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THE
AVICULTURAL
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THE

Avicultural Magazine.

BEING THE JOURNAL OF
THE AVICULTURAL SOCIETY
FOR THE STUDY OF
FOREIGN AND BRITISH BIRDS.

EDITED BY
C. S. SIMPSON AND H. R. FILLMER,

UNDER THE DIRECTION OF THE EXECUTIVE COMMITTEE
OF THE COUNCIL.

VOL. I.

NOVEMBER, 1894, TO OCTOBER, 1895.

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ERRATA.

- Page 47, lines 30 & 37, *For* Caiaque *read* Caique.
Page 52, line 32, *For* White-crested *read* White-breasted.
Page 52, line 48, *For* Nonpariel *read* Nonpareil.
Page 56, lines 6, 7, & 10, *For* Eiectus *read* Eiectus.
Page 92, note, line 4, *For* amadava *read* amandava.
Page 94, line 51, *For* F.R.L.S. *read* F.R.S.L.
Page 96, line 43, *For* Tengmalms *read* Tengmalm's.
Page 100, line 2, *For* Pœouphali *read* Pœocephali.



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AVICULTURAL SOCIETY.

No. 1.

NOVEMBER, 1894.

THE AVICULTURAL SOCIETY
FOR THE STUDY OF
FOREIGN AND BRITISH BIRDS.

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MR. J. B. HOUSDEN.

IN placing the first number of the Magazine before the members of the Avicultural Society, we wish to take the opportunity of explaining a little more fully the objects for which the Society has been founded.

There is a large and increasing number of people scattered all over the country, who are greatly interested in birds and bird-keeping, but who, by reason of their living so far apart, can never meet to compare notes or form themselves into ordinary Societies, which exist for and by the holding of meetings. We now offer them a Society which holds no meetings, and which is kept together by the penny post.

One of our chief objects will be to endeavour to bridge over the gulf which exists between the lover of live birds and the scientific ornithologist—we believe that each has much to learn from the other. We want to infuse a little science into the bird-keeper, and to interest the cabinet ornithologist in the habits of birds.

A word as to our name. It seems desirable and even necessary, to invent or acclimatize a word which shall denote “a person interested in the keeping and breeding of birds,” and *Aviculturist* (being analogous to Horticulturist) will do perhaps as well as another. If any one will suggest a better, we shall be glad to adopt it—till then, we beg to subscribe ourselves AVICULTURISTS.

We rely for the success of the Society upon the energy of the members in inducing others to join, and in contributing to the Magazine. Those who are not prepared to write a formal article have generally met with some little facts or fancies in their avicultural experience, which will be of interest to others, and if they will note these down and send them to the Secretary, they will place the rest of the Society under an obligation. We want the benefit of the practical experience of all—we neither expect nor want literary skill.

In order that the Society may be of real assistance to beginners, we have arranged to give advice to members upon all matters relating to aviculture *by Post*. The vexatious delay which arises when correspondents are only answered in the columns of a magazine or newspaper will thus be avoided. All letters and questions must be sent to the Secretary, and contain a stamped envelope for reply. The Secretary will forward the letters to those Members of the Committee who are best qualified to deal with the subjects to which they relate, and who are willing to undertake the task of replying to questions. For the present, questions relating to Parrots will generally be replied to by Mr. Camps or Dr. Simpson; Insectivorous Foreign Birds will be undertaken by Mr. Phillipps or Dr. Simpson; Foreign Finches, by Dr. Butler or Mr. Fillmer; and British Birds by Mr. Frostick or Mr. Swaysland. Those questions and answers which appear to be of general interest, will be published in the Magazine.

Dr. Simpson regrets that he cannot undertake *post mortem* examinations of birds, and it is particularly requested that bodies of birds be *not* sent either to him or to any of the other officers of the Society. We should be glad to hear from any member willing to undertake *post mortems*.

It has been suggested that a sale and exchange column should be opened, and we are prepared to admit advertisements of birds at the rate of 3d. for each insertion, of not more than two lines. Longer advertisements will be charged in proportion. Advertisements of “wants” will be inserted free of charge. It is hoped that this arrangement will prove of mutual advantage to our members, who will thus know with whom they are dealing. We do not pretend to be exclusive, but we believe that under our rules (which have been very carefully thought out, and will be vigilantly administered), it will not be possible for any but honourable and straightforward men and women to become members of the Avicultural Society.

Signed on behalf of the Committee,

C. S. SIMPSON, *Secretary*.

H. R. FILLMER, *Treasurer*.

THE SHOW QUESTION.

In the correspondence columns, one of our members proposes that the Avicultural Society should hold a Show for Foreign and British birds in the Spring. It is perhaps rather early in the day to raise this question, but one or two points suggest themselves—*firstly*, since the larger proportion of our members never exhibit, and some are opposed to the holding of Shows, it would be obviously unfair to utilize the general funds of the Society for this purpose—*secondly*, it would be necessary to select a place where there are one or more members, who would undertake the management of the Show. The Secretary and Treasurer frankly admit that they do not feel disposed to manage an exhibition at Brighton.

Should any Members be willing to guarantee the funds, and to be responsible for the management of a Show, the Secretary will be very pleased to submit their scheme to the Committee—but the holding of Shows was not one of the objects for which the Society was founded, and the Committee would not be disposed to move in the matter, unless it appeared to be the almost unanimous wish of the members.

BALDNESS IN BIRDS.

Dr. Butler, in his very interesting article on "Aviculture in Aviaries," attributes the baldness to which some of the ornamental finches (especially the Avadavats and Cordon Bleus) are liable, in all cases to plucking by other birds. In a collection of waxbills, which Dr. Simpson kept for some years in a large cage in a sitting-room, some of the specimens, especially Cordon Bleus and Avadavats, invariably became bald at the commencement of Winter, but recovered their plumage in the Spring. It was found that by placing the birds in a warm place and keeping them at a high temperature, the feathers rapidly grew, but specimens which were isolated in a cold room did not improve. Here, it seems clear that cold was the cause. It is, however, quite possible that some of the birds constantly plucked the others, that in warm weather the feathers were rapidly reproduced, but that in cold weather the birds were unable to reproduce the feathers. The question is one of much interest to Aviculturists, and the Secretary would be glad to publish the experiences of other members.

OUR PROGRAMME.

The Secretary hopes that every member will assist him in making the Magazine a success by sending notes or short articles on Aviculture from time to time. It is intended to publish an account of the various bird-rooms and aviaries belonging to the members, under the title of "Our Bird Rooms and Aviaries." Mr. Phillipps has earned the thanks of the Society by his most valuable contribution to this series. Will each member follow his example? Another series on "Rare Foreign Birds," to which Mr. Fillmer this month contributes "The Parrot Finch," and "The Black-tailed Hawfinch," it is believed will be of great interest, if all will help by sending notes on the rare species they have kept. Will those who live in the country communicate their observations on wild bird life? And will our more scientific friends enlighten us on those points of ornithology which bear upon practical Aviculture. Lastly, will those who do not feel able to do anything else ask questions?

NOTE BY THE TREASURER.

I shall be much obliged if those members who have not yet paid their subscriptions, will kindly remit them to me in the course of the next few weeks.

I have promised that the necessary funds shall be forthcoming for the printing and circulating of our Magazine for one year, and that the Society shall start upon its second year free from debt; after October, 1895,

the Society must be self-supporting if it is to continue to exist. I calculate that if we can secure a membership of from 140 to 150, the success of the Society is assured, and there will be no deficit for me to make up at the end of the year. It will be seen that we start with 52 members; we want therefore 100 new ones, and I appeal to all to do their utmost to increase our numbers. If we have a large membership we shall be able to have a large Magazine, and shall be in a position to extend our cause in various other ways. But if our list of members remains small, we cannot afford to print more than eight pages per month, and shall be prevented from extending the usefulness of the Society by other means.

I shall not be satisfied until we number 200.

Members who wish for extra copies of this first number for distribution amongst their friends, can have them on application, at one penny per copy. This charge is merely made to cover postage.

HORATIO R. FILLMER,

Hon. Treasurer.

ON AVICULTURE IN AVIARIES.

By ARTHUR G. BUTLER, Ph.D., F.L.S., etc.

The study of birds in aviaries (I am not speaking of flight cages, but such as are large enough for the owners to walk about in) is in many respects, far more satisfactory than when they are confined even in large cages. Of this fact I can speak from experience; because, when I commenced to keep birds, my space was limited; so that my largest "aviary" was then actually little more than a long flight cage, only two feet six in height and one foot four inches from front to back: in length, this cage was not so bad—about ten feet; but nevertheless, for breeding purposes, it was of little practical use, on account of its narrowness, which brought the birds too close to the observer.

When my present house was built, I had seven aviaries constructed, all of them under cover: of these, four are kept at a moderately warm temperature during the winter; the other three are unheated. I have now added two open garden aviaries, with a door of communication from one to the other, and each of them measuring eleven feet six inches in length, four feet six inches from front to back, and from about seven to eight feet in height (the roof sloping forwards). At first, my unheated aviaries were permanently open on one side to the air, throughout the year; but the through draught caused, when the door into my garden was opened, proved very prejudicial to the health of some of the birds, more especially to British species, such as Linnets, Goldfinches and Siskins; therefore, I eventually had sashes made (which could at any time be removed) so as to exclude draught.

To attain much success in breeding, each aviary should be plentifully supplied with various forms of receptacles for nests, and when possible these should be more or less concealed by thick bushes: dead furze-bushes perhaps make the best cover; but if these are not procurable, branches of fir answer the purpose fairly well. Pea sticks nailed against the walls make convenient elastic perches, and when used in quantity, help a little to conceal the roughness of nest-boxes.

In the case of the well-known receptacle described by Herr Wiener, as of the cigar-box pattern, it is always best to give the builders a start by ramming two or three handfuls of hay into the bottom before hanging it up: the actual nest is then much more easily and rapidly completed, than when the architects have first to form their own foundation; while the appearance of nesting-material in the box gives the birds a hint as to what is expected of them.

From a study of the works of Dr. Russ, I am convinced that when many birds of different species are kept in the same aviary, it is necessary

to supply a considerable amount of cover in order to ensure the production of many broods. My own experience has shown me that where it is impossible to do this, the different architects are constantly at warfare; consequently, though many and varying nests are built throughout the year, few, if any, broods come to perfection. This, I believe, is the reason why my Ornamental-finch aviary, which only has one short wall available for nesting-purposes, so rarely proves productive; whereas, the adjoining Weaver aviary, having a twelve-foot length of additional wall, gives fairly satisfactory results.

The amateur who has only observed Ornamental-finches in store or flight-cages would be apt to imagine that they were, as a class, the most amiable and peaceable of birds; there they sit in rows close together, preening each others feathers and lovingly caressing one another: but in the aviary all this is changed, and especially when more than a pair of each species is turned loose. Now disputes are frequent, more particularly when nesting is commenced, and in the case of some of the species, not infrequently with fatal effect.

An Ornamental-finch aviary should not only be restricted to small *Fringilloid* birds, but it should exclude Aurora, Diamond, Parson, and Ribbon-finches, more particularly the two last-mentioned, which are both meddlesome and murderous towards smaller or weaker birds. Then, again (but here I am preaching that which, at present, I do not practice), a Weaver-aviary ought not to include Bayas or soft-billed birds, some of which are very destructive both to eggs and newly-hatched youngsters. During the present year my two Bayas and a Yellow-bellied Leiothrix (Pekin Nightingale) have, I know, greatly reduced the numbers of my additions: but when I kept Blue-birds with Ornamental-finches, every egg was stolen, almost as soon as it made its appearance in a nest.

