft-shelled, and either eaten or destroyed by the bird itself. The other Javan Parrakeets also show great affection for me, and are charmingly droll and intelligent. One of these birds says, with a clear voice, 'Papagei!' then 'Anna, Papagei!' 'gei, gei!' and 'ei, ei!' and then laughs loudly and clearly, so that I am obliged to join in its merriment. The male bird sings a clear short song, and nods its head right and left. Their tricks are very comical; they make low bows, &c."

We thus find in this species, when treated properly and affectionately, a charming and interesting cage bird; its talent for speech is, however, small in comparison with that developed by the species previously described.

CHAP. LXXXV.—THE ROSE-BREASTED ALEXANDRINE PARRAKEET.

Psittacus Lathami, Fnsch.

Cochin China Parrakeet (Ger., *Roth-und schwarzschnäbeliger Edelsittich mit rother Brust, Latham's rosenbrüstiger Edelsittich blos Latham's Edelsittich, Kochinchinasittich, Bartsittich, Schnurrbartsittich, Rosenringsittich (I)*; Fr., *Perruche à bavette rose, Perruche de Pondicherry, Perruche à moustâches*; Dut., *Latham's Alexander Parkiet, Zwartkeel Edelparkiet*)—*Distinctive Marks—Habitat—Rarely Imported—Hardiness.*

This species strongly resembles the preceding, and can only be distinguished from it by the following marks: The band on the forehead is broader; the lores and the large spot on the chin black; the whole of the upper part of the head and the cheeks light bluish-grey, the latter edged toward the back with a dull rose-colour; the nape of the neck a brilliant grass-green; a large olive-greenish yellow spot on the shoulder; the wing coverts yellowish-green; all the rest of the upper part of the body olive-yellowish green; the throat and breast, as far as the beginning of the belly, pale rose-colour; the rest of the under part of the body bluish yellow-green; the upper mandible red; the under mandible black; the eyes bright yellow; the feet blackish-grey; the claws black. It is scarcely perceptibly larger in size than the preceding (length, 13½in. to 14½in.; wings, 6½in. to 6⅝in.; the longest feathers in the tail, 6½in. to 6¾in.; the outer feathers of the tail, 5½in. to 5¼in.).

It is found throughout the whole of India as far as Penang, and is also said to be met with in Cochin China. In the lower provinces of Bengal, flocks of these birds occasion great damage to the crops, especially in the rice fields. The young birds which are taken from the nest and brought up by hand are, like the Javan Alexandrine Parrakeet, greatly prized in their native country as cage birds. They, however, come but seldom to us. Several attempts made at breeding have proved unsuccessful. This species is found very hardy in zoological gardens, and it may be inferred that others would be equally so.

CHAP. LXXXVI.—THE BLACK-BILLED ALEXANDRINE PARRAKEET.

Psittacus melanorrhynchus, Wgl.

The Black-billed Alexandrine Parrakeet (Ger., *Schwarzschnäbeliger Edelsittich mit rother Brust, Schwarzschnabelsittich;* Fr., *Perruche Alexandre à bec noir;* Dut., *Zwartbek Edelparkiet, Smous-of Baardparkiet*)—*Distinctive Marks.*

By Blyth and Jerdon this species was considered to be the female, or young, of the one just described; but after it had been described by Wagler, in 1832, from a living specimen in the possession of the King of Bavaria, it was determined by Finsch to be a distinct variety. Fraser also considered it to be a separate species (1850), and described it as such. It bears a strong resemblance to the two foregoing, and can be distinguished only by the following marks: The narrow band on the forehead and the lorum stripe, as well as the broad stripe on the chin under the lower mandible, deep sooty-black; forehead greenish-blue; crown of the head violet-blue; stripe above and below the eye, extending each side as far as the nostril, yellowish-green; the part behind the eye marked with violet undulatory lines; the cheeks and the part round the ear blue; a flesh-coloured stripe extends from the front of the throat round the cheeks as far as the middle of the back of the head; the nape light yellowish-green; spot on the shoulder small, oblong, dark olive-greenish yellow; the reverse side of the tail a dull olive-greenish yellow; the whole of the upper parts of the body green, the same colour as the two preceding species; the beak a shining brownish-black; the cere bluish-grey; eyes pearl-white; iris grey, with large black pupils; feet bluish-grey; claws bluish horn-grey. Size exactly the same as the Rose-breasted Alexandrine Parrakeet.

We have no knowledge as to the country it inhabits nor of its mode of life. Black-billed Alexandrine Parrakeets are frequently seen in the market and at bird shows.

CHAP. LXXXVII.—LUZIAN'S PARRAKEET.

Psittacus Luziani, Vrrx.

Luzian's Parrakeet (Ger., *Prinz Luzian's Edelsittich, Bartsittich, Luziansittich;* Fr., *Perruche de Luzian;* Dut., *Luzian's Edelparkiet*)—*Description—Habitat—Rarity.*

A GREEN Parrakeet with a blackish-green band on the forehead; the crown and back of the head a reddish-grey-green; the lores, and the spot on the chin, black; the sides of the head vermilion; the nape and back of the neck rose-coloured yellow; the back pale green; the quills darker green, a blackish-green on the reverse side; the reverse side of the tail feathers greyish-yellow; the throat grey; the neck, and upper part of the breast, yellowish-green; all the rest of the under parts of the body green; the upper mandible vermilion, the lower black; the eyes yellowish-white; the feet black. In the female, or young bird, the plumage varies; the sides of the head are dark red; the crown of the head green; the beak black; otherwise similar. The male bird may be distinguished from the Javan Parrakeet by the absence of the yellow spot on the shoulder, and the red breast; besides having a stouter beak and being much larger.

According to Sclater, it is a native of China. It was described by Verreaux, in 1850, from a living specimen in the Zoological Garden at Amsterdam; a second appeared in Van Aken's menagerie; and a third in the London Zoological Gardens in 1857. Since then this parrakeet has been seen now and then in the market, and the wholesale dealer, Henry Möller, of Hamburg, had a beautiful male bird in full plumage, which was quite tame and spoke several phrases distinctly. Two specimens were sent to the Zoological Garden at Hamburg, in 1880, and the bird-dealer, Mr. Dieckmann, of Hamburg, offered a couple for £6 in 1882. Hence we may expect that these beautiful birds will sooner or later prove welcome additions to the European bird markets.

CHAP. LXXXVIII.—THE CONURES, OR WEDGE-TAILED PARRAKEETS.

Conurus, Khl.

Distinguishing Marks—Habitat—Domestic Character.

THIS group, which embraces the greatest number of species, may be distinguished by the following marks: A powerful beak, much bent, as deep as it is long, with a shallow groove on the lightly furrowed obtuse ridge, a distinct indentation, broad but slightly curved socket-edge, the lower mandible truncated at the anterior end, and with slightly curved cutting edges; the tongue is thick, fleshy, and smooth; eye cere naked; the lores feathered; the nostrils small, round, set in the narrow cere, which is rarely covered with feathers; pointed wings, longer than the tail; the quills rounded off to a point at the end; the tail is long, ending in the shape of a wedge, each feather decreasing in width symmetrically towards the end, and terminating in a rounded point; the feet are powerful, with strong nails; the plumage is usually hard, and the form compressed. It is about the size of a thrush or jackdaw. In all Conures the plumage of both sexes is alike.

They have their home in South America, especially Brazil, *i.e.*, they extend from Chili as far as South Mexico. Some are found exclusively in the West Indies, and only one species is a native of North America. The hot, damp lowlands along the Amazon River, which are densely covered with primeval forest, are their principal habitation. They live gregariously in more or less numerous flocks, consisting, even in the breeding season, of several species. The nest is built, as in the case of other parrots, in a hole in a tree, and one species builds in the holes of rocks. They are said to lay two or three eggs, but most species probably lay more. Being tree birds, the Conures fly very well and climb rapidly, though rather unskilfully, and on the ground walk awkwardly. Many, or probably all, species migrate from time to time, or wander as birds of passage. We may, without hesitation, assume their food to consist chiefly of seeds, and, in a lesser degree, of fruits and other vegetable substances. They cause immense damage to the crops, inasmuch as, like all parrots, they destroy far more than they consume. For this reason, and also because their flesh is savoury, they are hotly

pursued. The Indians take numbers of the young birds from the nests, in order to rear them for sale in the seaports. The old birds are caught in snares, or with bird-lime, and of late in flocks with large nets.

Nearly all the Conures are easily tamed and prove exceedingly hardy in captivity. They are, therefore, seen more frequently, both as regards species and numbers, than most other parrots. Some may be reckoned among the commonest birds in the market, but many kinds, on the other hand, are rare and valuable. At first they seem, especially if old birds, to be shy, stupid, untameable, and far from agreeable, and their piercing cry, which it is impossible to silence, renders them altogether insupportable. But in a short time all, even the wildest old birds, become uncommonly tame and affectionate, and prove capable of high training and of being taught to speak; they cannot, however, in any case, be esteemed clever as speakers, and they never discontinue their harsh cry, even when they are fully tamed. They are chiefly valued as ornamental birds, as they have all more or less brilliant plumage, and attract amateurs by the charm of their comical ways, with their nodding, bowing, erecting their feathers, and the dilatation or contraction of the pupil of the eye, &c., although one must patiently put up with the shrill continuous cry. Only a few species have as yet been successfully bred. The Conures, in point of food, need only seeds—hemp, canary seed, oats—with a little fruit, and biscuit or egg-bread. They should also have a constant supply of fresh branches for gnawing. On account of their small size they are seldom kept on stands, but more usually in cages, which, by reason of their inveterate habit of gnawing, must, with the exception of the perch, be wholly of metal. In aviaries they are, as a rule, very ill tempered and vicious towards other little birds.

Of course I shall speak here of those Conures only which have been proved to possess capacity for speech.

CHAP. LXXXIX.—THE CAROLINA CONURE.

Psittacus carolinensis, L.

Carolina Parrakeet (Ger., *Nordamerikanischer Keilschwanzsittich, Keilschwanzsittich von Karolina, Karolinensittich;* Fr., *Perruche de la Caroline, Perruche à tête jaune;* Dut., *Zon Parkiet of Carolina Parkiet*)—*Description—Habitat—As a Cage Bird.*

THIS, the only species indigenous to North America, is one of the commonest in the market, and, at the same time, one of the most beautiful and brilliant. It might, therefore, rejoice in universal admiration if it had not attributes which render it altogether unbearable. It was described by Catesby, 1731; scientifically named by Linné, 1766; spoken of by Buffon as a cage bird; and delineated by Buffon and others.

The Carolina Parrakeet, as it is mostly called, is of orange-vermilion on the forehead and front of the head, as far as the eyes, and on the cheeks down to the base of the beak; the crown, back, and sides of the head, the region of the ear, and the upper part of the throat, a pure sulphur-yellow; the quills dark green, bluish on the outer web, and black on the inner; the covert feathers of the primaries bluish-green; the small coverts on the bend of the wing and the spurious wing lemon-yellow, a few edged with orange-red; the tail dark grass-green, the tip bluish-green, the outer web on the reverse side blackish, the inner web greyish-yellow; all the rest of the upper parts of the body dark grass-green; the hinder part of the back somewhat lighter; all the under part of the body a light yellowish-green; the hinder part orange-yellow; the beak horn-grey white; eyes brownish-grey; feet greyish flesh-colour; claws black. In the old male bird the orange-yellow colouring on the bend of the wing is very broad; in the female it is sometimes totally absent. In size it is equal to the jackdaw, but slimmer, with a much longer tail (length, 12¾in.; wings, 6⅝in. to 7⅜in.; longest feather in the tail, 5⅜in. to 6¼in.; outer tail feathers, 3in. to 3¼in.).