Next year I hope to try an interesting experiment with my garden aviaries: it is my intention, as soon as the warm weather commences, to turn out pairs of two species into each aviary, with ample nesting accommodation and plenty of cover. I believe that, under these favourable conditions, far better results may be anticipated, than when thirty or forty examples of different species are associated together.

If supplied with plenty of suitable food, I think that many birds which are usually considered unable to stand cold, become perfectly hardy under this apparently adverse state of things. As an instance, I may mention that, in about August or September of 1893, I turned loose a Redstart into one of my unheated aviaries. Now, in the article on British birds in Cassell's "Cage-birds," Mr. Swaysland mentions one that was kept from April to December, but which always felt the cold when the thermometer fell to 40°, and in November the cold weather sent it into a decline, of which it died. This bird, however, was fed partly on raw meat, and meal-worms appear to have constituted its insect-food. Fortunately for my birds I have a goodly number of Cockroaches in my bird-room and stoke-hole: every night three "demon beetle-traps" are put down; and, each morning, summer and winter, these are transferred to my aviaries, where they are soon cleared out by the birds.

Last winter, on a diet of bread, potato, grocer's currants, egg, ants' eggs, Abrahams' food and cockroaches (with an occasional spider) my Redstart, a Blackcap, a Whinchat, a Yellow and a Grey Wagtail, together with several foreign seed-eating birds, were quite indifferent to twelve degrees of frost. All these birds, excepting the Blackcap, which was killed by a Blossom-headed Parrakeet, are in perfect condition at the present time; and, so far as I can see, likely to live through the coming winter equally well.

Perhaps I may be prejudiced, if so, my prejudice is based upon very unpleasant experience; but I believe that raw meat is extremely unsuitable food for any but predacious birds. I have kept Thrushes and Blackbirds in perfect health for years without a particle of raw meat, and it is absolutely certain that a Missel-Thrush brought up and always fed upon farinaceous

food, was killed at the Crystal Palace through having scraped raw meat and bread supplied to it: previous to that time it had never had a day's illness, but was a marvel of vivacity, tameness and cleanliness.

In the breeding-season two cock Wagtails, of different species, invariably fight in an aviary; and unless separated, the stronger (not always the larger) will infallibly starve the weaker to death, by incessantly driving him from the food-dishes. I even lost a favourite hen Grey Wagtail two or three years ago, owing to the persecutions of a male Pied Wagtail. This summer again, I was obliged to remove my Yellow Wagtail to a cage to prevent his destroying a very beautiful cock Grey Wagtail. At the Zoological Gardens the Grey and Pied Wagtails have been successfully crossed: probably the hen bird was the Pied; if not, the male bird must have been an especially amiable individual.

My experience of British birds as aviary pets, leads me to the following conclusions:—All finches must either be kept in a large open garden aviary, as nearly as possible under the same conditions to which they would be subject when at large; or, they must be kept during the winter at a high temperature, indoors. They are far more susceptible to changes of temperature when in captivity than the majority of foreign finches. It is rare for Goldfinches, Bullfinches, Linnets, and especially Siskins, to live in a limited, unheated, though enclosed, aviary for more than eighteen months. Indeed I have found some of the small Indian, Australian, and even African and South American Ornamental-finches, decidedly more hardy under these conditions.

On the other hand, many Insectivorous British birds appear to be indifferent to temperature, provided that they can be supplied with a fair quantity of insect-food throughout the year.

Budgerigars seem to be subject to the same influences as British finches; they will stand cold well, but not in a covered-in aviary: yet in a flight-cage open only in front, and kept at a moderate temperature, they live for years. Blossom-headed Parrakeets, on the other hand, have so far done well in the same aviary which killed the majority of my Budgerigars: indeed, whereas twelve out of thirteen young birds of the latter species died within two or three months after leaving the nest, a young male Blossom-head, born this year in the same log-nest, is larger and apparently more vigorous than its parents.

The preceding observations must, nevertheless, be understood generally; not as applying to every individual of a species: thus, for several years I repeatedly tried to keep the Cordon Bleu in my Ornamental-finch aviary; but always lost every individual, either within a few weeks or at best in two or three months. At length, I purchased two pairs, in 1892, and turned one pair into the same aviary, the other into a flight-cage; the hen of the first pair lived about three months, that in the cage a little over a year; but both cock-birds are in perfect health as I write, having passed through two winters, at a temperature never lower than 46 degrees Fahr., but rarely exceeding 50 degrees.

It has been frequently stated that, in flight-cages, the Amaduvade Waxbills, as well as Cordon Bleus, are liable to baldness. This is, without question, due to the fact that the birds pull out one another's feathers; a trick to which the Green Amaduvade is much addicted. In a large aviary, on the contrary, all these birds are usually in magnificent feather; though in the case of *Stictospiza formosa*, a spiteful unpaired hen will sometimes make herself objectionable by pulling out her companions' feathers; or specimens which have long been naturalized in the aviary will simultaneously surround and pluck a new-comer, more especially when the latter is somewhat rough in plumage. For this reason, as well as from the inexplicable fact that, after several years of uninterrupted health, these lovely little birds will suddenly and unaccountably be found dead (though subsequent dissection shows all their organs apparently healthy) the Green Abudavats, or Amaduvades, are somewhat aggravating aviary pets. Mr. Abrahams considers them delicate; but I think this is not the real cause of their death: a bird which can stand twelve degrees of frost and be none

the worse, can hardly be strictly called delicate. My own opinion is, that these birds usually die of apoplexy, or heart disease, suddenly; that a scare, caused by the hasty entry of any person into the bird-room, or the abrupt turning on of artificial light, may be accountable.

If these few rough notes should prove useful to any of our members, they will have served their purpose; and such matters as I may have overlooked, will, I hope, be supplemented by others who have had experience of this form of Aviculture. On the other hand, should anyone wish for further information on any of the points which I have mentioned, it will be a pleasure to me to attempt to answer such questions as he may put. What all aviarists desire is, to render their feathered pets as nearly as possible immortal; but perhaps when I say *all*, I should exclude bird-dealers, who doubtless would be content with a more moderate span of life for them. At present, aviculture is still in its infancy, and every crumb of information *based upon fact* is important. A Society such as ours, which affords its members the opportunity of freely exchanging experiences, is therefore likely to prove extremely useful, in reducing the death-rate of birds in captivity.

THE WATERFALL PIRATE AT HOME.

BY GEORGE C. WILLIAMSON, D.LIT.,

Member of the Council of the Royal Society of Literature.

MR. and Mrs. *Lestris Catarractes* are At Home every afternoon at Hermaness, Isle of Unst, Shetland Isles; but the distance is too great to induce many people to go and pay their respects to one of the rarest of our British sea-birds. My wife and I went, however, recently, and were well rewarded for our journey.

The island is the most northern point of the Queen's home dominions. It is on the same latitude as Cape Farewell in South Greenland, and the light that one expects in northern Norway, but does *not* expect in Britain was streaming around us as though it were midday instead of nearly midnight.

The great skua occupies in the bird world a place midway between hawks and gulls. He is a bold and fierce bird. He unites the ferocity of the hawk and its swiftness and directness of flight to the swimming and fishing powers of the gulls, but he is so thoroughly a pirate in the feathered world that he prefers living upon the activity of others to providing food for his family by his own exertions. It is quite within the memory of this generation that the great auk has become practically extinct, even if there be any truth in the rumour that a pair have been seen lately in Iceland. At one time there was a fear that the great skua would share a similar fate—at all events that it would never be again seen to nest in the British Isles. Now, however, thanks to the energy and care of one of the landed proprietors of Unst, Mr. Laurence Edmondson of Bunes, Hermaness Hill has been fenced around, permission to enter upon it being scrupulously preserved, and the eight pairs of skuas left undisturbed.

It is not given to everyone to be able to fence in a great hill 657 feet high, with all the acres of long slope of grassy downs around it, and to provide keepers whose special charge is a flock of sixteen birds. Much gratitude, however, is due from all ornithologists for this action of Mr. Edmondson's, and for the guarding care that has preserved to Britain another of its rarer birds.

The natives call the bird the Bonxie, and in breeding-time they are by no means anxious to come with reach of it.

Lestris catarractes derives his name from the fierce and unhesitating rush of flight that he makes. So tremendous is the force with which this pugnacious bird will fly, that, rushing against a tree or a fence, it has stunned itself and fallen over helpless many a time from the impetus with

which it has gone. It has even transfixed itself upon a sharp-pointed stick, or upon a knife, when held up by an islander guarding himself against an attack; and dogs, foxes, and birds are instantly and bravely attacked, and in many cases not only driven off but actually killed by the powerful wings and beak of the bird. Is a gull coming across the hill, loaded with a large sillock, herring, or pollock—the skua is at it in a moment, rushing boldly against the poor gull, and with a blow of its wing causing the smaller bird to drop its prey, which the skua carries off in triumph. Small wonder, then, that as we landed on Hermaness we found the summit of the hill deserted of all other birds, who were quietly pursuing their fishing occupation by the cliff near the sea, leaving the grassy slopes free to the predatory skuas.

A skua's nest lay at our feet! Just a hollow in the ground, a few dried weeds, and two dark olive-green eggs blotched with brown, but above us was the parent bird in a high state of excitement, roaring itself hoarse with shrieking, and beating its great wings with impotent fury. We drew back instinctively, and then caught sight of the female bird a few yards off, poised exquisitely but a couple of feet from the ground, hovering around, trembling all over in excitement, and with its reddish-brown wings spread to their fullest extent, its black shining bill ready to strike did we dare molest the nest, its black legs tucked back under the plumage, and its eyes gleaming with anger. It was a wonderful sight. The male bird making the uproar, and ready to dart down on us with relentless energy; the female silent, but ever alert and watchful; and we three disturbers of their peace watching them quietly. What right had we, however, to so needlessly irritate these beautiful birds? But a moment we stayed, and then quickly moved aside and pursued our way; and like the flight of arrows converging on a given point, as we left the spot, did the two birds in a flash regain their nest, and silence reigned again.

We had seen the great skua, his nest and his eggs, and we were grateful for the sight as on and on we trudged, tired with the long walk and eager for a cup of tea.

(To be continued.)

[Reprinted, in an abridged form, from the *Boys' Own Paper*, with the Author's permission.]

OUR BIRD-ROOMS AND AVIARIES.

I.

MY BIRD-ROOM.

BY REGINALD PHILLIPPS.

Most of us are the victims of circumstances; and most of those who, like myself, love their birds, would like to provide better accommodation for them than circumstances will usually permit. Besides, we all have our own peculiar ideas of what is right and what is best; and some of us keep one class of bird, some another. It follows of necessity, therefore, that bird-rooms are of all sorts and sizes, and arranged in many different ways; and doubtless we may all pick up a wrinkle or two by reading accounts of the homes in which our fellow aviarists keep their feathered pets.

Some people seem to consider that a bird-room is a room in which to place cages containing birds; and there are some who—the victims of circumstances, you know—find it difficult to keep their birds except in cages. The room is fitted up with shelves, and on the shelves are placed the cages, and in the cages are placed the birds, all much like a bird-shop, or, to put it more prettily, like the Parrot House at the London Zoological Gardens. The habits of caged birds may be studied in such a room, but not the habits of birds. If you desire to study the habits of your favourites, and to find out what are their respective natures, why birds have been constructed by the Master Builder some in one way, some in another, and all so marvellously according to their several requirements, you must let them have as much liberty as possible. If you have not an out-door aviary, have one made; if you are likewise a victim, and cannot do so, at any rate let your birds fly loose in your bird-room, as far as practicable.