Its home is in the south of North America, and is said to extend from the north-east of Maryland and north-west of Missouri, as far as Upper Arkansas, South-west Texas, and south of Florida. Although this parrakeet has been observed by the most eminent of American explorers—Wilson, Audubon, Prince Wied, Coues, and others—yet there are many gaps in our know-

ledge of its habits in freedom. Bechstein says that in his time it had been frequently imported into Europe; that it was fed on hemp seed; and that, though it screamed much and spoke little, on account of its beauty and tameness it had many admirers. It occupies a similar position at the present day; for many novices, dazzled by its brilliant plumage, buy it, and then discover that it is far from suitable as a cage bird. It is true Dr. E. Rey, of Halle, describes it as one which, if treated properly, may develop great intelligence. One couple, indeed, showed so much cleverness that the ornithologist was of opinion that, in this respect, the Carolina Parrakeet took precedence of all the Long-tailed Parrots (either those which he had kept himself or otherwise observed), and, moreover, that it even surpassed many of the highly gifted Short-tailed species. Yet this same fancier admits that it never becomes so affectionate as the other parrots; but, on the contrary, always displays distrust and caution.

The experience and observation of years has convinced me that a Carolina Parrakeet, caught when old, is never susceptible of taming and training, but always remains stupidly shy, obstinate, and untamable; though a very young bird, which happens to fall into the hands of a judicious trainer who treats it properly, becomes as completely tame and familiar as any of its congeners. As regards capacity for speech, certainly it can only attain to second or third rank, and, even if it becomes unusually tame and affectionate, it will at the best be wearisome by reason of its intolerable screaming. It is extremely hardy and long-lived. First, Dr. Rey, and afterwards Baron H. von Berlepsch (the latter in several instances), accustomed it to fly in and out of the house, and left it for the winter in a boarded apartment, the walls of which were also of wood, and which was, of course, a very cold place. It is generally kept in zoological gardens in swing cages, which are left in the open air, usually quite unprotected. The various attempts made at breeding have in but few cases produced any satisfactory result. In the Zoological Gardens the only effect was the laying of eggs; but in my aviary the young have become fledged, and Dr. Nowotny has met with similar success.

The Carolina Conure appears among us in large numbers and is common in the trade.

CHAP. XC.—THE BLUE-CROWNED CONURE.

Psittacus hæmorrhous, Spx.

Blue-fronted Parrakeet (Ger., *Blaustirniger Keilschwanzsittich, blaustirniger Sittich, Blaustirnsittich;* Fr., *Perruche bouton bleu, Perriche à front bleu;* Dut., *Blauwvoorhoofd Parkiet*)—*Description*—*Domestic Character.*

Among the parrakeets treated in this book, the Blue-crowned Conure is of surpassing interest; for, after careful observation, it has been described by two eminent fanciers as capable of speech and as otherwise very gifted.

It is of bluish-green, inclining to sky-blue on the forehead and front of the head; the wings dark green; the first quill sky blue on the outer web, the other quills green; all an olive greenish-yellow on the inner web and on the reverse side; the tail green; the two central feathers all one colour, but the others coppery-red on the inner web; all the feathers of the tail on the reverse side pale yellow; all the rest of the upper parts of the body grass-green; the under parts a pale lighter green; the beak dull flesh-colour, inclining to brownish-red (according to Bolau it may be horn colour, with darker tips and under mandible); cere flesh-colour; eyes orange-yellow, inclining to yellowish-brown; the featherless circle round them whitish flesh-colour; feet flesh-colour; claws horn-brown. Size, the same as the Carolina Conure (length, 14⅜in.; wings, 6⅞in. to 8½in.; longest tail feathers, 6½in. to 7¼in.; outermost tail feathers, 3½in. to 3¾in.).

It is a native of Brazil, from Bahia to the boundaries of Bolivia, and is one of those species which have only been known in later times. The travellers Spix, Natterer, and Burmeister give no information as to its life in freedom.

Although it is rarely imported alive, and is scarcely to be found even in the most important zoological collections, yet Mr. Schmalz, Ministerial secretary, of Vienna, at one time succeeded in obtaining five specimens, of which he tells us: "Even in a few days they became accustomed to my presence, although they were at first very shy, and I was then enabled to convince myself that they were parrots of a high degree of intelligence. One had a festering wound from a bite, which I was obliged to clean and wash out daily with a sponge. The bird at

first fluttered as if mad; but by the fourth day it was completely tamed, and soon I did not need to take it in my hand at all; for, when it saw me coming with the sponge, it voluntarily held its head bent forward. When it was quite well it began to fly about the room madly, by which it in no small degree disquieted the other birds; but when I called 'Ara!' it stopped at once, and when I showed it the sponge it immediately flew to the place where I had always washed its head, and let me take it quietly in my hand. Now it is thoroughly tame, and allows itself to be laid on its back, &c. Formerly a dreadful screamer, and especially noisy in the morning, it has now been trained, by a few cross words and light taps on the beak, to abstain entirely from its cries. It is, moreover, charmingly affectionate, and has learnt without any particular teaching to say 'Ara! Good Ara!' and 'Cockatoo!' just as plainly as any Grey Parrot. A female (for such it proved later on by laying eggs) of this species became just as tame, and learnt to say exactly the same words, but pronounced them more softly."

Mrs. von Proschek, who also received a specimen of these parrakeets, informs us that it not only became uncommonly tame, but also chattered much and continuously, and imitated the barking of dogs. Mr. Napoleon M. Kheil, of Prague, bought from M. Petzold, a bird dealer of that town, two specimens which proved equally gifted, droll, and affectionate, lively and comical, as any other parrot. Certainly, at times they uttered such harsh resounding cries as to be unbearable—the more brightly the sun shone the more they screamed; but they also learnt to repeat some words. The Vienna bread, which was given dry, was always carried by them to the water vessel and dipped, in order that they might eat it wet. They expressed their pleasure by uttering murmuring sounds.

This species first appeared in the Zoological Gardens in London in the year 1864, when several specimens were shown. Since then it has been seen in other gardens and at exhibitions.

CHAP. XCI.—THE YELLOW CONURE.

Psittacus solstitialis, L.

Solstitian Parrakeet (Ger., *Sonnensittich, Sonnenwendesittich, Orangegelber Keilschwanzsittich, Kessisittich;* Fr., *Perruche soleil, Perruche jaune;* Dut., *Oranjegeele Parkiet*)—*Rarity—Description—Habitat—Domestic Character.*

THIS is among the most beautiful of the talking parrakeets; but it is to be regretted that, though it extends over a large tract of country and is found in great numbers, it is extremely rare and seldom imported alive. It was named scientifically by Linné.

Its plumage throughout is lemon-yellow; the eye cere, the cheeks, and the part round the ear, reddish orange-yellow; the rump and upper coverts of the tail pure yellow; the primaries green at the base on the outer web, the tip half blue, the tip and the inner web black, with a yellow spot at the end, the secondaries blue, the inner web black, with a yellow spot at the end; all the wing feathers are blackish-grey on the reverse side; the coverts of the primaries deep blue, the inner web black with a yellow spot at the end; the tail feathers olive-green, about one third from the tip blue, the outermost blue on the whole of the outer web, the centre ones yellowish-green at the basal half; all on the reverse side a greenish-yellow grey; the breast and belly reddish orange-yellow; the beak dark brownish horn-grey; eyes orange-red; narrow featherless eye cere reddish flesh-colour; feet brownish horn-grey; claws black. Size, somewhat less than that of the Carolina Parrakeet (length, 12½in.; wings, 5¾in. to 6¼in.; longest feathers in the tail, 4¾in. to 6⅛in.; outermost tail feathers, 2⅝in. to 3in.).

It is a native of South America, from the Amazon River to the Orinoko. The travellers, Natterer and Burmeister, frequently shot it, yet they give no information as regards its life in freedom. This, however, is described by the brothers Schomburgk, who saw it in large flocks at the foot of Mount Mairari, on the borders of Venezuela and Brazil, and on the Mahu River. In the latter locality (where they are called Kessi-Kessi) they attracted attention by loud resounding cries. This bird, which is a special favourite with the natives,

may often be seen in flocks of from thirty to forty flying about a village, and they nest in the trees which stand in the open spaces around the huts.

The Yellow Conure was first placed in the London Zoological Gardens in 1862, and then but one specimen was procurable. It only appears occasionally in our bird shops and exhibitions. I once saw in Berlin, in the possession of a second-hand dealer, a bird of this species which had been for a length of time in the house of a private family. It was exceedingly tame and chattered some words most charmingly.

CHAP. XCII.—THE GOLDEN-CROWNED CONURE.

Psittacus aureus, Gml.

Half-moon Parrakeet (Ger., *Orangestirniger Keilschwanzsittich, Halbmondsittich, Goldstirnsittich, Goldstirne*; Fr., *Perruche bouton d'or, Perruche à front jaune, Perruche couronnée*; Dut., *Halve-maan Parkiet of Oranjevoorhoofd Parkiet*)—*Description*—*Habitat*—*Familiarly Known*—*Value as a Speaker.*

A SLENDER, pretty parrakeet, which appears to us a charming creature, though the peculiar dull character of the Conures makes it seem less engaging than it really is.

The Half-moon Parrakeet is marked in the following manner: Forehead, front of the head, and eye cere, orange-yellow, inclining to a deep orange-red; the lores and the middle of the head a dull blue; the back of the head and the part round the eye and ear green, fading to a bluish shade; all the rest of the upper part of the body grass-green, with a yellowish tinge; the hinder part of the back and the rump a clear yellowish-green; the wings green, the tips black, with a blue spot on the outer web, and a greyish-yellow edge on the inner web, the reverse side a shining yellowish-grey; the small under coverts of the wing greenish-yellow; the reverse side of the dark blackish-grey; the cheeks and throat a grey brownish-green, inclining to a brownish-yellow grey; the lower part of the throat and all the rest of the under parts of the body greenish-yellow, inclining to orange-yellow on the breast and the middle

GOLDEN-CROWNED CONURE.

(Psittacus aureus.)

of the belly; the beak brownish-black; cere blackish; eyes grey, orange-yellow, or reddish-brown; a narrow, greyish-brown, featherless circle round the eye; the feet blackish-brown; claws black. Size, that of a thrush (length, 11in.; wings, 5¼in. to 6in.; longest feathers in the tail, 4¼in. to 5⅛in.; outermost feathers of the tail, 2⅛in. to 2⅞in.).

In its native habitat (South America) it is found over a large tract of country, from Paraguay and Bolivia to Guiana and Surinam, and is exceedingly numerous. Travellers, in particular Prince Wied, and also Natterer, mention as its home the steppes and smaller woods in the neighbourhood of the coast, but not the primeval forest.

It was described by old Markgraf in 1648, then mentioned by Brisson in 1760, scientifically named by Gmelin in 1788, and is among the most anciently known of the parrots, as well as being one of the earliest to be imported alive. Buffon spoke in praise of the Golden-crowned Conure (which, however, he wrongly subdivided into two varieties), as being clever, engaging, and an excellent speaker.

In the present day this species is one of the commonest objects in the market, and is a favourite for the aviary and ornamental cages, although its shrill cry is wearisome; but in this respect it is by no means so disagreeable as its congeners. This parrakeet is also very hardy, unless, of course, it be sickly when bought. The majority of those imported are young birds, which are at first very delicate. The breeding of this variety has been attended, at least in one instance, with success, for Mr. C. Wenzel, a tradesman, of Danzig, has reared some young ones which have become fully fledged.

It is interesting as being one of the best speakers among the Conures, as will be seen from two descriptions from which I will quote. Mr. Schneider, master of the grammar school at Wittstock, states that he had a very tame Half-moon Parrakeet which could whistle, sneeze, and the like, and said some words, such as "Ara," "Papa," &c. The accounts given by Dr. Stölker, of St. Fiden, are extremely interesting. This ornithologist received a Half-moon Parrakeet in a miserable state, but it soon recovered, and began, when fed, to cry, "Please! please!" if it wished for fruit or the like. Then it learnt the words, "That is good, very good!" and, "Good day! how do you do?"—"Well, very well." If Dr. Stölker asked the question, the parrakeet answered as above. After-

wards it learnt to say, "Good night, doctor!" the names "Marie," "Julie," and "Leo," and "Well! Bäberli, where are you?" At the same time it would try to bite the forefinger, if held out to it, so that one had to take care when feeding it, and if scolded it cried out angrily, "Go away! Just wait, you rascal, I'll come to you!" Another time it would ask, "What are you doing?" and call out "Come down!" It could laugh and sneeze, and when it did the latter it courteously wished itself "Good health!" "It rejoiced greatly at my return after a lengthened absence, and in its delight chattered most comical gibberish. But with all its affection and drollness, it uttered sometimes a most intolerable scream, and was so obstinate that it could not be silenced with threats. It occasionally interrupted itself in a comical manner by exclaiming, 'Be quiet!' and in this way it now and then admonished me if I made a noise by whistling or otherwise. If I sang or whistled something to it, it stretched itself to the utmost, and stepped gravely and with erected plumage up and down the perch, as if dancing, uttering now and then a whistle or cry. It had not accomplished much in the way of singing; it tried the tunes 'Kommt a Vogerl' geflogen,' and 'e Briefle auf mei Fuss!' It would rest at night suspended from the wire. Its diet consisted of seeds only—millet, canary seed, oats, and sunflower seeds—with a little whey cheese, turnip, or fruit, and with this it seemed to thrive well. It never spoke in the presence of strangers. If my own cat came into the room it took no notice, but would greet a strange one with a cackling cry. I might here remark incidentally that another Half-moon Parrakeet, owned by a friend of mine, also learnt to speak very well."

A bird of this species in my own possession became tame without any trouble on my part, and when I went into the aviary would fly at once on to my shoulder or climb upon my outstretched finger. It may, I think, take precedence of all its congeners in teachableness and gentleness. It is usually sold in couples.

CHAP. XCIII.

THE YELLOW-CHEEKED CONURE.

Psittacus pertinax, L.

St. Thomas Conure (Ger., *Keilschwanzsittich mit gelbem Gesicht, Gelbwangiger Keilschwanzsittich, Gelbwangiger Sittich, St. Thomas-Sittich, gelbgrüner Grassittich, Goldmasken-Sittich;* Fr., *Perruche à joues jaunes, Perruche à joues oranges;* Dut., *Geelwang Parkiet*).

THE BROWN-THROATED CONURE.

Psittacus ænuginosus, L.

Brown-throated Conure (Ger., *Keilschwanzsittich mit ockerbräunlichem Gesicht, Keilschwanzsittich mit spangrünem Oberkopf, braungesichtiger Sittich, Braunwangensittich;* Fr., *Perruche à gorge brune, Perruche à joues brunes;* Dut., *Bruinwang Parkiet*).

THE CACTUS CONURE.

Psittacus cactorum, Pr. Wd.

Currassow Parrakeet, Maccawle Parrakeet (Ger., *Grünwangiger Keilschwanzsittich, Kaktussittich, Kaktus-Perikit;* Fr., *Perruche cactus, Perruche à joues verts, Perruche à ventre orange;* Dut., *Groenwang Parkiet*).

THE last three species of Conures which come under our notice as speakers may be classed together, for, from the amateur's point of view, they are of little importance as talking birds, and otherwise resemble each other in several respects. At first sight, notwithstanding their plain plumage, they appear very attractive and charming, or at the least, pretty, droll little birds; and for this reason they find many admirers. On closer acquaintance, however, they become quite unbearable, by reason of their shrill, piercing, and irrepressible cries, while their talent for speech, as before remarked, is but small. Nevertheless, being classed among speakers, they must find mention here. Among men of science these conures have excited much confusion and discussion, and no one, even in the present day, is quite clear respecting them. I shall, however, describe them here, as I have seen them before me in numbers for years, and I know them probably better than anyone else.

The *Yellow-cheeked Conure* is dark orange on the forehead as far as the eyes, the lores, the temples, the region around the ear, the sides of the head, and the base of the beak; the crown of the head is marine blue; the back of the head and the nape of the neck greenish-yellow, all the rest of the upper parts of the body grass-green; the tips of the wings greenish-blue, the inner webs edged with black, the reverse side blackish-grey; the feathers of the tail bluish at the end, olive greenish-yellow on the reverse side, all the rest of the upper part grass-green; the sides of the neck, the throat, and the upper part of the breast ochre-brownish olive-green; the breast and all the rest of the under parts of the body a yellowish grass-green; an orange spot in the middle of the belly; the beak brownish horn-grey, inclining to a slate-coloured black; the cere greyish, or sometimes pure white; the eyes brownish-yellow, inclining to dark-brown; the unfeathered skin round the eye white; the feet brownish horn-grey; claws black. The plumage of the young bird orange only on the lores and round the eye; the forehead and top of the head a dull marine blue; the sides of the head, the base of the beak, and the throat olive-brown; the belly orange. The intermediate plumage: A broad band of pale brownish yellow on the forehead; the forehead and crown of the head brownish-green; a broad orange-yellow circle round the eye; the eye region, the cheeks, throat, and upper part of the breast, pale yellowish-brown; the lower part of the belly orange-yellow. Size, that of a thrush (length, 9⅞in. to 10¼in.; wings, 4⅞in. to 5⅜in.; longest feather of the tail, 3¾in. to 4⅝in.; outermost tail feathers, 2⅛in. to 3in.). It is a native of South America, from Rio Negro to Darien, across Panama, the West Indian Islands, Trinidad, St. Croix, and St. Thomas.

The *Brown-throated Conure* is of a pale ochre-brown on the forehead; the crown of the head a dull marine blue; the lores, round about the eye, the cheeks, and sides of the head ochre brownish-grey, marked as with fine black scales; the wings a pale greenish-blue on the outer web, the inner web grey, the reverse side silver-grey; the small under coverts of the wing yellowish-green; the two central feathers of the tail blue on the tip, the basal half greenish, the others bluish-green, all olive greenish-yellow on the reverse side; the rest of the upper part of the body a pure dark green; the throat and upper part of the breast ochre brownish-grey, marked as with fine black scales; the under part of the breast and the belly a pure

greenish-yellow; the breast and sides of the belly yellow; the hinder part of the body a reddish orange-yellow, inclining to a bright orange-red; the beak blackish-grey; the cere white; the feet flesh-colour; the claws black. Size, same as the preceding. It inhabits the same districts as the Yellow-cheeked Conure.

The *Cactus Conure* is olive-brown on the forehead and front of the head, with a brownish-grey shade through it; the head grass-green; the wings dark green, the tips greenish-blue, the inner webs blackish, the reverse side all greyish-black; the small under coverts of the wing grass-green, with some yellowish feathers; the tail greenish-blue, and the tip a dull greyish orange-yellow on the reverse side; all the rest of the upper part of the body grass-green; the lores, the cheeks, and round the ear light green; the lower part of the cheeks, the throat, and upper part of the breast olive-greenish ochre-brown; the breast, sides, belly, and hinder part of the body deep orange-yellow; the thigh and under coverts of the tail light green; beak a pinkish grey-white; the skin on the nose white; the eyes yellowish-grey or orange-yellow; the broad bare circle round the eyes whitish-grey; the feet dark flesh-colour; claws black. Size, same as the two preceding. Home, the east of Brazil.

According to the accounts of the travellers, Schomburgk, Natterer, and Burmeister, which are unfortunately very brief, we only know of these parrakeets that they have the same habits as those I spoke of in the lengthier description of the Conures.

The two first-mentioned—the Yellow-cheeked Conure and the Brown-throated Conure—were described by Brisson, 1760, and named by Linné; the Cactus Conure, however, was first discovered and described by Prince Max von Wied in 1820. Bechstein depicts them both according to Buffon's description, and adds that they are usually kept in couples in brass wire cages, and fed with Vienna bread moistened in milk, and nuts, and that they are much admired on account of their beautiful colours, affection, and mutual tenderness—"but they hardly learn to speak at all, and make a constant disagreeable noise."

At present all three species appear frequently and numerously in the market, so that they are amongst the commonest birds in the trade; but the Cactus Conure is somewhat more rare than the others. The dealers and the amateurs do not, as a rule, make any distinction between these species, and only for breeders are they offered according to the different varieties; but as yet, un-

fortunately, in spite of many attempts, they have not been bred with any success. They are, however, extremely amusing, and become much more rapidly tame and gentle than their congeners above mentioned, and may be accustomed to fly about freely in the garden or courtyard, returning to perch on the hand when called. The Baroness von Schlechta praises the Brown-throated Conure as being "an affectionate and merry bird, which has often cheered me with its simple song, and cried out in a very amusing manner, clawing its beak with its foot, 'Pretty Poll! pretty Poll! there, there! there, there!' In other respects it was very clever, but often very wild." Another specimen was more gentle. When these parrakeets have become tame after the manner described, and have been taught to speak, they seldom, if ever, utter their disagreeable cry. For this purpose it is, of course, necessary to obtain birds as young as possible.

CHAP. XCIV.—THE BOLBORRHYNCHI OR THICK-BILLED PARRAKEETS.

Bolborrhynchus, Bp.

Distinguishing Marks—Food.

The Bolborrhynchi are a genus of parrots consisting of comparatively few species, of which only one is common in the market, while the others are but rarely imported alive. The first-mentioned variety must, however, be reckoned among the speaking parrots. The Thick-billed Parrakeets are distinguished from allied genera by the following marks: Beak powerful, thick, and short, bulging out at the sides, with a rounded ridge without the longitudinal furrow; the upper mandible has a short, broad, blunt point, with slight indentation; the lower mandible is deep, with broad socket-edge rounded off; the nostrils small, uncovered with puffy edges, only in exceptional cases covered by the feathers of the forehead; the lores feathered; the eye cere is hardly noticeable; the feet are short and strong; the wings long; the quills pointed; the tail feathers decreasing gradually towards the middle of the tail in shape of a wedge; the plumage soft. The colouring has little brilliancy. Its size (not including the long tail) varies from that of a starling to a thrush.

It is a native of South America, extending over the western, southern, and central parts, and one species occurs even in the north. All are found at considerable elevation, and some of them are said to be exclusively natives of the mountains.

Their food appears to consist chiefly of seeds, and but little or no fruit. Experiments in the breeding of one of the Thick-billed Parrakeets have shown that in freedom as well as in captivity this parrot, in contradistinction to all others, builds its nest in open spaces. In their native country several species of these parrakeets are highly esteemed as cage birds. In food—that is, their diet in captivity—the Bolborrhynchi have the same tastes as the Conures.

CHAP. XCV.—THE GREY-BREASTED OR QUAKER PARRAKEET.

Psittacus mónachus, Bdd.