When selecting a room for your birds, choose, if you can, a lofty room, facing south or thereabouts, on the ground floor, with the window opening on to the private garden. There are several advantages in having the bird-room on the ground floor. The temperature is more equable than if it be somewhere among the garrets; the birds are more handy during your waking hours; you are less likely to stir up the ire (always latent, if not always expressed) of the petticoated members of the household, as you will avoid making a mess about the house, and being accused of wearing out the stair-carpet by your "perpetual tramping up and down after those nasty things;" and above all you may be tempted to do what I have done—to build an aviary in the garden coming up to and against the house, and so arranged that you can let your birds fly backwards and forwards between the bird-room and the aviary, just as you may deem prudent or find convenient.

Your bird-room must (I prefer *must* to *ought*) have a fire-place, to assist the ventilation; and, in my room, at the *very top* of the wall, I have had a good-sized hole knocked through into the chimney, protected by a grating. A wire-guard protects the fire-place, and prevents any bird going up the chimney, or sitting on the cold bars in a very draughty place. The window is protected by wire-netting: I have two light wooden frames covered with netting, the one fitted over the upper half of the window, the other over the lower; either of these can be easily removed, to allow the birds egress and ingress; or, when left in position, the window can be opened without allowing the escape of the inmates. The window, moreover, can be opened and closed from the outside, without entering the bird-room.

The room should be as light as possible, but should be provided with a dark blind; this latter is of great value when you desire to catch a bird, one person trimming the blind, while you catch your bird without any bustle. I still have a blind; but, since I have introduced some of the larger parakeets into the family, it has fared rather badly. The walls are washed, not papered; and, if you may (I may not), you will do well to cut a panel or two out of the door, and cover the apertures with netting; the apertures serve not only as peep-holes, but also as aids to ventilation. If too draughty or cold, a piece of green baize, or other covering, can be arranged to fall down over them as required.

The question of the floor and its covering is a very serious one. If you have tiny finches, waxbills, and the like, I suppose there is nothing better than a good layer of sand. This has the disadvantage, however, of clinging to one's feet as one leaves the room, with the unavoidable consequences that more is carried away and deposited elsewhere than the ruling powers usually approve of. Not long since I met a gentleman who is very warm on the canary. I have never seen his bird-room, but, like that of most fancy canary breeders, doubtless it contains only caged birds. As he piteously remarked, it is impossible to help a little seed-husk getting about, or a little dirt of some kind sticking to one's slippers; but he said that he is regarded among his own household as an outcast, and a——, and is treated accordingly. Nevertheless, I am glad to say that he has nailed his colours to the mast, and has no intentions of surrendering. If the man without sand on his floor is treated thus, how will it fare with the one who sands his floor properly! A little while back, someone writing to the papers told us how it ought to be done. He commenced by letting his birds fly loose in the room; but, after having been taught the errors of his ways, he shut them up in cages, seated himself comfortably in the centre of the room, lighted his pipe, and was able to view his feathered prisoners with a quiet mind, and amidst that domestic harmony which should prevail even in the house of an aviculturist. To my mind, this was retrogression, not progression. He evidently had not the same grit in him as has our canary friend.

But I am wandering. I do not have sand on the floor of my bird-room. Most of the birds I have kept for these many years have been large ones; and for such a sandy floor would probably be a mistake. I have one piece of floor-cloth running the whole length of the room, and 9ft. wide—the widest I could obtain: this covers a very large part of the floor. A nurse-

girl comes six days a week to attend to my feathered children ; and one of her duties is to clean the floor every day. This plan has many advantages and many disadvantages ; but with large birds I doubt if it is not as good as any other.

My ideas of cages are perhaps peculiar. The ordinary cage is sometimes useful, sometimes, perhaps, almost necessary ; but I do not favour it. All the cages in my bird-room have been specially made according to my own directions ; some of them I now know are not quite as they should be ; but they still answer the purpose very well, better than would any I could obtain ready made. Two are slightly over 4ft. by 2ft. by 5 $\frac{3}{4}$ ft. high. The more modern ones are from 4ft. to 6ft. long, about 2ft. deep, and from 2ft. to 3ft. high. One is placed at the top of another, the upper ones having gable roofs. Most of them can be divided into two or into three sections, 2ft. long each, by running in divisions, should it be necessary. All the doors of these cages last mentioned are about 2ft. by 2ft., with an extra door of the same size for the longer cages, so that one side can be thrown open ; and wide open these doors usually are, for they are closed only when a bird is engaged for some special reason. The bottoms of all the cages are kept well supplied with sand, grit, cuttle-bone, rock salt, egg-shells (baked and ground), and finely ground oyster shell. Some of the cages have been fitted up with little shelves, on which are placed most of the food saucers and drinking water, so that both are kept free from droppings. The cages are mostly set on stands, which raise them at least one foot above the floor ; and there is a space of several inches between the cages and the wall. I consider these last-named arrangements to be of special value. Mice cannot climb into the cages and disturb the inmates, nor soil the food ; and cockroaches have to content themselves with such scraps of food as may happen to have been scattered on to the floor. Moreover, if a bird should fall down behind the cages, instead of getting fixed and dying miserably, it lands on the floor, hops quietly forth from under the cages, and is itself again ; and the open space beneath and behind the cages tends to cleanliness and pure air. Each cage should have at least two sides of wood, the remainder being built round with straight wire, not wire-netting. About the room, but not coming too near the window, nor over that part of the floor which is uncovered—and which is usually clean, and forms my customary path—there are several natural boughs of various sizes, and portions of trees, fixed about, artificial perches being mostly excluded. There are usually, also, a few nesting boxes about ; but I trust more to the aviary for all nesting purposes, the bird-room being used more as a shelter from cold and wet. But, of course, with many kinds of birds totally different arrangements would have to be made ; and in my bird-room and aviary there is a quiet work of change perpetually going on, according to the natures and requirements of my various pets.

I have never been able to detect a bird-insect of any kind in the bird-room itself, notwithstanding that some of the cages, or houses, are old, with ample accommodation for millions of mites. I smear the parts where cages rest on one another and on the stands thickly with soft soap as bought ; it is the duty of the nurse to constantly well rub over every part of every cage with a damp cloth ; and occasionally I personally doctor any cage that I think may be likely to require it with a liberal supply of fir-tree oil. At night I sometimes make a tour of inspection with a candle, to see if any traces of the prowling foe can be discovered. In short, I go in for cleanliness and prevention ; and the results are certainly satisfactory so far as the absence of mite and disease is concerned. The floor and floor-cloth are washed every week-day with carbolic soap ; and every drop of water used for cleansing purposes is fortified with permanganate of potash. The room is over the kitchen, and the kitchen flues run up the wall by the side of the fireplace, and make the room very dry, so that the moisture is rather beneficial than otherwise. In another room, this daily floor-washing might not be wise. Certainly my birds never seem to suffer from this cause : I have invariably been able to trace every case of cold, and the like, to over exposure out of doors. The food and water vessels are scattered far and wide, so that every bird may have a chance ; none of the vessels

are of metal; and the washing saucer is placed on the floor, on a large tray. A thermometer reports the temperature, and the lowest degree of cold touched during the night.

For a good part of the year, I keep a hurricane lamp burning in the bird-room all through the night. This practice has much to be said in its favour. I am in London, and am shut in by houses, and the bird-room is dark; and the evenings so rapidly close in on a dull day that my birds used often to go to roost before their supper was served: for fresh food for the Soft Bills, and fresh water, are always given at least twice every day. Now they have grown accustomed to the light, most of them will feed to a much later hour than they were able to do formerly; and they can get to their food betimes in the morning, fog or no fog. And the lamp is invaluable in a room where migratory birds are kept. Instead of knocking themselves about, and knocking other birds off their perches, as they used to do, they now fly round and round the room until they have had enough of it, and then quietly compose themselves to sleep as if nothing had happened; and by the time I go to bed everything is quiet. Of course, I burn a much stronger light, two lamps in fact, during the earlier part of the dark evenings, a much softer light prevailing during the night. A panic in a bird-room in which there is a light is a very unlikely occurrence, and even if such a thing should happen little or no mischief would befall the inmates.

I do not believe in the wisdom of keeping delicate Foreign birds through an English winter without artificial heat. I am well aware that many Foreign birds can stand a great deal of cold; but not many of them can do so with impunity, although the effects may not immediately be apparent. The longer I keep birds, the more I believe in the wisdom of keeping them warm, dry, and comfortable. For some years, I warmed my bird-room with a gas fire; but the expense was so considerable that the gas had to give way to the less convenient, but less costly, paraffin. I place a paraffin stove between the window and the fire-place, and near to the latter, cover it with a wire extinguisher-like guard: and on the top of the latter I place a pan of water for evaporation purposes. The lamp, also, lends its help in warming the room. But I must again press upon you the importance of having the room well ventilated, but without draughts, especially during the winter months.

If all the cages be mounted on stands as I have suggested, mice cannot do much harm. Nevertheless, they are highly objectionable tenants, and should be evicted or otherwise disposed of. Traps will catch a few, now and then, but are practically of no use. I allow one hole to be always open, their favourite hole. Down this I drop a piece of bread and butter, well smeared over with phosphor paste, taking great care that none of the paste is left outside. The mice disappear: sometimes a feeble outbreak of the attack takes place in a month or two, but a second dose frees me of them for from twelve to eighteen months. On the morning following the laying down of the poison, I promptly remove any dead mice I may find; and those which die beneath the flooring seem to dry up, and do not smell. I once found such an one, as perfect and dry as a mummy.

In some particulars, I have not described my bird-room just as it is, but rather as it should be, so that this little sketch of it may be the more useful to my readers. But they will please bear in mind that circumstances alter cases, and that what is best for one room may not be the best in another; and that a different class of birds may require various modifications of various details.

NESTING OF THE CUBA FINCH.

At the beginning of June in this year a pair of Cuba finches, which I was keeping at the time in an open wire cage, 3ft. by 2ft. began to build a nest in a cocoa nut husk hanging in a corner of their dwelling. The material used was soft hay, and with this they completely lined the hollow and blocked up the mouth of the nest. The hen began to sit on June 17th,

and remained pretty constantly on the nest. The cock did not appear to share in the duty of incubation, though he would sometimes pay his wife a visit and remain in the nest for half an hour or so. Neither bird would touch soft food of any sort; they lived mostly on spray millet. On July 6th, a newly hatched bird was discovered dead on the floor of the cage. The nest was then removed and examined and was found to contain one egg, the contents of which were dried up. The nest was replaced, but the birds appeared to take no notice of it for some weeks. On August 29th, however, the hen was discovered to be egg-bound and in spite of every attention died on the following night. On examining the nest, another egg was found.

The eggs were white, thickly spotted with reddish brown and measured $\frac{5}{8}$ of an inch in length.

The result, though unsatisfactory and disappointing, appears to indicate that the Cuba finch might, under more favourable circumstances, succeed in rearing young in this country.

C. S. SIMPSON.

RARE FOREIGN BIRDS.

I.

THE BLACK-TAILED HAWFINCH.

By H. R. FILLMER.

The Black-tailed Hawfinch (*coccothraustes melanurus*) is a native of China, and it is also brought to this country from Japan, but is said not to be indigenous to the latter.

It is much larger than any other seed-eating cage bird of the finch group; being considerably larger than the Virginian Nightingale, which it resembles in the shape of its beak.

The general colour of the male consists of various shades of light drab or fawn colour; the whole of the head is black and so is the tail; the under tail coverts are white; the wings are glossy black, except the ends of the primaries and the tips of the secondaries, which are white. In the female the head is the same colour as the body, and the primaries are only tipped with white; the black on the wings is less extensive and not glossy, and the tail is rather brown than black. The beak is yellow, except at the base, where it is white; and is curiously clouded with greenish black (especially in the male). The feet are flesh-colour. It habitually stands very upright on the perch.