Grey-breasted or Quaker Parrakeet (Ger., *Mönchssittich, Quäkersittich, Mäusesittich, Mönchspapagei, Quäker, junge Witwe, grauköpfiger Dickschnabelsittich*; Fr., *Perruche moine, Perruche souris*; Dut., *Monniks Dikbek parkiet of Muisparkiet*)—*Description—Habitat—Character as a Cage Bird—Breeding in Captivity.*

Like the Carolina Conure, the Quaker Parrakeet wins admirers at sight; though its plumage is not so variegated and striking as that of the before-mentioned Conure, being much plainer, in soft colourings, yet it is uncommonly pleasing; indeed, its whole appearance is so pretty that the discoverer, Azara, who observed it in its native country, gave it the name of "the young widow." But the amateur who may be misled by this into buying a couple of these thick-billed Parrakeets will soon regret the step, for their continuous screaming, which cannot by any means be silenced, is unbearable, and scarcely to be endured even by the strongest nerves.

The Grey-breasted Parrakeet is of a light grey on the forehead, front of the head, lores, cheeks, throat, front of the neck, and breast, each feather having a narrow pale-grey tip,

so that the grey on the forehead and breast appears marked as with delicate scales, the breast having a noticeably brown shade; all the rest of the upper part of the body is grass-green; the shoulders are shaded with an olive-greenish brown-grey; the primaries indigo-blue; the secondaries, the coverts, and the bend of the wing, blue; the whole of the wings greenish-blue on the reverse side, the inner webs edged with greenish-yellow; the lower part of the breast and the belly a light yellowish-grey; the lower part of the belly, the thigh, hinder part of the body, and the under coverts of the tail, yellowish-green; beak yellowish-grey; eyes brown; feet brownish-grey; claws blackish. The plumage of the young birds is of a less lively green and more uniform grey, the light tips to the feathers on the neck and breast not yet being apparent; the wings are not a pure blue, but rather greenish. Size, that of a thrush (length, 10$\frac{3}{4}$in.; wings, 4$\frac{3}{8}$in. to 6in.; longest feathers of the tail, 4$\frac{3}{8}$in. to 5$\frac{1}{4}$in.; outermost feathers of the tail, 2$\frac{1}{2}$in. to 3$\frac{3}{8}$in.).

Its home is in the western parts of South America, and it is said to be common in Paraguay, Uruguay, the Argentine Republic, and Bolivia. It is found in the mountains up to an elevation of between 300ft. and 400ft. The Grey-breasted Parrakeet was described and named by Gmelin, 1783. The American discoverers, especially Azara, Darwin, Rengger, Burmeister, Gibson, and others, have given us full details of its life in freedom. These parrakeets always live gregariously, even in the breeding season. Their flight is rapid and skilful, with quick strokes of the wing; they climb with uncommon cleverness, but, on the ground, run awkwardly, and, being tree birds, seldom alight. A flock of them always betrays itself, wherever they may be, by continual shrill, piercing cries. Their food consists of seeds, fruits, and, during summer and autumn, chiefly of thistle seeds. The forests, a traveller tells us, contain thousands of the nests of these parrakeets, which usually hang from the ends of the branches, into which they are woven. Each separate nest consists of an ante-chamber, and behind this the real nest, which is always occupied by one couple. The entrance is usually effected from below, but if it should be at the side, it is protected by a projecting roof. In this manner about a dozen pairs build their nests close together; every spring the couples build new nests upon the old ones, and thus there arises in time an enormous pile of these structures in

one mass, which may often weigh several hundredweights, and on many a sturdy old forest tree one may see seven or eight such settlements, in which the birds are constantly at work, mending the nests, &c.; and new ones are always added in spring for the fresh breeding season. Breeding begins in November, and the brood consists of seven or eight, but more generally of six. The nests are occupied by the birds, even after the breeding season, all through the year. Thorny twigs are used exclusively for building purposes, and Azara tells us that the part of the nest used for hatching is lined with grasses. The old clusters of nests often afford a refuge to strange guests, such as a species of duck, which finds them a convenient residence, and often even opossums turn them to account. Throughout the whole day piercing screams resound about the nests, and on this account, no less than the destruction to the crops of maize, fruit, &c., the parrakeets are greatly disliked, the more so as, like all species of parrots, they destroy much more than they consume. They are, therefore, unrelentingly pursued, and as, in spite of this, they are by no means shy, are shot in great numbers or caught in nets. They are considered most delicious game, so that regular parrot-shooting parties are frequently arranged. In many parts rewards are offered for their destruction, and occasionally, in La Plata, they are shot down in thousands. Such is their perseverance, however, that they are not easily beaten back, and they return again and again to the maize fields. But in certain localities, where they have noticeably diminished, they are cautious and shy, and there the Quaker Parrakeet, to the annoyance of the sportsman, acts as a sentinel to all other animals. They may be often seen, after the close of the breeding season, flying about in large flocks in search of food.

The old authors—Buffon, Bechstein, and others—speak of the Quaker Parrakeet as a cage bird. Bechstein says it appears of a melancholy temperament, becomes very tame, and learns to speak, although but little; he adds, its cry of allurement is a high, sharp-sounding screech. Azara informs us that it is highly esteemed in its native country as a cage bird, and is regarded with preference as a talker. The account given by Gibson is very interesting. He says that one may often hear a Quaker, among the numerous swarms, repeating words which it has learnt in captivity and remembered after its escape: "Often, in passing through the forests, I heard, to my astonish-

ment, a bird of this species hoarsely crying, 'Pretty Poll!'" This traveller is of opinion that the Grey-breasted Parrakeet never learns to speak distinctly. The assertion is, however, emphatically denied by their affectionate admirer, Dr. D. A. Willink, of Utrecht. He found a trained Grey-breasted Parrakeet in the shop of a Mrs. Bianchi, at Nice, which made itself remarkable chiefly by trying furiously to bite all strangers, and which, consequently, no one would buy. "As I visited the place frequently, the bird soon became accustomed to me, and began to speak. In French it could only say, 'To Arms!' and then it would imitate the tattoo on a drum; in Italian it could say, 'Rosetta, come here! give me a kiss!' Further, it coughed and laughed, and soon became so tame that it would come on my finger and kiss me. I bought it, and it is now unusually affectionate; however, it is still vicious and unfriendly to every stranger. It speaks as clearly as the best grey parrot, but, in spite of this, has not left off its dreadful screech, which, unfortunately, it utters only too often." Mr. Exner also writes of a Grey-breasted Parrakeet, which he allows to fly freely in the garden, and which has learnt to speak a great deal and to sing, and can also laugh and cry.

Anyone wishing to train a parrakeet of this species to speak will do well to see that he gets a young bird; and, for this reason, I have clearly described the plumage in that stage. The duller the colour and the more indistinct the grey undulatory lines on the neck and breast, the younger is the Quaker and the more amenable to teaching will it prove.

This species is usually offered for sale in couples, and then either bought by ignorant amateurs, and disposed of again as soon as possible, or else purchased with the intention of keeping for breeding. The latter, indeed, gives rise to much excitement and pleasure, and has already, in many instances, been attended with successful results. In all cases this parrakeet has built nests similar to those used in freedom. The Quaker Parrakeet is well suited to zoological gardens, for it is hardy and strong, and may be kept quite well through the winter in unheated rooms.

CHAP. XCVI.—THE SMALL-BILLED PARRAKEETS.

Brotogérys, Vgrs.

Distinguishing Marks—Description—Natural History—Character in Confinement.

Anyone who has kept these little parrots—which are about the size of a finch or a thrush—and knows them thoroughly, will probably wonder why the ornithologist, Vigors, gave them a Greek name signifying "gifted with human voice." Several species certainly have proved themselves capable of pronouncing words, but their talent in this respect is so very small that they can only be allowed the lowest position among the feathered speakers. On the other hand, they are mostly prettily coloured, attractive in their appearance, and amusing in their habits; they become exceedingly tame and familiar, though never really affectionate and gentle, and always remain uncommonly disagreeable screamers.

Finsch gives the following as their distinguishing marks: Beak, rather long, slender, much compressed at the sides, with a sharp ridge, long, thin, sharply bent downwards at the point, and with a deep indentation; the tongue thick, fleshy, blunt pointed; the nostrils, round and uncovered, set in broad unfeathered cere; the lores feathered; the eye cere bare; the wings long and pointed; the tail wedge-shaped, all feathers rounded at the point; the feet rather slender, with a short leg; the plumage soft and full. Both sexes are said to be alike in colour. They are natives of South America throughout its whole extent, and some varieties also of Central America.

We have but little knowledge of their mode of life in freedom. They live gregariously and are of amiable disposition. It is not known whether, like their before-mentioned congeners, they build their nests together in numerous couples, but it is very unlikely. Their movements are in a degree clumsy; they fly rapidly, but not skilfully, climb rather awkwardly, and trip clumsily on the ground. They are said to live on all kinds of seeds, fruits, berries, and other vegetable substances, and often to do great damage to the crops of maize, rice, fruit, &c. The nest stands, as is the case with other parrots, in a hollow of a tree, and the brood consists of from two to four.

Like some other parrots, also, they are much esteemed in their

native country as cage birds, yet they are hardly so frequently taken from the nest and reared by hand as are the larger species, but are more often caught when old. Owing to their amiability and trustful boldness, this is astonishingly simple. With a bird which can be used as a decoy it is easy to catch a whole flock by means of a horse-hair snare attached to a stick, or with a twig smeared with birdlime. They do not appear shy, even at the outset, like other birds, and though at first a little frightened, yet soon become bold, and even impudent, for they unite to attack the hand that feeds them, as if it were that of an enemy. Nodding their heads and with raised wings, uttering piercing cries, they appear very quarrelsome, and at the same time very comical, but at the least threat fly terrified into a corner. They nestle closely together in the most loving manner, whether they are a pair or two of the same sex. All their arrangements as to eating, drinking, flapping the wings, or sudden burst of chattering are carried on simultaneously. In Brazil they are kept with clipped wings, chained upon a stand, fitted up with a horizontal perch, and a sliding box for rest at night. We, on the contrary, keep them as a rule by couples in a cage; but they must be kept either by themselves or with large peaceable parrots, for they are extremely vicious towards smaller companions. For diet they chiefly need seeds, hemp, and oats, with a slight addition of sweet fruit and biscuit, or moistened egg-bread; but the majority of them entirely refuse to take the two last named. They are very healthy and hardy, and can be kept without trouble for many years, only that cold and damp must be carefully guarded against. It is true that one species, the largest, has already been kept through the winter in the open air, but I must warn the reader against this course in the case of any of the smaller varieties. Up to the present time eight species have been imported alive, but only one may be reckoned common in the market. Although, as before remarked, they are mostly kept in couples, yet only one single Small-billed Parrakeet has been bred in captivity. The rarer species fetch a rather high price. I shall, of course, only speak here of those which have already been proved to be speakers.

CHAP. XCVII.—THE TOVI PARRAKEET.

Psittacus tovi, Gml.

Tovi Parrakeet (Ger., *Tovi-Schmalschnabelsittich, Tovisittich, Schmalschnabelsittich mit gelben Unterflügeldecken, Goldkinnsittich (!), gewöhnlich blos Grassittich oder Grasperikit;* Fr., *Perruche Tovi;* Dut., *Tovi Parkiet*)—*Description—Habitat—Character in Captivity.*

Though commonly known, the Tovi Parrakeet is not often seen in the market. It is only imported occasionally, and usually in pairs. It was described and delineated by Brisson in 1760, but was often confused with other varieties by the older authors. They give us no particulars as to its life in captivity.

All the body is green; the head grass-green, with a tinge of malachite-green; the hinder part of the neck and the shoulders have a shade of olive-brown; the rest of the upper part of the body is dark green; the rump and upper coverts of the tail a faint bluish grass-green; the primaries have a blackish edge on the inner web; the secondaries are bluish; all the wing feathers are of a dull green on the reverse side, blackish on the outer web; the coverts of the primaries are dark blue; the central and smallest wing coverts, together with the coverts of the shoulder, a yellowish cinnamon-brown; the small and central under coverts lemon-yellow; the tail feathers dark malachite-green, a lighter yellowish-green on the reverse side; a deep orange-yellow spot on the throat, close under the lower mandible; all the under parts of the body light greenish-yellow; the thighs, belly, and lower coverts of the tail grass-green, with a malachite-green lustre; the beak whitish horn-grey; the upper mandible has a blackish point; eyes dark brown; feet greyish flesh-colour; dark horn-grey claws. About the size of a sparrow (length, 7⅜in.; wings, 4in. to 4⅛in.; tail, 2¼in. to 2⅝in.). The plumage and size of the young bird does not vary from the above.

It is a native of Central America and the northern districts of South America; it is said to be common in New Granada and Panama, but not to be found in Brazil. Dr. A. von Frantzius states that in Costa Rica he met with it only in the warmest parts, chiefly at the Gulf of Nicaya. He adds: "They always die very soon on the highlands, where they are brought for sale in numbers. They are easily tamed, and learn to speak a little."

Observation has taught us that in captivity they are by no means so delicate as described, but can stand our climate well; they all become tame, but it is not yet known if they are all gifted with a talent for speech to the extent which Professor Hallbauer claims. A couple which belonged to his brother, a surgeon in the navy, and had been brought from the West Indies, learnt to speak. After a delay of about a year, when they had acquired fresh plumage of a beautiful character, they began to imitate an Amazon which was near their cage, or rather one of the couple did so, probably the male bird. "Setting out by softly uttering 'Kickerick,' it by degrees pronounced the phrase completely as 'Kickericki.' Soon it learnt also the word 'papa;' both words sounded very odd as pronounced in its tiny voice. It is worth noticing that when the little speaker said the word 'Kickericki,' it hopped about on its perch and clapped its wings, which heightened the comical impression." Travellers have from time to time declared that the Tovi Parrakeet, in its native country, is far from rare as a talker. We may expect, therefore, that this capability will develop itself more frequently among us in future, if the fanciers will but take the trouble to teach these birds, especially the young ones.

Both Mrs. Veronika Greiner and Mr. Schmalz (ministerial secretary), amateur bird fanciers and residents of Vienna, have had the good fortune to obtain successful results in the breeding of the Tovi Parrakeet. These birds, however, are not often to be found in aviaries, for their ear-piercing cries render them obnoxious.

CHAP. XCVIII.—THE ALL-GREEN PARRAKEET.

Psittacus tirica, Gml.

All-green Parrakeet (Ger., *Blumenausittich, Tirikasittich, blos Tirika, blos Grassittich, blauflügeliger Schmalschnabelsittich*; Fr., *Perruche tirica*; Dut., *Tirica Parkiet*)—*Description—Habitat—Importation—Character in Confinement.*

The All-green Parrakeet was described by Brisson as early as 1760, and was named by Gmelin in 1788. No mention was made of it before this time. It is of a light grass-green on the forehead, all the rest of the upper part of the body dark

grass-green; the primaries are dark blue along the middle of shaft and broad grey-black on the inner web; in the secondaries the greyish-black decreases in extent, and the other wing feathers are uniformly green; all on the reverse side dull green; the coverts of the primaries dark blue; the edge of the wing yellowish-green, and the small under coverts greenish-yellow; the outermost tail feathers are yellowish-green on the inner web, and all are of blackish-green on the reverse side; the cheeks and all the under parts of the body are of a light grass-green; the beak reddish flesh-colour, the point almost white; the cere greyish-green; the wings almost pure green; the coverts of the wings brownish-green. The size is that of a thrush (length, 10½in.; wings, 4½in. to 4⅝in.; tail, 4in. to 4⅓in.).

Its home extends from the east of Brazil to Guiana. The travellers, Natterer, Prince von Wied, Schomburgk, Burmeister, Karl Euler, and, more recently, Karl Petermann, have written of its life in freedom. It is common in the forest districts along the coast of Brazil, but is also found throughout that country, and where the forest borders on the plantations one frequently sees enormously large flocks of various species of Conures, and among them the Small-billed Parrakeets. Each species keeps separate in the vast host; but the shrill cry of the All-green Parrakeet can be heard distinctly amid all the noise made by the multitude. On account of the harm they do to the maize and other crops, they are habitually shot. Many species are said to be delicious eating, yet, on the whole, they are not very highly esteemed as game. In recent times these birds have become an important article of commerce, and are, therefore, caught in many ways. Until a short time ago, and as is even now the case in some places, they were so unsuspecting that a whole flock could be taken at one time in the manner described on p. 230. Where they have become more cautious, they are caught in nets, &c., at the drinking places.

The first wholesale importation to Germany was by Mr. William Schlüter, who sent several hundred pairs to Mr. H. Schlüter, naturalist, of Halle, most of which were forthwith brought into the market chiefly through the agency of K. Gudera, bird dealer, at that time in Leipzig. Since then these Small-billed Parrakeets have reached Europe in greater or less numbers. Unfortunately, they are usually treated most improperly on the voyage, being fed with crushed maize, or bread

moistened with water, the former thrown in among the dirt and the latter not unfrequently sour. If, then, they survive the trying journey from the colony of Blumenau to Rio Janeiro, and afterwards the passage to Hamburg or London, they may surely be included among the hardiest species; and this is, indeed, true, for they have, in several instances, been kept in unheated rooms throughout the winter.

Although the All-green Parrakeet in its native country is highly esteemed and often taught to speak there, and though it is so hardy that it has lived in zoological gardens for ten years or more, yet it does not enjoy any great popularity here. This is due to the fact that it is a bad screamer at times and that it has not as yet proved itself a suitable subject for breeding. I am convinced, however, that it would be advantageous if attempts at breeding it were made—and they would undoubtedly succeed—the young birds tamed, and then taught to speak. As their training advanced they would certainly cease from their disagreeable cry, and thus this comparatively worthless species might become a very valuable one.

CHAP. XCIX.—THE CANARY-WINGED PARRAKEET.

Psittacus xanthópterus, Spx.

Orange-winged Parrakeet (Ger., *Schmalschnabelsittich mit hochgelber Flügelbinde, Gelbflügelsittich, Golbflügelsittich, Kanarienvogelsittich, Kanarienflügelsittich, gelbflügeliger Grassittich*; Fr., *Perruche xanthoptère*; Dut., *Oranjevleugel Parkiet*)—*Description—Habitat—Character in Captivity.*

Described and named by Spix in 1824, this species belongs to those known only in later times. It is grass-green all over the body; above darker, beneath somewhat lighter; quills bluish on the outer web, blackish-grey on the inner web; all on the reverse side bluish-green; the bend of the wing and the large upper coverts deep yellow (forming a broad yellow band across the wing); tail feathers olive greenish-yellow on the inner web, on the reverse side both webs are bluish-green; the beak a light brownish grey-white; eyes dark brown; feet brownish horn-grey; nearly as large as a thrush (length, 9¾in.; wings, 4⅝in. to 4¾in.; tail, 3¾in. to 4in.).

It is a native of, probably, the whole extent of Brazil, and is said to be particularly numerous in the region round the Amazon and in Bolivia; Bartlett found it also in Peru. Of its life in freedom we only know that for the most part it is like that of its kindred species. Burmeister saw small flights of them every day in the neighbourhood of New Freiburg.

In its native country this Small-billed Parrakeet is frequently kept as a pet, and in captivity displays the droll character which I described in speaking of the preceding species, but it is easily distinguishable from them by its marked gentleness. The following account is by an eminent connoisseur and affectionate admirer of foreign cage-birds—Dr. Luchs, a physician, of Warmbrunn: "My Canary-winged Parrakeet is an uncommonly tame, gentle, and affectionate bird. It grows daily more confident and familiar with me, though with strangers it is always shy. When I prepare to sit down to breakfast it begins to make a climbing journey from its open cage, up the window curtain beside it, across two birdcages, and down the curtain on the other side on to the adjacent sofa, thence up again by the table-cloth, and at last to the farther side of me, to feast on milk, moistened toast, sugar, and the like. If I do not at once take notice of it, it at first softly pecks my hand, but then more sharply, looking up at me from time to time to see if I will not give it the coveted food. As soon as it is satisfied it returns by the same route with all its difficulties. I could relate much of the droll caresses of my friendly parrakeet, but in doing so I should illustrate no intellectual gifts with which these parrots may in particular be endowed, but merely that which has already been observed in a higher degree in many other species. This variety, however, I have no hesitation in asserting, by no means belongs to the untalented and lower ranks. My little Canary-winged Parrakeet was able to say quite distinctly, 'There, there, Polly!' Its cry was by no means annoying or disagreeable, and was not often heard. Every time that I went into the room it greeted me with a call, also when I addressed it as 'Polly.' If it had settled to rest for the night and I went up and spoke to it, it would answer me, at first in a whisper, and then with a repeated cry." This species has not yet been bred with success.

Their price stands usually high, although they are by no means beautiful, and have a very plain plumage.

CHAP. 6.—THE YELLOW-AND-WHITE-WINGED PARRAKEET.

Psittacus virescens, Gml.

The Yellow- and White-winged Parrakeet (Ger., *Schmalschnabelsittich mit gelber und weisser Flügelbinde, weissflügeliger Schmalschnabelsittich, Weissschwingensittich, Weissflügel*; Fr., *Perruche Chiriri, Perruche à ailes blanches*; Dut., *Chiriri Parkiet*)—*Description*—*Habitat.*

ALL these Small-billed Parrakeets are extremely like each other, and the marks by which they may be distinguished are seldom very noticeable. Thus, the Yellow-and-white-winged Parrakeet can only be recognised beside the Canary-winged by observing that a white and a yellow band are visible at the same time in the outspread wings. The former was described by Brisson in 1760 and scientifically named by Gmelin in 1788, therefore it must be reckoned among the earlier known species. Buffon gives an account of its life in freedom, and even says that this little parrakeet learns to speak well.

The Yellow-and-white-winged Parrakeet is dark grass-green; the back has a shade of olive-green over it; the first five quills are green, bluish along the shaft, the inner web edged with black; the last four of the primaries and the secondaries are white as far as the three last, also on the shafts; the greater upper coverts of the wing sulphur-yellow, with white inner webs, the lesser quite white; the bend of the wing yellow; the tail green, the inner webs yellowish; all the under parts of the body a little lighter yellowish-green than the upper; the beak whitish horn-grey; the cere white; the eyes brown; the feet yellowish horn-grey. Size, nearly as large as the preceding (length, 8½in.; wings, 4½in. to 4¾in.; tail, 3¼in.).

Its home extends from Paraguay to the north of Brazil, and it is said to be common along the Amazon River. Wallace saw it in flights of several hundreds on the island of Mexicana at the mouth of the Amazon. The species, however, has only been imported alive since the year 1862, and it is still considered a rare object in our bird markets. The assertion made by Dr. Finsch, that it does not belong to the speaking parrots, has been in one case controverted, for Mr. Hinz, a merchant at Königsberg, describes a Yellow-and-white-winged Parrakeet which he had taught to say clearly, "Papa!" and "Polly!"

CHAP. CI.—THE FLAT-TAILED PARRAKEETS.

Platycercus, Vgrs.

Distinguishing Marks—Natural History—Character in Captivity—Treatment—Capacity for Speech.