It is a decidedly handsome bird and yet not much of a favourite; its size repels some people, and its colouring although striking, is not brilliant. It appears to be of a somewhat wild and nervous disposition. Its chief attraction is its song, which is very loud and musical, and resembles that of the blackbird. Both sexes sing about equally well: in this again it is like the Virginian Nightingale.

This species will breed in confinement, but I have not yet heard of any young having been successfully reared. However, as almost all specimens show a disposition to nest, and it comes from a temperate climate, and its breeding season corresponds with our summer, there should be no difficulty in propagating the Black-tailed Hawfinch in this country.

This bird thrives on canary seed, millet, and paddy; but seems to require a little soft food occasionally, the preserved egg does very well for it, but it should not have too much of this or any other soft food. It is very fond of fruit, and I have never found that any quantity of ripe fruit would hurt a bird. It should also have plenty of green food.

THE PARROT FINCH.

By H. R. FILLMER.

The Parrot Finch (*erythrura psittacea*) is a native of New Caledonia, and is one of the most lovely birds ever seen in a cage.

The general colour is bright grass-green with a beautiful golden lustre; the whole of the face, crown, throat and breast are bright crimson, and the tail and upper tail coverts a slightly duller crimson. The bill and feet are black.

This bird is nearly related to the Pin-tailed Nonpareil (*e. prasina*) but while that is a very delicate bird the Parrot Finch appears to be quite hardy. It appreciates paddy rice, and should always have a supply of it in addition to canary seed and both kinds of millet seed. It is very fond of fruit.

The Parrot Finch has no song, and its cry is at once shrill and harsh. According to Wiener, the hen is only distinguishable by the smaller extent of the red colour on the breast. Mr. Wiener was successful in breeding this species, but it is so rarely imported that very few have had an opportunity of testing its inclination to nest in this country.

My knowledge of the bird is confined to a single specimen, which has now been in my possession nearly a year and a half, and it had passed one winter in Britain before I purchased it. I have not seen another specimen for nearly three years. It is a remarkably healthy and active bird, but unfortunately very wild. I have always been afraid to trust it amongst other birds, and therefore cannot say whether it is peaceable or quarrelsome.

There is a still rarer species called the Three-coloured Parrot Finch.

OUR WINTER VISITORS.

BY WALTER SWAYSLAND.

(Author of "Familiar Wild Birds" and "British Cage Birds.")

At this season of the year we are looking for our winter visitors, some of which make exceptionally interesting cage birds. The Siskin is one which is somewhat uncertain in its arrival, the number varying greatly from year to year, but as a good many have already been seen it is likely to be fairly plentiful this autumn. This pretty green bird is the tamest of all our British Finches, and can be easily taught some simple tricks, such as opening a little box containing maw-seed or hemp-seed. (There is no cruelty involved in this, if the bird is always well supplied with some less favourite food, such as canary seed, in an open vessel). The siskin has a pretty jerky song, with a long harsh note at the end.

The Lesser Redpole is also very common this year, it is, however, not so erratic in its visits as the siskin, and is to be found in large numbers every autumn. It is not quite so bold as the Siskin, but is exceedingly tame and quite as intelligent. From a school-boys point of view, it is one of the jolliest of birds.

The Mealy Redpole is only very occasionally seen here in its wild state, last year there were a fair number, but they were the first for several years. Most of those seen at Bird Shows are imported from Germany or Russia. The Mealy Redpole is larger than the common redpole, and of a much lighter colour.

The Twite, which greatly resembles the Linnet, but has a yellowish beak, is pretty well distributed at this time of the year all round our coasts, but it does not as a rule congregate far inland, unless it is on the banks of large rivers, or the marshy land adjacent. Its song is inferior to that of the Linnet, and it does not usually live so long in captivity.

The Brambling, or Mountain Finch, has been well called our winter chaffinch, which it is much like in every respect but colour. It is a very

handsome bird, but has no song worthy of note, and being of a wild and timid disposition, it is not much cared for as a cage bird. It is a nice bird for an aviary, although sometimes quarrelsome.

The Snow Bunting is another strikingly handsome aviary bird—especially the adult male, which is nearly all white. It is larger than the birds previously mentioned, not very intelligent, and extremely clumsy in a cage. As a rule it gets very fat, which is probably caused by its indolent habits.

The Lapland Bunting is now classed amongst our native birds, as it is taken in considerable numbers every year around our southern and eastern coasts—it is a little more interesting than the Snow Bunting, but has many of the same characteristics.

The Tree or Mountain Sparrow is of quite the opposite disposition to the Snow and Lapland Buntings. Instead of annoying one by its laziness, it keeps up a perpetual fluttering when caged, and if put in an aviary will endeavour to hide itself whenever anyone approaches. Its extreme shyness and dislike of confinement, make it unsuitable for captivity, although its soft colours are very beautiful.

NEW BOOKS.

“Foreign Finches in Captivity,” by Arthur G. Butler, Ph.D., F.L.S., F.Z.S., F.E.S.

The appearance of the first part of Dr. Butler's book on foreign finches marks a very distinct advance in the literature of Aviculture. The writer is peculiarly fitted for his task, no less by his scientific attainments than by his long and large experience in the keeping and breeding of foreign birds, and he has been fortunate in securing the services of an artist whose illustrations are as true to nature as they are artistic and beautiful.

The word “finch” is used in this book with a somewhat extended meaning, and embraces not only the true finches and the Ploceidæ or weaving finches, but also the Tanagers, which are considered to be finch-like birds that have taken to a diet of fruit and insects, and have become structurally modified in consequence.

The first number deals with the Tanagers and commences the typical finches (Fringillinæ).

The Tanagers described by Dr. Butler, are the Superb, the Paradise, the Violet and the Scarlet. For these birds, he recommends one of the prepared foods for insectivorous birds. The food in question is no better and no worse than a dozen others (and it is perhaps a mistake in a work of this description to quote the opinions, and advocate the wares, of a particular dealer quite so prominently) but Tanagers require a liberal allowance of sweet fruit and a few meal worms, or other insect food, daily, to keep them in health. The coloured plates of the four species are admirable, especially those of the Violet and the Scarlet Tanagers, which could hardly be improved upon.

Dealing with the Superb Tanager, the author quotes largely from the description given by Dr. Russ, which by no means does justice to this very attractive bird. The Superb Tanager is not a difficult bird to keep, though it will not stand a temperature falling below 45 degrees. Like all soft-billed birds, it requires more trouble and attention than a seed-eating species; but it certainly is not (as Dr. Russ states) either a very greedy or a very uncleanly bird.

The author is at his best in describing the true finches. A most full and interesting account is given of the Scarlet Rose-finch, a species rarely seen and but little known in captivity, and not mentioned in previous works on foreign cage-birds. The coloured plate of this species is extremely good; but that of the Saffron-finch is less successful, being rather too highly coloured.

The Grey-necked Serin-finch is the last species treated of in the present number.

Dr. Butler is to be congratulated on the care and accuracy with which he has done his work. He has shewn us that a popular book need not be either unscientific or inaccurate. Should the succeeding parts prove equal to the first, "Foreign Finches in Captivity" will, undoubtedly, take the very highest rank among works on Aviculture.

C. S. SIMPSON.

EGG-PRODUCTION AND EGG-BINDING.

By C. S. SIMPSON, L.R.C.P., M.R.C.S.

To those Aviculturists who have kept birds (at any rate foreign birds) for any length of time, the title of my paper will at once raise various gloomy recollections. Probably the complaint of egg-binding is the cause of more deaths than any other disease to which such birds are liable in confinement. It is peculiarly disappointing, too, to the amateur, from the fact that it necessarily occurs at a time when he is indulging in pleasant anticipations of seeing his birds successfully rear a family, a prospect which must always excite the keenest interest in everyone worthy of the name of Aviculturist.

What is the cause of egg-binding? Can we prevent it? And how are we to treat a bird suffering from the disease?

If we dissect the body of a hen bird during the breeding season we shall find, after carefully removing the bowels and liver, at the back of the abdominal cavity, and on the left of the spine, a body which is generally compared to a tiny bunch of grapes. This is the ovary, and the little separate bodies corresponding to the grapes are the partly developed eggs or ova, each of which is contained in a delicate membrane or capsule. There are two ovaries, but the right one is almost always atrophied. A convoluted tube leads downward from the ovary, and opens into a cavity called the cloaca, which is formed by the dilated end of the bowel, and which communicates with the exterior by means of the ventral orifice. This tube is called the oviduct, and its purpose is to conduct the ovum when ripe to the exterior of the body. The wall of the oviduct contains muscular fibres, which have the function of contracting the calibre of the tube, and so driving the egg down it. A number of little glands are also contained in the oviduct, the mouths of which open upon its inner surface, and these manufacture both the "white" and the shell of the egg.

If we dissect a hen bird during the moulting season, or before pairing has commenced, we shall probably conclude at first sight that the ovary is absent. If, however, we have carefully noted its position in our previous dissection we shall be able to find it, but in a very small and undeveloped condition.

The conditions which stimulate the egg-producing organs, and cause them to develop are (1st), the approach of that time of the year at which pairing takes place, and which normally coincides with (2nd) the advent of warm weather; (3rd), the presence of the male bird, who at this time endeavours, by all the arts at his disposal, to attract and excite the female, and (4th) access to a suitable site and suitable materials for nesting.

When an ovum becomes ripe, its capsule bursts, it passes into the upper expanded end of the oviduct, and the latter contracts and presses it onward towards the cloaca. Meanwhile, the glands are discharging their contents. At the upper part of the oviduct the white is deposited around the yolk, and at the lower part a white material containing lime salts is poured out and forms the shell. This process occupies from 12 to 24 hours, and, at its conclusion, the egg is completely formed, and is then expelled from the cloaca, or in other words, "laid."

Now, it is evident that this process of egg production is a com-

plicated one, and in order that it may be successfully completed, it is necessary that the various portions of the mechanism should act well and harmoniously. For instance, when the ovum burst its capsule, the oviduct must be ready to receive it, the muscular fibres must be in a healthy condition, and the glands must be ready to play their part, otherwise a hitch may occur in the process. Unfortunately, in the case of captive birds, this hitch too often takes place; the process of egg production fails to be successfully accomplished, and egg-binding results. The reason for this, in almost all cases, is that some of the causes previously enumerated, which stimulate the reproductive system, are present, while others are absent. The hen bird is associated with a male of the same species, the pairing time approaches, and she is provided with nesting material, but the weather turns cold, and she has, perhaps, not been long imported, and has not yet recovered from the effects of the long and trying journey from her tropical home. The consequence is a partial and imperfect stimulation of the egg-producing organs, an ovum matures and bursts its capsule, but the oviduct contracts feebly, the glands fail to perform their duty, the shell is incompletely formed, the hitch occurs, and the bird becomes egg-bound.

It very frequently happens that egg-binding is associated with an imperfect condition of the shell. The egg is then soft, and does not offer sufficient resistance to the contraction of the oviduct. It is often assumed that this condition is due to absence of lime-salts from the birds' food, and that if they can be made to swallow sufficient cuttle fish, or broken egg shell, egg-binding will be prevented. I believe this theory to be a mistaken one. Birds which partake freely of these substances are as liable to egg-binding as others, because the imperfectly developed organs are unable to take up the necessary salts from the circulation and make use of them.

If my views are correct, it follows that we can prevent the disease in two ways, either by removing those causes which lead to egg-production, and so keeping the reproductive system in a quiescent state, or by endeavouring to provide all those conditions which are necessary to a successful completion of the process. In the former case we shall separate the sexes at the approach of the breeding season, and remove the male out of the sight and hearing of his mate, we shall take away all nesting material, we shall avoid a high temperature in the bird-room, and we shall provide a plain and non-stimulating diet. In the latter case we shall act in exactly the opposite way; we shall keep up a tropical temperature, we shall provide suitable places and material for nesting, and we shall give stimulating food.