THE Platycerci, or Flat-tailed Parrakeets, take a high position among the more splendidly plumaged parrots. It is only within the past fifteen years that they have been imported into Europe in considerable numbers and numerous species. From the first they met with a warm welcome, and they may be seen sometimes in bird houses among the small ornamental and song birds, and at others in couples, in cages, or in companies, in large aviaries. In addition to their beauty and attractiveness, many offer the advantage of being more or less easily bred; and at no distant date we may expect that all species will have proved themselves easy to breed. At the same time, the admiration which they excite is attended by many drawbacks—for example, the high price usually asked for them, and also their delicacy of constitution, which often manifests itself in the most puzzling manner.

Their special distinguishing marks are as follows: The beak is strong, short, nearly always deeper than it is long, rounded off, and with shallow indentation, with short, usually sharply bent-back point, and very broad socket edge; the nostrils oblong, situate in a narrow cere, which is set with little hairs in front; the lores and eye cere covered with feathers; the wings pointed and long; tail broad, sharply graduated, each feather broad and rounded at the point; the feet of medium strength; the tongue thick, fleshy, smooth, blunt at the point — in many cases there is a faint depression at the front edge; plumage soft, in rare cases somewhat hard, without powdery down. Size, varying from that of a thrush to a crow.

They are distinguished from the other long-tailed parrots and parrakeets chiefly by being livelier and more active (only a few of the larger are clumsy), by being able to run about on the ground more rapidly and skilfully, and by flying more gracefully, though they do not climb better. In contradistinction to the Noble Parrakeets, Conures, Thick-billed and Small-billed Parrakeets, they prefer to live on the ground, and seek their food chiefly from grass seeds, running quickly along the earth. Their home extends throughout Timor, Booru,

Ceram, the Eastern Moluccas, New Guinea, Australia, Tasmania, the New Hebrides, New Caledonia, New Zealand, the Norfolk and Auckland Islands, and some groups of the South Sea, the Fiji, Friendly, and Society Islands; one species is also found on the Macquarie Islands, the most southerly point which parrots inhabit. Their nest, like that of other parrots, is said to be found in hollows in trees, especially the holes in the branches of the eucalyptus, and contains four to eight, or even twelve eggs; moreover, they are said to hatch several broods annually and consecutively. After the nesting season they usually unite in large flocks, each species separately, seldom several varieties together, and fly about seeking food. Besides grass-seeds, they are said to eat many species of fruits, honey, and insects. Flying about only in the twilight, they sit quietly throughout the day, but are uncommonly lively early in the morning and in the evening.

Many of the Flat-tailed Parrakeets cause considerable damage to the corn and other crops; and for this reason, as well as on account of the delicious quality of their flesh, they are keenly pursued for sport; but of late they have been more generally captured at the wells, &c., with large nets, for exportation to Europe.

In captivity, we are met at the outset by the difficulty already referred to—namely, that directly after importation they are exceedingly delicate, and die from the slightest ailment. This arises chiefly from their being (as I mentioned when speaking of the large parrots, on p. 8) so improperly treated—first, by the wholesale buyers abroad, and then during their voyage to Europe. If they arrive sound and healthy, are acclimatised according to the directions given on pp. 17 *et seq.*, and are managed properly, they are amongst the hardiest of all cage-birds. Amateurs are emphatically warned against sudden changes in food or general treatment.

The newly-purchased Platycerci should, at first be given only the food which has been recommended by the dealer. It consists entirely of seeds. Canary or hemp are usually the seeds found in the travelling cages of the newly-imported birds; and if to one of these the other be immediately added it may cause death. Only after they have been kept for weeks, and after one is fully convinced of the healthiness of the birds, should suitable seeds be given, and then in small, gradually increasing quantities; and it is desirable in this way to accustom

them, like the Noble Parrakeets and the Conures, to a really varied seed diet. Green food, it is to be noted, may in particular be dangerous to the Platycerci; a very small piece is sufficient to make a freshly arrived bird very ill, and it may prove injurious or destructive to long acclimatised or even home-bred birds. Nevertheless, green food would appear to be a necessity, for they devour it with incredible eagerness. I have habituated my Flat-tailed Parrakeets to it, by giving very small, and then gradually increasing quantities, of tradescantia, mignonette, or chickweed, so that afterwards they could take it without stint. All other green food, especially salad, must be entirely avoided. Fresh branches of trees, particularly of the willow, are, however, very wholesome for them. For the rest, they may have—but, I must again repeat, in very gradually increasing quantities—biscuit or egg bread, fresh or dried ant-grubs; the last may be given in a mash of carrots, but only when they are about to breed; finally, some good fruit—good apples, sweet pears, cherries, or grapes, and service berries; but of these, with the exception of the last, only very little. I would recommend above all things, as most wholesome for the Platycerci, and, indeed, for parrots generally, fresh ears of corn or grass seeds in a milky state, or when quite ripe; the best are oats, millet, and canary seed. With such precautions the Platycerci prove extraordinarily hardy, for almost all—even the most delicate varieties—have thus been kept for a long time, and have even passed the winter in unheated rooms.

They do not appear to take high rank in intelligence—at least, they are far behind the Noble Parrakeets and Conures. However, they have not the shrill cry of these latter, though from their screeching they may become just as wearisome. Of late the talent for speech has in several varieties been proved, and for this reason they must find a place in this book. But even if every species of the Platycerci should prove to be gifted with speech, none of them would be found highly talented in that respect, for all, without exception, would only learn to chatter a few words. It is interesting, however, to find that this bird, of such splendid plumage and so easily bred, can be taught to speak; and for the breeder, as well, doubtless, as for the fancier, there will be a special charm in breeding all species of Flat-tailed Parrakeets, and training the young thus obtained to become talkers. Many species arrive in Europe without the

adult plumage, and therefore recognisable as young birds, and these are quite as well suited for teaching to speak as home-bred birds. Here, of course, I can only describe those varieties which up to this time have been proved to be speakers.

CHAP. CII.—THE ROSE HILL PARRAKEET.

Psittacus eximius, Shw.

Rosella. Rosella Parrot (Ger., *Bunter Plattschweifsittich, Buntsittich, Rosella, gemeiner Buntsittich, Omnikolor, grünbürzeliger Plattschweifsittich, wunderlicherweise Allfarbsittich oder blos Allfarb;* Fr., *Perruche omnicolore;* Dut., *Groenstuit of Rose Hill of Rosille Parkiet*)—*Capacity for Speech—Description—Habitat—History in Captivity—Selection.*

One of the most magnificently coloured of all parrots, the well-known Rose Hill Parrakeet, usually called the Rosella, had, till lately, been accounted anything but intelligent, and, in spite of the gorgeous splendour of its plumage, was no great favourite. It has, however, proved to be capable of speech, and on that account it will, without doubt, attain unexpected importance, at least in the eyes of the bird fancier. Discovered by Phillips and White in 1789–90, it was described and scientifically named by Shaw in 1812. Levaillant, in 1805, drew the portrait of a live Rosella which was in the possession of Madame Buonaparte.

It is scarlet on the forehead, all over the head, and in the region around and below the eye; on the nape of the neck there is a broad orange band; the shoulders and upper part of the back black, every feather having a yellowish-green edge; the rump and upper coverts of the tail are yellowish-green; the quills blackish-brown, dark blue on the outer webs, and the last of them having a broad light green edge on the outer web; the upper and under coverts and the edge of the wings purplish-blue; below the wing a large black spot; the two central feathers of the tail dark olive-green, the other tail feathers green at the basal half, the outermost feathers of the tail, on either side, greenish-blue, with white tips; the throat and breast scarlet; the spot under the chin, beginning at the lower mandible, from the lower part of the head to the

ROSE HILL PARRAKEET.

(*Psittacus eximius.*)

ear, is white; the under part of the breast deep yellow; the sides of the breast yellow, each feather having a blackish spot in the centre; the middle of the belly and the hinder part of the body bluish-green; the under coverts of the tail red; the beak a whitish yellow-grey; the upper mandible a rather darker horn-grey at the base; eyes dark brown; feet grey-brown; claws blackish. The female may be similarly described, but the yellow spot on the nape of the neck is smaller; the middle of the belly and the hinder part of the body yellowish, not bluish-green. (According to Bargheer, the male is more purely and brilliantly coloured; the light green spot round the eye is larger, and protracted sideways in the female; in the latter also the sulphur-yellow spot on the back of the neck is wanting, and its place is supplied by the greenish colouring of the back; the female also is said to be slimmer and her head more rounded; the male stout in the body and thick in the head.) The plumage of the young birds is paler and duller, each feather edged with greyish-green, not with yellow; on the back of the head there is a large grey spot, and on the nape a yellow one. Size, less than that of a crow (length, 13½in.; wings, 5¾in. to 6¾in.; longest feather in the tail, 6⅜in. to 6⅞in.; outermost feather of the tail, 3½in. to 3⅞in.).

It is a native of Tasmania, New South Wales, and South Australia. Its mode of life has been observed by Caley, Gould, Rietmann, &c. According to their observation, it is only found in circumscribed districts; along the Hunter River and in Tasmania it is very numerous. It prefers open, sandy, grass plains, with brushwood and large trees standing singly. In the last-named country different variegated parrakeets may be seen in company—the Pennant and the King's Parrakeet, besides the Rosella—but mostly in small flocks, running about on the roads, and, when frightened, flying up on the fences which mark the divisions of the land. They are so tame that one could almost knock them over with a stick. The food of the Rosella consists chiefly of seeds, but also of insects. Their voice is not shrill and piercing, but of a pleasant piping kind. The breeding season falls between October and January, and the brood sometimes consists of as many as eleven, but usually of five or six. The nest is built in the hollow of a tree, often far down inside the trunk, but easily accessible to this parrakeet, which is particularly clever in climbing. Since these parrakeets attack the ripening maize and other

crops, inflicting considerable damage, and because their flesh is reckoned delicious eating, they have long been keenly pursued as game, and have everywhere been driven out of the inhabited districts. But of late, like most parrots, they have become an important article of commerce, and, therefore, they are chiefly caught alive in large nets. This is done principally when they begin their migrations in flocks. They then suddenly appear in neighbourhoods in which they are not found at other times, and, according to the success met with in capturing them, they are exported to Europe.

We know comparatively little of the life of this very common variety in freedom; we have, however, full details as to its existence in captivity. All that I have written on page 238, by way of introduction, applies especially to the Rosella. I wish, however, to mention emphatically that this bird can bear our climate exceedingly well, and has already in many cases, notably with Mr. Otto Wigand, photographer in Zeitz, shown that it can, without danger, pass the winter in our country in the open air. Wigand, in 1871, was the first to breed this species.

The traveller, Gould, asserts that the Rosella, in spite of its brilliant plumage, is unable to excite a lasting interest; invariably after a short time it becomes wearisome, and I fear that even the ease with which it can be bred will hardly lend it any considerable value. Nevertheless, it has found enthusiastic admirers, and among them Mr. A. Bargheer, teacher of music at Basel. He thus describes them: "A couple of Rosellas in a cage may appear quiet and stupid, because they are too shy and terrified to move about much. Where, on the other hand, they have plenty of room to fly about, they are uncommonly lively, and so attractive and entertaining that one may watch their antics with pleasure. Their flight is easy and graceful, their movements on the ground quick and skilful, although, like all parrots, they look awkward owing to the inward turn of the foot and the manner of lifting one over the other. They also climb rapidly, but prefer to fly, and frequently undertake continuous exercise on the wing. One must use care, especially at first, in giving them green food; but I gave twigs of willows, alder, beech, and fruit trees, afterwards ears of all kinds of corn and grasses, and, finally, chickweed and salad (but the latter is always dangerous for the Platycerci). In the autumn they had service berries, and in winter dried juniper berries; all others they rejected. They liked the fresh seeds of the sunflower

greatly. The diet, of course, consisted chiefly of seeds—canary seed, millet, hemp, oats, and maize. The voice of the Rosella is a pleasant piping. The male utters a short but rather varied song, the female only a low soft call, and a loud, clear note of warning, both of which latter, however, are also peculiar to the male. The latter dances a love dance, holding himself upright, having the feathers of the neck and head erected, and the tail outspread like a fan, and raising his body with a quick backward motion, accompanied with clear, ardent notes. A full-grown Rosella cannot live peaceably with its equals or other birds." Mr. Bargheer has, from two couples, annually bred several broods, each of three to five nestlings. Strangely enough, the parrakeets always began to build their nest in our spring.

Though I may willingly agree that the Rose Hill Parrakeet, if treated with more attention and affection, will become a pleasant companion in a room, yet I should by no means be justified on that account in giving it a place in the present work; but at the house of Mr. Holtz, postal secretary, of Leipzig, I myself heard a Rosella which said, "Papa," "Mamma," "Ella," and mixed up other words with its own strange natural chatter. Moreover, we have accounts of several talking Rosellas, but I consider it unnecessary to repeat them here. Of course, this species reaches a much higher value if there is a hope of training the young home-bred birds at once to become good speakers. For the purpose of teaching it is certainly most advantageous to choose from the miserable-looking, tailless, half-fledged, dirty young birds of a grey colour, which have been newly imported.

CHAP. CIII.—THE RED SHINING PARRAKEET.

Psittacus splendens, Pl.

Shining Parrakeet or Parrot, Fidji Parrakeet (Ger., *Purpursittich, glänzende Purpursittich, Glanzsittich, Fidschisittich, rother Pompadoursittich, purpurrother Plattschweifsittich;* Fr., *Perruche pourpre de Fidji, Perruche pourpre brillante;* Dut., *Purper-roode Fidji-Parkiet*)—*Beauty and Rarity—Description—Habitat—Character in Captivity.*

As described on page 236, the Platycerci belong to the most richly coloured and variegated of all parrots, and the

Shining Parrakeets are further distinguished by the brilliancy of their plumage. On account of their rarity, as well as their beauty, they command extraordinarily high prices, and are only to be found in the possession of the wealthy or in the larger zoological gardens.

The Shining Parrakeet is crimson on the crown, back, and sides of the head, and on the sides of the neck; the back of the neck is marked with a broad blue band; the whole of the upper part of the body, the wing coverts, the rump and upper tail coverts dark grass-green; the primaries blue, the inner web edged with black; the secondaries blue at the base of the outer web, greenish-blue at the tip, the last green, all have a black edge on the inner web; quite black on the reverse side; the under wing coverts marine-blue; the tail feathers blue, with green edge at the base on the outer web, the two central ones green, with blue tip extending about one-third of their length; the whole of the under part of the body crimson; the beak bluish-black, the tip yellowish; eyes a light orange-red; feet blackish-brown; claws black. It is about the size of a crow (length, 16½in. to 17⅝in.; wings, 7¼in. to 9in.; central feathers of the tail, 7¼in. to 8¾in.; outermost tail feathers, 1⅝in. to 5¼in.).

It is a native of the Fiji Islands, but only of the little group of Viti, where it is found on some islands. It was discovered by Peale in 1848, and was observed and described by Layard and Gräffe. The Shining Parrakeets attract attention in the mangrove forests, not only by their brilliant colours, but, less agreeably, by their loud cries. They live chiefly in the forests. Their flight is heavy. They feed on berries and fruits, as well as seeds, and in some places do much damage to the crops of maize, &c. While engaged in plundering they keep strict silence, having become shy and cautious owing to the pursuit they are subject to. When danger threatens, one of them utters a warning cry, and the whole body fly rapidly to the wood, to hide in the thick tops of the trees. If molested there they hurry away with loud screams. But if the sportsman affects to pass by, they are easily deceived, and he may get within shot. Layard states that they have been kept in captivity in the Fiji Islands from time immemorial, for the purpose of supplying feathers as ornaments. When taken from the nest (the brood consists usually of three), they become exceedingly tame, and can without difficulty be taught

to fly about freely and to return regularly to the cage in the evening.

This parrakeet has been imported alive several times since 1864, but always only singly or in pairs. In the year named it appeared in the Zoological Gardens in London, and afterwards in those of Amsterdam, Berlin, Hamburg, &c. It has been shown now and then at exhibitions, and was to be seen in the collections of Messrs. Wiener, Rittner-Bos, Blaauw, Scheuba, &c. The travellers tell us that it is gifted with speaking talent. A magnificent Shining Parrakeet which Miss C. Hagenbeck exhibited in the Ornis Exhibition, at Berlin, in 1880, was not only uncommonly tame, but a thorough good speaker. Rittner-Bos describes this species as awkward and clumsy in the cage: "With the exception of its gorgeous plumage, I have failed to find any pleasant qualities in it, nevertheless I believe that all these large parrakeets would develop a completely different character if they were kept in a large aviary, where they had room to fly about." Mr. Scheuba had a Red Shining Parrakeet which was so tame that it came voluntarily to perch upon the hand.

CHAP. CIV.—THE MASKED PARRAKEET.

Psittacus larvatus, Res.; seu Psittacus personatus, Gr.

The Masked Parrakeet (Ger., *Maskensittich, schwarzmaskirter Plattschweifsittich*; Fr., *Perruche à masque noire, Perroquet masqué, Coracopse noir*; Dut., *Masker Parkiet*)—*Costliness and Rarity—Physical Characteristics—Habitat—In Captivity—Talent for Speech.*

The most stately of all the Platycerci, this is more rare, perhaps, than the Shining Parrakeet, and therefore the more costly.

It is black on the forehead, front of the head, round the eye, and the lower mandible, so that the face appears as if covered by a mask; the whole of the upper part of the body is dark grass-green; the primaries are blue, blackish on the inner web; the secondaries are green, the inner web edged with black; all the quills black on the reverse side; all the upper

wing-coverts, and the bend of the wing, blue; the largest under wing-coverts black; the tail edged with black on the inner web and wholly black on the reverse side; the throat, sides, thighs, and under tail-coverts green; the front of the throat and breast deep yellow; the front part of the belly darker yellow; the hinder part of the belly orange-yellow; the beak black; eyes orange-red; the feet and claws black. It is fully the size of a crow (length, 18½in. to 18¾in.; wings, 8⅝in. to 9¼in.; central feathers of the tail, 8⅝in. to 9⅛in.; outermost tail feathers, 4⅛in. to 5⅝in.).

The Fiji Islands are its home, and there, accordingly, are found the largest and most beautiful of the Platycerci—the Red Shining and the Masked Parrakeet. It is said to inhabit only some of the islands. Gräffe states that he saw the Masked Parrakeet in company with the Red Shining Parrakeet in the mangrove bushes, in the swamp along the shores of the rivers, where they agreeably enlivened a scene otherwise devoid of animal life.

In the year 1848, G. R. Gray described it from a live bird in a menagerie, but until Peale gave an account of it, the ornithologists (for instance, Schlegel) were much in error as to this variety. They took it to be the female or the young of one of the other Shining Parrakeets. We have no further details of its life in captivity. The zoological gardens show it even more rarely than the species before described, and only the very best private collections contain a specimen. Messrs. Wiener, of London, Scheuba, of Olmütz, and Baron Cornely in the Castle of Beaujardin, near Tours, lately announced that they have each a Masked Parrakeet. In the aviary of the last-named it keeps in excellent health at a temperature of 8deg. C. I have seen specimens of this Parrakeet on several occasions in the menagerie of the dealer, Mr. Karl Hagenbeck, and in the wholesale shop of Miss Hagenbeck. In the latter collection I heard it speak loudly and clearly; with this qualification, these birds appear more valuable than many others.

CHAP. CV.—THE UNDULATED GRASS PARRAKEET.

Psittacus undulatus, Shw.

Zebra Grass Parrakeet, Zebra Parrakeet, Singing Parrakeet, Shell or Scallop Parrot, Grass Parrakeet (Ger., *Wellenstreifiger Sittich, Wellenpapagei, Wellensittich, Kanariensittich, Muschelsittich, Undulatus, früher Pepitapapagei, fälschlich auch Andulatus, Angulatus oder gar Andalusier, Dr. Finsch benannte ihn Wellenstreifiger Singsittich*; Fr., *Perruche ondulée*; Dut., *Graasparkiet*)—*Distinguishing Marks of the Genus—Description of the Species—Habitat—Breeding—Capacity for Speech.*

THE Undulated Parrakeet (*Melopsittacus*, Gld.)—literally the Singing Parrakeet—may be easily distinguished from all other talking parrots, for the only one of this genus is much smaller than any other, being about the size of a sparrow. Their special distinguishing marks are as follows: Beak rounded, with thin, long point to the upper mandible, which is bent outwards and provided with two fine indentations; the nostrils are small and round, set in broad puffed-up cere; the lores and eye cere feathered; the wings long and pointed; the tail long, wedge-shaped, the two central feathers projecting far beyond the rest; the feet slender and weak; the tongue short, fleshy, blunt pointed; the plumage soft. As there is only one species, I shall give all other details in speaking of it.

The points of contact between men and animals in general, and between men and speaking birds in particular, upon which I touched in the Introduction to this book, offer abundant matter of surprise for the amateur, and, indeed, for every intelligent person. But scarcely any illustration of this kind could have made so great an impression on all who witnessed it as the speaking Undulated Grass Parrakeet in the Ornis Exhibition in Berlin, in 1880.

Stories of canary birds gifted with speech had long been made public, but were generally received with incredulity, though they came from an unquestionably trustworthy source. There, however, stood the Undulated Grass Parrakeet, certainly not more highly gifted by nature, bodily before the eyes of the unbelieving, and thousands of visitors to the exhibition could

convince themselves that they were not the victims of deception.

It is well known that the Undulated Grass Parrakeet has only appeared in our market in modern times. It was first described and scientifically named by Shaw in 1789-1813; in 1831 it was mentioned as a rarity in the museum of the Linnean Society, in London. Gould gave the first description of its life in freedom, and this renowned naturalist brought the first living pair of Grass Parrakeets to Europe in 1840. In this short space of time—the last four decades—this, the smallest of all parrots imported alive, has become so common among us that it is to be found everywhere, whether in palace or in cottage, and is as completely at home as our yellow friend, the canary. Many thousands are imported annually, besides which it is bred from time to time in great numbers.

It is a prettily coloured bird, of a yellowish-green on the upper part of the body, the plumage appearing in undulating lines, with blue spots on the cheeks, chin, and throat. It is about the size of a sparrow, but slimmer and prettier, with pointed wings and long graduated tail, and its comically dignified mien gives it a charming appearance, as it runs about in a lively manner, nodding its head and chattering so sweetly, as, on this account, to have received the name of "Singing Parrakeet."