The symptoms of egg-binding are usually unmistakeable. If a bird which has been building a nest, or has shown signs of wanting to do so, and which has previously been in good health, is suddenly found prostrate on the floor, with puffed out feathers and distended abdomen, she may be safely assumed to be egg-bound. Some birds, however, die very suddenly from this cause, without showing previous symptoms of illness. It sometimes happens that a bird becomes ill with every indication of egg binding, but apparently recovers, and lays an egg some hours afterwards. In this case the hitch has occurred high up, probably at the passage of the ovum from the ovary to the oviduct. The bird sometimes dies, however, after laying.

Suppose egg-binding to have occurred, how are we to treat the patient? A large bird may have a drop of castor oil, but with a small bird the trouble of getting the beak open, and the risk of hurting the patient, more than counteract the somewhat doubtful good effect of the drug. Holding the patient over the steam of hot water is often advantageous, but as a rule the less the bird is handled the better. It should always be placed in a box-cage, close to a good fire, at a temperature of from 80 to 90 degrees, and as the complaint is an extremely depressing one a stimulant should be given (five drops of whisky to each teaspoonful of drinking water).

If the bird be not too far gone when its condition is discovered, and

if it have been previously in good health, it will probably recover with this treatment. Should it do so, it must be separated from its mate, and no attempt must be made to breed with it for the remainder of the season.

CORRESPONDENCE.

SUNNY VIEW, KINGSNORTH GARDENS,
FOLKESTONE.

SIR,—May I be allowed, through the columns of the *Avicultural Magazine*, to ventilate a grievance which is felt a good deal by many British Bird and Mule fanciers. During the Cage-bird Show season, from the beginning of October until the Crystal Palace Show in February, these birds are not in colour. Of course, after that time canaries are better employed as a rule, and are not free for exhibition. But why should British Birds and Mules always be content with a back seat at Shows? Why cannot some enterprising spirits get one up at the end of April or the beginning of May? to which canaries should not be admitted; but plenty of classes should be given for Mules, British and Foreign Birds.

Some birds vary in plumage but little at different seasons of the year, but to others it just makes *all* the difference. I need only instance the Brambling and the Chaffinch, and among Mules the dark jonque Goldfinch-Canary. These are never exhibited in their full beauty. It is no exaggeration to say that to many people (bird-lovers, but not able to indulge their fancy to any extent) a good Mule of this kind in his Spring plumage is simply a revelation. We see them colour-fed to almost any tint at the Winter Shows, but no colour food can produce that exquisite metallic lustre of the blaze, or that brilliant universal glow which characterizes these most lovely birds in May.

Could not the Avicultural Society strike out a new line, and inaugurate a show of this kind?

Yours truly,
H. B. RUTT.

WOODFORD HOUSE, QUEEN'S PARK ROAD,
BRIGHTON,

Sept. 27, 1894.

DEAR SIR,—I am greatly interested in Birds, of which I keep a good many (chiefly Foreign). But as I have as yet had little experience, I am not very successful, and hope to learn a great deal from the Avicultural Society.

I have been trying to breed Zebra finches all the year, and have had plenty of eggs but no young birds. What is the cause? I started with three pairs, which I keep separately in large cages. I lost one hen in the spring through egg-binding, but soon replaced her, so that I have had three pairs all the summer ready for breeding. One pair have done nothing at all; another pair have built nest after nest, and laid an immense number of eggs, but never attempted to sit; while the third pair have had three nests and have sat on each most industriously for about a week and then deserted them. I am sure that the birds have not been disturbed, and they have had plenty of egg and other soft food which some of them seem fond of, while others never touch it.

I feed my soft-billed birds on Abrahams' food, which I am told is the best. Am I doing right? I find that the birds pick out the egg and ants' eggs from it and leave the rest.

I cannot keep my Cardinals in good condition. After I have had them a few months they begin to get shabby. I give them one meal-worm each about once a fortnight, but fear to give them more as I understand that they are apt to cause fits. They also have plenty of spray millet, beside white millet and canary seed.

Is there any cure for baldness in birds? Waxbills seem specially liable to it. I notice that perhaps one in twenty recovers, but the large majority are hopelessly ruined if they once become bald.

Yours truly,

SEPTIMUS PERKINS.

The following reply has been sent to Mr. Perkins :—

1.—Zebra finches will readily nest and lay eggs in a cage, but seldom succeed in rearing any young. Like almost all birds (except domesticated species) they very much dislike being observed during their breeding operations, and in a cage they cannot select a sufficiently retired spot to suit their taste. The consequence is that sooner or later the nests are deserted. In an aviary they will breed freely.

2.—The egg and ants' eggs are the only parts of the food which are of any use to insectivorous birds. No prepared food is equal to fresh food made daily. A food made of equal parts of grated hard-boiled egg, bread crumbs and ants' eggs, with a little preserved yolk added, would be much better than what you are using.

3.—Feed your Cardinals on canary seed with a little hemp occasionally, give a couple of meal-worms and a little egg-food on alternate days, and plenty of fruit (apple is the best). If kept in a small cage with fine wire, Cardinals are very apt, if at all wild, to fray and cut their feathers against the wires. It is better to keep them in a large box-cage with wires only in front.

188, EARL'S COURT ROAD, S.W.

DEAR SIR,—Should Gouldian Finches be kept warm? After keeping mine in good health for two years, one had a growth on the beak like an ant's egg, which I touched with *Homocea* by Dr. Greene's advice. It has fallen off, but the beak is scaly. Otherwise the bird is in good health and it eats well.

Yours truly,

L. LLEWELYN.

The following reply has been sent to Miss Llewelyn :

In spite of all that has been said to the contrary, the Gouldian Finch is undoubtedly a delicate bird, and very susceptible to cold. If it be practicable the temperature of the bird-room in which Gouldian Finches are kept should not fall below 50 degrees, and if 60 degrees can be maintained, so much the better. The fact that some people have succeeded in keeping this bird alive at a very low temperature, is no proof that such treatment is otherwise than hazardous and mistaken. It is a restless bird, and if kept in a cage the cage should be a large one. Give as great a variety of food as possible—a little soft food—cuttle-bone—turfs (excepting in frosty weather)—flowering grass—and, occasionally, a very small quantity of inga seed. But some Gouldians will touch nothing besides the two kinds of millet seed.

THE AVICULTURAL SOCIETY.

RULES.

1.—The name of the Society shall be "THE AVICULTURAL SOCIETY." And its object shall be the study of Foreign and British Birds. Poultry, Pigeons and Canaries shall be outside the scope of the Society.

2.—The officers of the Society shall be elected annually by the members in manner hereinafter provided, and shall consist of a President, a Vice-President, a Treasurer, a Secretary, an Auditor, a Scrutineer, and a Committee of 12 members. All officers shall be ex officio members of the Committee.

3.—Each member shall pay an annual subscription of 5/- to be due and payable in advance on the 1st of November in each year. New members shall pay an entrance fee of 2/6. Any member whose subscription or entrance fee shall be four months overdue shall cease to be a member of the Society, and notice of his having ceased to be a member and of the cause, shall be inserted in the Magazine.

4.—New members shall be proposed in writing; and the name and address of every person thus proposed, with the name of the member proposing him, shall be published in the next issue of the Magazine. And unless the candidate shall, within two weeks after the publication of his name in the Magazine, be objected to by at least two members, he shall be deemed to be duly elected. If five members shall object to the candidate he shall not be elected. If two or more members (but less than five) shall lodge with the Secretary objections to any candidate, the Secretary shall announce in the next number of the Magazine that such objections have been lodged (but shall not publish the names of the objectors), and shall request the members to vote upon the question of the election of such candidate. Members shall record their votes in sealed letters addressed to the Scrutineer, and a candidate shall not be elected unless two-thirds of the votes recorded are in his favour; nor shall a candidate be elected if five or more votes are recorded against his election.

5.—The Magazine of the Society shall be issued on the first day of every month, and forwarded, post free, to each member. The Secretary shall have an absolute discretion as to what matter shall be published in the Magazine (subject to the control of the Committee). The Secretary shall refer all matters of doubt or difficulty to the Committee. The decision of the majority of the Committee shall be final and conclusive in all matters.

6.—The election of officers shall take place every year between the 1st and 14th of October. All candidates must be proposed by one member and seconded by another member (in writing), before they are eligible for election; but this shall not apply to officers willing to stand for re-election to the same office. All such proposals which have been duly seconded must be sent to the Secretary before the 14th of September. The Secretary shall prepare a voting paper containing a list of candidates, showing the offices for which they are respectively seeking election or re-election, and shall send a copy of such voting paper to each member of the Society, with the October number of the Magazine. Each member shall make a cross (X) opposite the names of those for whom he desires to vote, and shall sign the voting paper at the foot, and send it to the Scrutineer in a sealed envelope before the 14th of October. The Scrutineer shall prepare a written return of the officers elected, showing the number of the votes recorded for each candidate, and send it to the Secretary before the 21st of October, for publication in the November number of the Magazine.

7.—It shall be lawful for the Committee to delegate any of their powers to a Sub-Committee of not less than three.

8.—The Committee (but not a Sub-Committee) shall have power to alter and add to the Rules, from time to time, in any manner they may think fit.

9.—The Committee shall have power to expel any member from the Society at any time, without assigning any reason.

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NOTE BY THE SECRETARY.

I have received a large amount of correspondence (some of great interest) which it is impossible to insert owing to want of space, and I must ask those contributors who are left out in the cold, to accept this explanation. As our numbers increase, we shall have more funds available, and shall be able to have a larger Magazine.

Mr. Sergeant has very kindly sent me a charming design for the cover of our Magazine, but the Treasurer tells me he has not sufficient funds in hand to make use of it at present. The cost of the block would be £1 16s. od. Will any of our wealthier friends come to our assistance?

C. S. SIMPSON.

SUGGESTIONS FOR AN OUTDOOR AVIARY.

By JOHN SERGEANT.

The first thing to be considered in starting an Outdoor Aviary is a suitable situation for it. The most favourable situation is facing South or South-East, as in this position you get a maximum of sun during all months of the year, which is a most important consideration; and it is needless to say it must be well protected from the North.

If a portion of a garden, containing established shrubs and trees, can be enclosed, so much the better, and if there be a running stream that can be made to flow through a part of the aviary, it will be an ideal site. As I write I have in my mind's eye an aviary where a running stream has been utilized, and I cannot imagine anything prettier. If a corner of the garden be enclosed, much expense will be saved, because the walls, if high enough, can form one end and one side, but if the whole of one end of an oblong garden can be devoted to the aviary, then only one side and the top will require to be built, as the walls will make two ends and the other side, thus saving a considerable amount of labour and expense. The higher the surrounding walls, the more protected the aviary will naturally be, and the height of the aviary should be regulated by the height of the walls, which, if not high enough, should be raised to at least eight feet, as there is nothing more undesirable than to have the outer aviary exposed to the elements on all sides.

As the question of size depends so much upon the space available, and the funds at disposal, it can hardly be touched upon here, beyond saying that it is best to have the aviary made as large as possible, for the larger it is the more comfort the birds will have, and the more likelihood there will be of their breeding in captivity.

The situation decided upon, and the size determined, the question of the house in which to keep the food, and in which the birds can roost in severe weather, presents itself. This should be as large as the size of the outer aviary will allow, and should occupy the whole length of the sunniest end of the space decided upon. The house, or inner aviary, can be constructed of either brick or wood. I have one of each, and cannot say which is the

warmer. The greatest point in favour of brick is that you are better able to keep the mice out, by laying a cement floor, and cementing the walls round the floor to the height of six inches. If a wooden house be chosen it should be covered with two thicknesses of felt, which should be tarred in September every year, and the floor should be laid closely with tiles. Of whatever material the house be constructed, it must be well lighted, and the windows and skylights (covered inside with wire netting), must be in a position to catch as much sun as possible. There should be two large folding or sliding windows looking into the outer aviary, which should be always open in summer, but kept closed in winter and on cold spring days; and on the floor, also communicating with the pen, an opening, a foot square, should be made, through which the birds can fly or walk when the windows are closed. Thus, in severe weather, the birds can have access to the food, and still the inner aviary can be kept fairly warm and free from draughts, which would be impossible if the windows were the only means of ingress or egress and had to remain open continually.