It is marked as follows: The full-grown male—the forehead and crown of the head pure straw-colour; a narrow band of sulphur-yellow on the forehead; broad lores and marks on the lower part of the cheek of the same colour; in the centre of the cheek there are some rather long blue feathers, which form blue spots; a long broad beard of yellow, and mixed in it also blue spots, but these are of a darker shade; the back of the head (beginning about the middle) the sides of the head, the back part and nape of the neck, the shoulders, and the greatest part of the wing coverts are of a bright greenish-yellow, marked regularly with transverse undulations (each feather has four fine black transverse lines, those on the shoulders and wing coverts only two, but the latter are broader, and form half-circles); the hinder part of the back, the rump, and upper tail coverts, grass-green, the latter with more of a bluish-green shade; the primaries and their coverts a dull green, the outer webs having a narrow yellow edge, the inner webs blackish, and in the centre broad yellowish spots (which below are lighter,

narrow towards the front, becoming broad towards the back, and forming a transverse band right across the wing); the secondaries are green on the outer web, finely edged with yellow; yellow at the base and in the centre (so that the outspread wing shows on the upper side a yellowish-green, and, on the reverse side, a yellowish-white transverse band); all the quills are a dark ashen-grey on the reverse side; the last quill feathers and their coverts, as well as the longest of the capillars, are brownish-black, with yellow tips; the two central and longest tail feathers dark-blue; the rest are more of a greenish-blue, with a broad yellow central spot across both webs, and a broad black edge at the base of the inner webs (the tail has, on the outer and inner webs, two broad blackish-green bands running crosswise, and a similar acute-angled band of sulphur-yellow); all the under parts of the body, from the base of the beak, a yellowish grass-green; the beak greenish horn-grey; the cere dark-blue, more or less glazed; the eyes pearly white, sometimes pale yellow, with large black iris; broad bluish circle round the eye; the feet bluish horn-coloured, those bred at home white; claws blackish. The female is similarly marked, only the blue spots on the cheeks and beard are a little smaller; but the chief mark of distinction is that the cere is greenish, yellowish, or brownish-grey. The plumage of the young bird is similar to the above on the forehead, crown of the head, and sides of the breast, but marked with pale dark transverse lines, the whole colouring paler, the green and yellow duller; the beak, at the time of leaving the nest, black (growing, after the second week, gradually a lighter green-grey); the cere flesh-coloured or bluish-white. Length, 8¼in. to 10¼in.; width of outspread wings, 10¼in.; wings, 3½in. to 3⅝in.; central tail feathers, 3½in. to 3⅝in.; outermost tail feathers, 1¼in.

It is said to be a native of all parts of Australia, and not only is it found throughout an extensive range, but it is in some places very numerous. Its habits doubtless agree with those of the Platycerci, described on page 237. Gould especially draws attention to the regularity of these birds in all their movements. The flocks fly away at a certain time in the morning to seek for food, return home in the same way, and hurry off, morning and evening, to the drinking places. In the heat of the day they sit motionless in the thick tops of the trees. During the breeding season they live gregariously in the hollows of the gum-trees.

Many pairs settle near each other, and sometimes two or more brood in the same nest. They are said to lay three or four eggs. Whether, as is the case in captivity, they hatch several broods consecutively, is not known; but we may conclude, almost with certainty, that this is so. After the nesting season they collect in flocks of from twenty to a hundred head, and these again unite, apparently all at once, in enormous numbers, and, if the season be dry, undertake more or less distant migrations, and, driven by the drought from their customary habitations, appear suddenly in districts abounding more in water. Among them one often sees little flocks of Grass Parrakeets (*Euphema*, Wgl.)—for instance, the Turquoisine Grass Parrakeet—the Platycerci, and various others. In districts where they are not harassed they are exceedingly tame, and may be shot in great numbers. All their movements are graceful and rapid; their flight is exceedingly quick; they climb well, or rather, they slip about cleverly in the branches, and can walk well on the ground. Their food consists chiefly of grass seeds. They seek out the corn fields also, but do no great damage. On the other hand, however, they offer a valuable prey, for they are often caught by the flock in great nets, for the purpose of export to Europe. The chief places for the capture of Grass and other Parrakeets in this way are said to be the Alexandra and Wellington Lakes, both situated by the River Murray, where bird seekers resort annually for the capture of all sorts of beautiful parrots, but principally the Undulated Grass Parrakeet. Though no more than threepence or sixpence a head may be paid on the spot by the wholesale dealer, yet, owing to the multiplicity of the birds, considerable sums may be realised. The number of Undulated Parrakeets imported into Europe is estimated at from 2000 to 12,000.

The Undulated Grass Parrakeet bears an unusually high value as an aviary bird, chiefly for the ease with which it may be bred—an advantage found to so great a degree in no other bird except the canary. It is bred with equal zeal either for pleasure or profit, for the admiration for this bird is always increasing, and the young Undulated Parrakeets may sometimes be disposed of to great advantage. Of course, in the spring and early summer months, when many thousand couples arrive on the large Australian ships, the prices fall, but they do not remain low very long, and in winter good breeding birds are expensive.

In my small book, the "Undulated Grass Parrakeet" (Creutz, Magdeburg), full directions will be found for the purchase, management, breeding, and valuation of this species. It may be further remarked that the food is just the same as that directed on page 238 for the Platycerci. Single birds are best fed on canary seed, unshelled millet, and raw oats, with the addition of a little green food and ears of corn or grass.

Just as the canary needed a comparatively long space of time for its complete naturalisation among us; and again, as we are not really able to determine with exactness when the change from the greenish-grey plumage of the wild bird to the light yellow of the cultivated bird took place, or whether, indeed, several centuries were required to bring it about—in the same way the Grass Parrakeet shows itself to be peculiarly subject to the influences of development in breeding. Less than fifty years have sufficed for it to appear before us, not only in varieties of colouring, but also as a speaker. From the original variety we bred a yellowish-green, next a pure yellow was produced, and afterwards a white variety—the two latter had red eyes. Eventually a blue specimen was generated. Surely, no other bird has proved so readily subject to the influences of man in development by breeding.

The principal attraction of the Grass Parrakeet for the readers of this book is, of course, its talent for speech. It is not really astonishing that the Undulated Grass Parrakeet should display a faculty for talking, belonging, as it does, to the Parrot family, and hence to those birds which, as this work abundantly proves, take a much higher rank than others. But when we consider that, though by no means the smallest of the parrots, it is one of the most diminutive imported alive; and that, with its droll charming ways, its rapid movements, &c., it does not at all give the impression of a highly talented bird, then, indeed, its great aptitude for speech becomes somewhat surprising.

Miss Eugenie Maier of Stuttgart, was, in 1877, the first to give an account of a talker of this species. Her young Grass Parrakeet, which had not yet acquired its adult plumage, picked up some lovely notes from the song of a Japanese robin. "It was very tame, and at a call would fly to my shoulder or my hand. Then it learnt the trumpet notes of a pair of zebra finches, and forgot the call of the robin. I therefore seat the finches away, so that 'Misse'—as I named the parrakeet—had no intercourse with other birds, and soon it also forgot the

trumpeting. How great was my astonishment and delight when one day it greeted me with the words, 'Come, dear little Misse, come!' which it at first pronounced hesitatingly but soon loudly and distinctly. I had always saluted it thus in the morning, but without the intention of teaching it to speak. Not long afterwards it began to say also, 'Oh, you dear little Misse, you little darling, come, give me a kiss.' It is most charming to see it and to hear it, when it plays with my finger, kissing it, then singing, and trying to eat. It flies away, returns, and repeats these gambols countless times, during which it continually chatters the above words."

Mr. William Bauer, of Tübingen, describes another speaking Grass Parrakeet: "If anyone calls 'Hansele, come,' it at once flies to him, sits on his shoulder or on his finger, and begins to chatter. It says most clearly, 'Hansele, where are you? where are you?' and then replies to itself, 'Here I am;' then it asks further, 'Are you good?' and says very prettily, 'He is a dear little sweetie,' or 'Sweet Hansele! pretty boy!' If a tune is sung to it, it sings it also; it can also laugh and cough, and is especially fond of getting 'kisses.' It puts its beak to one's lips, and kisses with a loud noise. At the same time it watches the eyes constantly, to see if they wear a friendly expression. If it wishes to be kissed, it says, 'Come,' 'a kiss.' Of course, it is accustomed to be talked to a great deal, to be laughed at, and played with; if not, it plays alone with a ball of cotton or a piece of roll. If not let out of the cage very soon in the morning, it cries and complains in truly lamentable tones. It talks also at night when the gas is lighted, and, if tired, it sings and rocks itself, whistling more and more softly, to sleep. It appears to have ceased from its natural cry entirely." It may be added that this parrakeet was sent by Mr. Bauer to the bird show at Berlin, where it took a silver medal, and was afterwards sold for £7 10s.

Another interesting description is furnished by Mr. K. von Scheidt, of Coblentz. The Grass Parrakeet of which he writes was in the workroom of Mr. Schmitz, tailor, together with a canary bird, and it surprised the workers, who had taken much notice of it, by saying softly one day, "Go away, James! you blockhead, you rascal!" The men scarcely believed their ears—one asserted and another denied that the bird had spoken—but soon they heard it talking quite loudly and distinctly. Afterwards it learnt to smack with the tongue, to pipe long-drawn

notes, and to kiss; took food from the mouth of its master and his daughter, could distinguish between those around it, and would follow the young lady when she called. It never again uttered the natural cry of the Undulated Grass Parrakeet, but only made a by no means unpleasant twittering.

Dr. Lazarus tells us of an Undulated Grass Parrakeet—"Mignon"—which was uncommonly tame. It would come at a call when flying free through the room, and perch on the hand; and it learnt to pronounce its own name distinctly in a soft tone. This bird was exceedingly affectionate.

The last account of a talking Grass Parrakeet which has come to hand is from Mr. A. Brandt, of Frauenburg: "A young male parrakeet, taken from the nest almost before it was fledged, became remarkably tame in a few days; and, as the owner had spare time to occupy himself with it, it soon learnt to say some words, and in the course of a year and a half it could say about fifty words, and even whole sentences distinctly. The bird is so teachable that it daily learns something fresh." As the above-named gentleman invites all fanciers to see and hear his Undulated Parrakeet, we can have no reason to doubt the extraordinary talent of this little speaker. Certainly, it has not yet been excelled by any other of its species.

After the instances given above, we can foresee for the Undulated Grass Parrakeet a much wider appreciation and greatly augmented value; for, of all the speaking parrots, it is among the least troublesome, and it is the most charming, and, at the same time, the most easily obtained.

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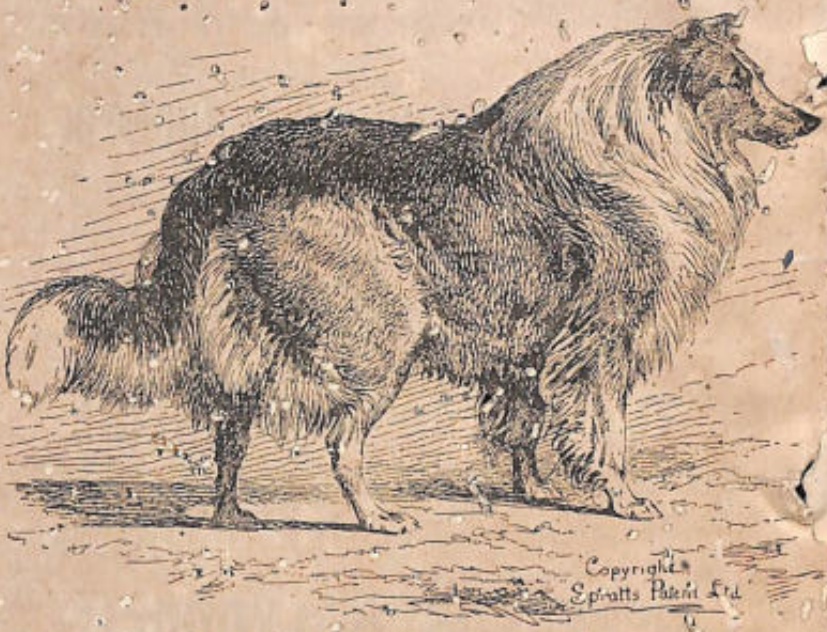

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