The outer aviary should be constructed of light standards, and lengths of $3\frac{1}{2}$ inch wood, painted with three coats of paint before being placed in position; upon which must be stretched $\frac{1}{2}$ inch mesh wire netting, and if an estimate be obtained from a local joiner, the price to include the nailing on of the wire, and the wire netting obtained from one of the large manufacturers, this part of the work can be done very cheaply.

A separate door should be made for the owner or attendant to go into the outer aviary, in addition to the one for the same purpose into the inner aviary. The latter must be covered by a double door, constructed of light wood and wire netting, to prevent the escape of frightened birds.

I have not found a double door at all necessary in the outer aviary, unless it be very small. If it be not intended to keep Parrakeets in the aviary, established roots of ivy should be planted and trained up the walls, also box trees, Japan cypress (*Retinospora Plumosa*), hollies, &c., which should be planted closely together round the sides and end of the outer aviary to form a dense cover. But if the Aviarist be ambitious to keep the lovely, but destructive, members of the Parrot family, he must be content with grass alone, because Parrakeets (except the weak-billed Turquoisines and Elegants) would destroy the shrubs and trees in a day.

In the centre of the outer aviary grass should be sown, and if kept regularly cut it will grow very thick and close, and so defy the efforts of the birds to eat it off.

If there be no brook available, or water cannot be laid on from a water main to form a continually running fountain, a drinking fountain of some kind, to be replenished every day, will have to be constructed. The best thing is a zinc dish, about 18 inches square and three inches deep, which should be let into the ground, level with the grass, but surrounded by one row of tiles laid flat, to prevent the soil getting into the water. The bottom of the dish should be covered with small pebbles, to prevent the bird's feet from sliding about when they are washing, as they are apt to do when the zinc is bare, but the pebbles must be taken out regularly and scalded. There should be a plug in the dish, and a large flower pot placed underneath in a hole in the ground, for the waste water to drain into, when the dish is replenished, as, not being tainted, it forms no nuisance when it sinks into the ground; but, of course, if a drain be conveniently near, it will be much better to have a pipe to conduct the waste water into it.

In the outer aviary a wire basket should be hung, containing a dish, in which to place the soft food for the insectivorous birds; this should be covered over in some manner to protect it from rain and sun. In winter it should be hung in the inner aviary, or the soft food would become frozen hard, and therefore useless.

The inner aviary should contain all the seed hoppers. It is much better to have each different kind of seed placed in a separate self-supplying hopper, as it saves waste, and the hoppers should be hung on the walls in

such a position that mice cannot possibly reach them. The floor should be covered with sand or grit to the depth of an inch.

The perches in both the inner and outer aviaries should be natural boughs of trees of varying thickness, as the aviarist will most likely have birds of many different sizes; and small birds cannot very well perch on very thick perches, and *vice versa*.

Now, having in these few suggestions dealt with the structure and fittings of an out-door aviary, I must leave the description of suitable inmates and their treatment until some other time, as I have already taken up too much space

OUR BIRD-ROOMS AND AVIARIES.

II.

MY BIRD-ROOM.

By H. T. T. CAMPS, F.Z.S.

I do not propose to write a long article on aviaries in general, but to limit myself to the above heading: "my bird-room," such as most bird lovers have, even though it may be the upper storey of the house in some instances. But I have a preference for a bird-room on the ground floor. If the owner be not competent to erect the building himself, a joiner will do the work more quickly and with a better finish, although I have seen both aviaries and bird-rooms built by the amateur's own hands, that have answered all the requirements necessary for the comfort of the inmates. Technically speaking, I have had no practice in carpentry, if I had I should not hesitate to erect my own, but being under this disadvantage I have had to resort to the tradesman.

My small garden aviary was not an expensive item, as nearly two thirds of the building is composed of wire netting and a small portion of wood for framework, the other portion is closed in and double boarded, thus affording a snug retreat during the inclement weather; the floor of this is boarded, and can be easily cleaned after the birds have been driven into the wired portion. I use coarse gravel for the floors, and I find it necessary to rake it over every morning, and at the end of each week have it removed, and replaced by fresh. This necessarily is attended with some trouble, but the trouble is repaid in the end, as the birds are kept healthy, and free from disease. The seed hoppers I hang from the roof, and do the same with the drinking vessels, which I find scarcely ever get polluted by the droppings, as is frequently the case if placed at the bottom or sides of the aviary. I have kept Budgerigars, Cockatiels, and Javas, and with such species the amateur is generally successful, if only he goes the right way to business. It is unnecessary for me to go into details, in describing the method of treating these birds, as there are so many good ornithological works available, that the beginner can scarcely go wrong; nevertheless, practical experience is the great school. But, undoubtedly, the above species are amongst the most easily kept, being hardy, and generally prolific breeders, and are sure to give pleasure, with remuneration, for the trouble bestowed. The size of this aviary is as follows: length, 18 feet; width, 10 feet; height, 8 feet. I should have said that it is a lean-to building, built against the garden wall, having a full southern aspect, as all aviaries should have.

Now, to return to my text, I will deal with my bird-room, where birds are confined in cages. For such treatment, many undoubtedly will condemn my system, as it will appear to be an imitation of the Parrot House at the Zoological Gardens, London. But, in this room, the occupants are Macaws, Parrots, Parrakeets and Cockatoos, and for such specimens as these several aviaries would be required. For the first and last-named species, something composed of wrought-iron would be necessary. I have experimented a little with these birds in an out door aviary, and the result has been that considerable damage has been done. Some years ago, I turned out a pair of Goffin's

Cockatoos, and in less than a fortnight the building would have been a wreck had I not captured them and placed them in their old quarters again. A Macaw did make his escape, and amused himself on a high tree for several hours, but fortunately I managed to secure him in the evening. A pair of Great Salmon-crested Cockatoos behaved themselves no better. I should imagine an oak would not be in their midst for any length of time. Notwithstanding all this, I do not wish to discourage those whose financial circumstances will admit of their building an aviary properly constructed. I should certainly say aviaries are preferable, as by giving birds their liberty, which is a more natural mode of existence, their habits can be studied to greater advantage.

First of all, I will give the dimensions of my bird-room, then my readers will be able to form a better idea of the structure. The dimensions are as follows: length, 36 feet; width, 14 feet; height, 15 feet; having a span roof. The portion of the room facing south, from guttering four feet down, is of thick glass, which is most important, as it admits plenty of light. The building is fixed on brick pillars, and one would naturally think that the room would be draughty from underneath; to obviate this, in the winter months, I have wooden slides to prevent any current of air underneath, but in the summer these are removed when air is much needed to cool the room.

The building is of pitch pine, being double-boarded tongued together, so that draught is out of the question; the whole of the inside is match-boarded, stained and varnished, so that, with the inside, there are three thicknesses of wood; the roof is also two boards in thickness, and contains a layer of felt, which tends to keep the room cool in the summer; the outer covering is galvanized iron. There is a six feet porch entrance, so that in opening the outer door of this (which is entirely separate from the door leading to the bird-room), the birds are not so much startled by anyone going into the room, as they would be if the door of the room opened directly out of doors, and another important point is that the room can be kept at a higher temperature during the winter. For ventilation, I have at each end near the roof sliding doors, which are easily regulated, to admit of necessary air. Being covered inside with perforated zinc, there is no danger of a bird making its escape.

As to the question of heating: some argue that the birds are best kept without any artificial heat. I am no advocate for a cold room. Directly one enters the bird-room to see birds shivering on their perches, is, I think, an indication that they are not comfortable. In the case of tropical birds I have noticed this particularly. I have tried several experiments, and have come to the conclusion that there is nothing equal to hot-water heating. I have two rows of pipes round the room, and by this means the building can be kept at any desired temperature, and by such an arrangement the room is always kept clean, and free from any objectionable odours, which are so detrimental to birds. The heating apparatus, which is of the "Burkitt" make, similar to the "Loughborough," is kept apart from the bird room, so that any fumes that may arise from the furnace cannot possibly get to the birds. This plan of heating I strongly recommend, being economical and clean, and attended with considerably less trouble than oil, or gas, stoves, which are in many instances unsafe amongst birds.

Now a few remarks on the internal arrangements. I have benches, composed of lath, placed two inches apart, making the width three feet, which are elevated three feet from the floor, and are on each side of the room. In the centre, I have a similar staging, but this is raised to four feet six inches. Ample space is left down both sides for any purpose. The cages (which stand upon these benches) are made specially to suit the different species, and there is sufficient room in each cage to allow the birds plenty of exercise. The bottoms of the cages have a plentiful supply of coarse grit and gravel, which is renewed every other day. The water and seed receptacles are attended to once daily, and by such attention I think our foreign birds can be made comfortable for many years, although confined in close quarters. Some birds that I brought from the West Indies twelve years ago, (one in particular, a good specimen of the Red

Throated Amazon), are looking as well as any birds that could be found in their native land; in fact, I may go further, and say that amongst my 50 Parrots, Parrakeets, and Cockatoos, I have not a single specimen looking any the worse for being made captive, but that every bird is in perfect health and plumage. But I must, if I may, be allowed to say, that much of this is owing to judicious feeding and careful attention; if kept otherwise, losses are certain to be of frequent occurrence. Clean water, the best seed, and comfortable apartments are most essential, if foreign birds are to be kept in health as cage-birds for a number of years. If treated otherwise the mortality will be a heavy one whoever may possess them. I never allow fresh importations to come into my bird-room direct, but subject them to fourteen days' quarantine, as often I have found that freshly imported birds bring infection, which would, doubtless, spread amongst the other birds.

As a remedy against vermin, I have tried several different plans, and have found nothing to equal a trained cat; this old favourite has exercised a protectorate over my birds for a number of years, and when master mouse puts in an appearance, his life is not worth much. There might be some difficulty in keeping a cat amongst the smaller species of birds. But mine would have something to contend with if she confronted one of my old cockatoos—I fear she would not come off conqueror.

I have endeavoured to describe my Bird-Room exactly as it is, and I think that each of us may glean here a little and there a little from the experience of others. I hope that this series of articles may bring about an interchange of ideas, that will be beneficial to all those who possess Bird-Rooms.

RARE FOREIGN BIRDS.

III.

THE MANY-COLOURED PARRAKEET.

By C. S. SIMPSON.

The Many-coloured Parrakeet is a member of the genus *Psephotus*, a group which contains but five species, all of which are confined to Australia. Four of these are occasionally seen in captivity, but none of them are common, while the relative rarity of each varies very much from time to time. At the present time, the Paradisa or Beautiful Parrakeet (*Psephotus pulcherrimus*) is practically unknown as a cage-bird, and the Red-rump (*P. hæmatonotus*) is almost as rare. The Blue-bonnet (*P. hæmatogaster*) is rather more common. Single specimens of the Many-coloured (*P. multicolor*) are occasionally to be obtained, but they never seem to be imported in any number.

This parrakeet has an unfortunate reputation. It is said to be very delicate and short lived in confinement; but it is probable that this opinion is to a great extent derived from the account given by Herr Wiener, and that other writers have simply copied his statements, without attempting to verify them by practical experience. My own knowledge is confined to some six specimens, all of which have lived for several years in confinement. I have only had one specimen myself, but this I obtained about two years ago, and have been able to keep it during that time in perfect health without the slightest difficulty.

The Many-coloured Parrakeet is an exceedingly beautiful bird. It is about 12 inches in length, and of a slender and elegant shape. The prevailing colour is a bright emerald green: the forehead and a band on each wing are yellow: there are patches of reddish chestnut on the occiput and the upper tail coverts: the abdomen and thighs are scarlet: the shoulders and under wing-coverts are brilliant verditer-blue, but this colour is not very noticeable in a cage, being hardly seen except when the wings are spread for flight. The hen is less brilliantly coloured, being of a yellowish-brown colour, with only an indication of the markings on the head and wings.

This bird is of a peaceable disposition in the Aviary. Here it shows to great advantage, being light and active in its movements, and running nimbly on the ground. It is very fond of bathing, and is by no means very susceptible to cold. Its diet consists mainly of canary-seed with a little hemp; it usually helps itself from the bread and milk saucer every morning, and it is very fond of apple, though it does not care for banana or other soft fruit. This species is said to be partly insectivorous when wild. It may be so, (probably most birds are) but mine never touches any description of animal food, though it has access to ants'-eggs and other "soft" diet. I have never heard of the Many-coloured Parrakeet breeding in confinement, but it seems probable that it would do so, if a pair could be isolated in a roomy Aviary.

RECENT BIRD SHOWS.

By REGINALD PHILLIPPS.

Seeing that our members are scattered far and wide, and that many of them, doubtless, have not visited the Exhibitions of Birds, recently held in London, it has occurred to me that a few words about some of the Foreign and British Birds exhibited may not be out of place in our magazine. For several reasons. I do not like Bird Shows; but I do like to see birds whenever I have an opportunity; and visiting the Shows occasionally helps one to keep pace with the times as it were, and to get a little idea of what foreign birds there are in the country.

I.

The London and Provincial Ornithological Society's Annual Exhibition, held in the Aquarium, Westminster, on October 30, 31, and November 1, 1894.

Concerning this Show, my remarks must, I fear, be rather sketchy, for a fortnight has passed, and I must write mostly from memory.

I visited the Aquarium on the morning of the 2nd day, and found, as one commonly does at Bird Shows, that the light was very bad. Few people were about, not even a catalogue vendor, so, avoiding a little group assembled around a loquacious Cockatoo, I watched for a brief space a lively Nuthatch, who played bo-peep with me from behind a piece of cork-bark, and I was not surprised to find that the judge had failed to "notice" him. A splendid Missel Thrush, exhibited by Mr. Wilson, was worthy of more than a passing glance: Missel Thrushes are remarkably nice birds when properly treated; and it is a wonder to me that they should so seldom be seen in captivity. I could not but stop for a moment to renew my acquaintance with Mr. Clayton's well-known Cornish Chough, no longer a chick by the way, which, as usual, was awarded a first. The sight of him touched a sore spot in my heart, for he reminded me of my own dear old "Corney," with whom I was compelled to part—because he made a noise forsooth, as a noisy neighbour informed me: he was just a little loquacious, as he had every right to be; but, alas! although howling cats have rights, sweet innocent Choughs have none. But a Cornish Chough, to be known and appreciated properly, must be kept in a garden, not in a cage. I was soon brought to a stop by the sight of a couple of birds for which I have the most affectionate regard, and which I have never before seen exhibited: these were the Ornamented (not Ornamental, I think) Lorikeets, *Trichoglossus ornatus*, exhibited by the energetic Hon. Secretary of the Cage Bird Club, an Aviculturist, who, having found that all is not gold that glitters, has burst the yellow fetters of canaryhood (forgive the word), and launched out into the well-nigh boundless expanse of the Foreign Bird World. These Lorikeets seemed in excellent health, and were awarded a first, although not in the best of plumage; and small wonder that their feathers were a little frayed, for when in health they are regular little sprites, perhaps demons would be the better word, full to the bursting-point of life and energy, and require a large place to be seen at their best. In a cage, their beauty is undeveloped and their buffoonery suppressed. But the wire bars

of a cage could not suppress the buffoonery of Miss Nutt's White-backed Piping Crow, who kept on shouting out "Who are you?" at the very top of his piping voice, occasionally varying the proceedings with "What d'you want?" He seemed intensely disgusted at the attention paid to a near neighbour, Mr. Camps' Great Salmon-crested Cockatoo, whose talking powers and friendly ways had attracted round him the little group I have already referred to. He seemed a very jolly bird, and had been awarded a second; but I could not see him well owing to the little crowd, which seemed to be composed, mostly if not entirely, of Aquarium stall-holders, and the truant catalogue seller, who, after the manner of his kind, was amusing himself at the expense of his masters. The sight of a catalogue in my hand created a little sensation among the genuine visitors to the Show. "Where did you get your catalogue, sir?" and I had to refer them to the Salmon-crest, who really had a great deal to say for himself.

On running my eye over the catalogue, I noticed I had somehow passed a Stanley Parrakeet; retracing my steps, expecting to find "the only Stanley," I found in its place a very ordinary Rosella, and felt aggrieved accordingly. But I recovered on finding that a White Jackdaw, exhibited as a British albino, had been "wrong-classed." It is comforting to find that the judges are at last waking up to the fact that these White Jackdaws are neither British nor albinos. I hope the Palace judges next February will pluck up courage, in this and some other matters, and do their duty. I have been told that judges are afraid of driving away exhibits if they do their duty: they certainly offend people now, but would probably offend fewer if they were firmer.

Another Aviculturist, Mr. Castellan, exhibited some nice little birds, and his Violet Tanager was worthy of more than a fourth. I am not fond of criticising other people, but I must say I think Foreign and British bird judges should give more credit than they usually do, to birds which are more or less difficult to feed, to keep in health, or to keep in plumage. However, I must admit that, when I saw this Tanager, the light was so bad that its upper parts looked nearly any colour but the right one. A Rock Pepler, exhibited by Mr. Zaché, seemed tumbling all to pieces; a few weeks before the Show, I had seen this bird looking well, and since I have seen it looking well; but at the Aquarium it was miserable: so much for the Bird Shows, and their effects on the birds.

I must conclude my brief account of this Show by adding that there was really a very fair number of birds, British and Foreign, many of excellent quality, but little that was rare, excepting the Ornamented Lorikeets. The Rock Pepler was but seldom seen in this country during many years, but latterly several have been imported. I must not omit mention of Mr. Camps' "Fiji Islander:" this individual bird has so often been to the front, that I was nearly forgetting how very seldom specimens are to be seen in our little island. Mr. Camps also is an Aviculturist.

(To be continued.)

(Our next number will contain Mr. Phillipps' account of the London Cage Bird Association's Show.)

CORRESPONDENCE.

THE SEX OF PARROTS.

SIR,—I should be glad if any member of the Avicultural Society would answer these two questions:

Have they observed that female Parrots pluck themselves more often than males?

Do female Parrots ever attempt to feed their owners or those they are fond of? I do not know that I can recollect any case of a Parrot, *I knew to*

be a hen, trying to feed its owner. It has occurred to me that it might be an indication of sex.

F. G. DUTTON.

Replies.

1.—So far as my experience is concerned with regard to Parrots plucking their feathers, I have found the males as bad as the females. I had three of the former sex (Amazons) that persisted in keeping the breast destitute of feathers. Also two Eclectus males were partial to this habit. One, however, discontinued plucking for a time, upon being introduced to one of the opposite sex as a companion. I do not believe the one sex more addicted to the habit than the other.

2.—Feeding its owner, is, I take it, disgorging food from the crop. The hen, I believe, does this as much as the cock. A Blue-fronted Amazon, an undoubted hen (having laid two years in succession), would commence feeding its owner almost directly it was handed from the cage: this, I think, is an indication of affection. I could give other instances of female Parrots acting in this manner. Tameness has much to do with Parrots feeding those who care for them.

H. T. T. CAMPS.

I have never had a Parrot or Parrakeet, which I knew to be a hen, that tried to feed its human friends from the crop. My Grey Parrot does so: this bird is an excellent talker, and I believe it to be a cock. A male Ring-neck does so most persistently. My Purple-capped Lory, which is most tame and affectionate, never attempts to feed me, nor does it talk: it is probably a female. I have two Amazons (*Chrysotis viridigenalis* and *C. albifrons*): the former is very tame, a poor talker, and never attempts to feed from the crop; nor does the latter, which is a bad-tempered bird and talks a little. I suspect they are both hens. Other Parrots and Parrakeets which I have, and of which I know the sex, are not tame enough to display this particular form of affection.

I have never had a Parrot that plucked itself; but I know of two which do so. They are both good talkers, and probably cocks.

C. S. SIMPSON.

THE YELLOW WAGTAIL.

SIR,—Does the Yellow Wagtail nest in this country?

Here (Berkshire) it appears late in the Summer, and comes on the conservatory roof for flies. I only observe it then, and never more than single specimens, and only for a few weeks.

E. E. THOYTS.

[The Yellow Wagtail is a regular Summer visitor to the British Islands, arriving early in April and leaving in September. In Cornwall and Devon, it is usually seen on migration: but from Somerset onwards, it is generally distributed as a breeding species throughout England and Wales, in suitable localities. The nest, built in the latter part of April and generally well concealed, is placed in a depression or small furrow of the ground in a meadow or corn-field; moss and dry grass being generally used for the exterior, while the lining may be of feathers, hair, rabbits'-down, or fine roots. The eggs, 4—6, are greyish-white mottled with clay-brown and have often some black hair-streaks.—*Saunders' Manual of British Birds.*]

THE SHOW QUESTION.

SIR,—Allow me as a Member of the Avicultural Society to give my vote *against* the proposal to run a Show in connection with the Society. I think it would be a great mistake to hamper the usefulness of the Society by employing the time of the committee, or the funds of the Society, for any such object. Personally, I do like to see a good Show of birds, but there are already enough Clubs and Societies arranging for such exhibitions. Rather let us strive by means of our Magazine to spread a knowledge of Aviculture.

J. C. POOL.

Avicultural Magazine,

BEING THE JOURNAL OF THE
 AVICULTURAL SOCIETY.

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THE ACCLIMATIZATION OF FOREIGN BIRDS.

By ARTHUR G. BUTLER, Ph.D., F.L.S., &c.

Acclimatization, as I understand it, signifies the acquirement by the inhabitant of one climate, of the power to resist the adverse conditions of another. This should be most easy to such species as have originated in a climate in which there are considerable variations of temperature or moisture; whether seasonal, or representing a difference between that of the day and night.

So far as I can see, there is no reason whatever why birds should not be as easily acclimatized as other animals, or plants; indeed, we know that British birds, when transported to Australia, readily adapt themselves to the altered conditions to which they are subjected: moreover, as regards the larger birds, a visit to our Zoological Gardens clearly demonstrates that the transfer from a warmer climate does not seriously affect them.

Are we then to infer that mere size gives a bird the power to resist cold? Such seems to be the prevalent opinion; but considering that a more rapid respiration largely compensates for decrease of bulk, this idea seems no more logical than that which I have often heard expressed, to the effect that Waxbills seem too small to be permitted to lay eggs! Indeed, if it were true, the Wren would be less hardy than the Blackbird, or the Blue-tit than the Ox-eye.

Undoubtedly to some birds the process of acclimatization is a trying one; therefore, many Aviculturists, rather than lose specimens in the effort to produce a vigorous stock, prefer to provide a tropical temperature throughout the year for the inhabitants of their Bird-rooms; thus, owing to the difficulty of combining heat with perfect ventilation apart from draught, these men often lose as many of their pampered children as those who follow the opposite system.

There can be little doubt that the prevalent opinion as to the difficulty of acclimatizing small foreign birds is based upon a false foundation. In the first place, small Finches are usually imported in crowds; many of them arrive in this country in an extremely emaciated and unhealthy condition. The association of two or three hundred little birds in a close cage, where they sit packed together almost like herrings in a barrel, throughout a long and perhaps rough sea journey, constantly surrounded by foul exhalations, with insufficient and unclean food and water, resulting in an incessant struggle for the barest necessities of life, naturally produces either disease or extreme weakness. Birds imported under these unfavourable conditions, if suddenly turned loose into a cold aviary, must necessarily suffer severely: being three parts dead already, it is no great marvel if the abrupt transfer from the close confinement in a stuffy cage (perhaps kept for weeks in a cook's cabin or an engine-room) to a chilly though airy home, rapidly develops the disease which has already marked down its victims, thereby accelerating their death. Thus the mistaken conclusion is arrived at, that if kept permanently in a heated room, the sufferers would have

recovered and lived for many years : whereas, in nine cases out of ten, they would not have survived many weeks.

Then again, all birds are not equally hardy ; some of them, as for instance the Mannikins, most of the Australian Grass-finches, the Ribbon and Saffron-finches, the Weavers, some of the little Grosbeaks, and the Indian Waxbills are more healthy and live longer under cool, than under warm treatment ; whereas, imported African Waxbills, Pintailed Nonpareils, Gouldian Finches, and some of the South American finches, require more warmth at the outset, and careful watching ; nevertheless, it does not therefore follow that their offspring cannot be brought up in a temperature which will render them more vigorous than their parents, provided that the aviarist be careful and patient in selecting his pairs for breeding purposes.

Is it not true that our most trying climate has produced a race which has overrun the earth ? Then again, is it not equally true that the effect of heated rooms upon some of the varieties of the Canary has unquestionably resulted in birds liable to succumb to all diseases to which flesh is heir, birds with constitutions so broken down by incessant pampering, that their lives hang on the most gossamer-like of threads ? Yet, under proper treatment for a few generations, even Canaries can be, and are, rendered so robust, that they are enabled to resist the most severe winters in open-air aviaries ; provided that they are protected against the north-easterly winds. An example fresh from the German or Norwich hot-houses, if subjected suddenly to far less trying conditions, develops tubercle immediately ; just as a Gouldian-finch, fresh from Northern Queensland, often does. The acclimatization of all birds with delicate constitutions must therefore, of necessity, be a gradual process.

I should judge that the first step in the acclimatization of delicate birds would be, to turn them at first into a moderately heated aviary ; and, at the approach of warm weather, to let them out into a second, open to the air. In the latter they should be encouraged to breed, and the resulting offspring, at the approach of cold weather, should be placed again in an enclosed aviary having a lower temperature than that to which their parents had originally been consigned. Year by year each succeeding generation might thus be gradually hardened, until eventually they were rendered sufficiently vigorous to dispense with artificial heat. Thus, by getting rid of the original delicate stock and only retaining the sturdiest for breeding purposes, it seems reasonable to believe that a strong race might be built up.

When we know, and this I have personally proved in several instances, that stove plants may be grown more vigorously and produce better flower-spikes under cool than under hot treatment, it is surely not presumptuous to believe that tropical birds may also, with proper attention, be brought into a like condition of robustness.

OUR BIRD-ROOMS AND AVIARIES.

III.

A BIRD-ROOM FOR FINCHES.

By H. R. FILLMER.

Mr. Phillipps has described a bird-room chiefly adapted for the requirements of large soft-billed birds ; Mr. Camps has shown us how a large collection of Parrots should be housed ; now it is the turn of the small fry : the little birds, which are certainly kept by a greater number of aviculturists than are the larger species.

I keep foreign *Fringilloid* birds only. I quite admit that Parrots and Insectivorous birds are more easily tamed, and more amusing ; but the noise of the one, and the smell of the other, make them equally unsuitable for my very small bird-room, and, moreover, I could not spare time to give that constant and careful attention which they (especially the soft-billed birds) require.

My bird-room is very small, meaning only 14ft. by 8ft. It is on the first floor, which I consider to be rather an advantage, as it is more out of the reach of cats and draughts, and (being close to my bed-room) more accessible the first thing in the morning and the last thing at night, than it would be if it were on the ground floor.

In order to exclude cats, and prevent the escape of any bird which may slip out of one of the aviaries, I have covered the outside of the window with wire netting. The whole of the window-frame is covered with one sheet of netting, so that the sashes can be raised or lowered as freely as if no netting were there. With the same object in view, I have made an inner door to the room, consisting of a light wooden frame covered with netting; this I keep closed when the outer door is left open for ventilation. Of course, window and door are never left open at the same time; but during the summer, either door or window is always left open, both day and night; however, I close the window at night, except in the very hottest weather. In winter, the room is heated by one of "Clarke's Syphon Gas-stoves," which I have found to be both effective and fairly economical. The light from this stove is sufficient to enable the birds to feed during the evening, and at about ten o'clock I cover it with a shade, which allows just sufficient light to enable the birds to avoid injuring themselves against the branches of trees, if they should be seized by a panic. In winter, I draw thick curtains across the window at night, which greatly assist in maintaining the temperature. A "Boyle's Ventilator" in the chimney-breast, a few inches below the ceiling, permits the vitiated air to escape from the room, while its ingenious construction effectually prevents the entrance of a cold down-draught. As my system of heating with "Clarke's Stove" is practically a hot-air system, I find that in very cold weather this ventilator allows a too rapid escape of the hot air; I have, therefore, made an apparatus by means of which the front of the ventilator can be opened or closed at will, by a cord. In winter, I endeavour to keep the temperature near to, but slightly below, 60 degrees; as a matter of fact it is often much lower than this, but so long as it remains above 50 I am satisfied, and prefer a well-ventilated room at 52° to a stuffy one at 58°. Very occasionally, in severe weather, the temperature will fall below 50°, but I endeavour to prevent this. I am perfectly aware that almost all foreign birds will survive in a much lower temperature; but it is not natural to them, and they are not happy in it. Experiments made to ascertain the minimum amount of heat which will suffice to keep life in a bird, seem to me no more humane than experiments made to ascertain the minimum amount of food upon which it will continue to exist.

In this room I have built five aviaries, and have no space for any more. Two of these are quite small, one being built over the other—these are really little more than large cages. The other three reach from floor to ceiling, which makes them upwards of nine feet in height; they are about three feet deep, and in length measure respectively 4ft., 5ft. and 7ft. These aviaries are entirely "home-made," and are constructed of a light wooden framework, covered with galvanized wire netting (half-inch mesh). The framework I made of "slate-battens," which are narrow strips of deal measuring about 2in. by 1in. (in section). For door-frames and some other parts, I used "tile-battens," which measure about 1in. by 1in. To prevent the seed-husks from blowing about the room, I have enclosed the lower part of the aviaries with half-inch boards to the height of 9 inches from the floor. In the upper part of the aviaries, to the depth of nearly 2 feet from the ceiling, the netting is replaced by thin boards—this renders the upper portion of the aviaries much more private than it would otherwise be, and in that part I hang the nest boxes. This plan of boarding the upper part of the aviaries, I adopted by Mr. Swaysland's advice, and I consider it a most important improvement in aviary building; in a well-lighted room it does not render the aviaries dark, as might be imagined.

For perches I use large branches of trees; the birds much prefer these to planed perches, and they have a better appearance. I think they prevent quarrelling, as each bird can secure a twig to itself; for when on a

straight perch, many birds seem unable to resist the temptation to run along it and drive all the other birds off.

Before I commenced my aviaries, the floor of the room was covered with linoleum, and as this would have been useless for any other purpose if I had removed it, I allowed it to remain and form the bottom of the aviaries, and I find it makes a fairly good flooring. Match-boarding, with the smooth side uppermost, would make a better floor, and if soft-billed birds be kept it is better to cover the floor with sheet zinc or tin-plate. I spread fine gravel over the floor, to the depth of about half-an-inch, and once a fortnight I put it through a sieve sufficiently fine to retain the seed-husks and dirt. Every few months, the gravel is entirely removed and replaced by fresh - it would, of course, be better to do this every fortnight; but gravel costs me sixpence per gallon, so I can't afford to change it so often.

I keep the seed in separate open glass vessels on the floor of the aviaries, taking care to place them in a part where there are no overhanging branches. I let my birds have a constant supply of white millet, Indian millet, canary-seed and paddy. For water vessels, I use the old-fashioned fountains; they require to be cleaned every few weeks, by shaking a little gravel and water in them. A piece of cuttle-bone hangs in each aviary.

I use cages only for sick and quarrelsome birds.

It will be seen that most of the arrangements of my bird-room would be utterly unsuitable if it were intended to be inhabited by such birds as are kept by Mr. Phillipps or Mr. Camps; but for small *fringilloid* foreign birds it answers very well. Its chief disadvantage is its small size, which necessitates small aviaries; but most of its inmates have very feeble powers of flight, and I do not think that larger aviaries would add greatly to their happiness.

The Secretary would be glad to hear from any Members willing to contribute to this series.

RARE FOREIGN BIRDS.

IV.

THE CHINESE BLUE PIE.

By REGINALD PHILLIPPS.

There appear to be but five well-established varieties of the Blue Pie (*Urocissa*) known to naturalists, all to be found in a tract of country comprising the Himalayas, parts of Burma and Siam, China, &c. They bear a strong family likeness to one another, and may be readily distinguished from other species by their size, length of tail, blue or bluish colours (mostly of the upper parts only), by the black head and neck relieved by a lighter colour in the occipital regions, and by the brilliant orange, red, or yellow of the bill and legs.

I have not myself heard of more than two of these varieties having been brought alive to this country; and even these two are so rarely seen that to the majority they are unknown, and to the few they are, for the most part, so far unknown that, to whichever variety a specimen may happen to belong, it is called a "Chinese Blue Pie." As a matter of fact, the bird most commonly, but actually very uncommonly, met with in England, so far as my own personal observations go, is the Siamese, or Great-billed Blue Pie, *Urocissa magnirostris*. It is not of this bird, however, but of the true Chinese Blue Pie, *Urocissa erythrorhyncha*, that I would now say a few words for the benefit of my fellow aviculturists.

The only living specimen of *Urocissa erythrorhyncha* (often, but not so well, called *U. sinensis*) that I can positively say I have ever seen, came into my hands more than seven years ago, and is still in the enjoyment of the most perfect health. It is a female, and measures some 20 inches in total length, of which the tail claims 15 inches. The head, face, neck, and upper breast are of a rich black, relieved by a lavender-coloured stream, which

flows over the crown, occiput, and nape, the long head feathers, which almost form a crest, being erectable at will. The under parts of the body, and the under tail coverts, are cream-white, the creamy tinge fading not very long after moult. The upper parts of the body vary much at different times and in different lights, but are mostly blue and blue-grey; some of the blue tints are so delicate that they can be seen only in a bright light. The primaries are chiefly brown, with blue outer webs; the secondaries, however, have a white, or cream-white, tip. These latter, with the upper tail coverts which fade into whitish but end up with black, and the blue tail feathers which are broadly tipped with black and white, form a striking feature in the plumage of the bird when viewed from behind. The two central tail feathers are much longer than the others, drooping downwards towards their ends, and want the subterminal band of black. The effect of the black and white bands across the ends of the tail feathers is fine also when the bird is viewed from the front (especially if it be above the spectator), owing to the unequal lengths of these feathers, which are so cunningly arranged as to allow of the black and white markings being seen, one above another in regular succession, on either side of the under tail, the two long central feathers, with their soft, white, drooping ends, completing the picture. The eye is of a beautifully soft reddish brown, almost lake; and the bright coral bill, legs, and toes, form a conspicuous part of the adornment of the bird.

Whilst flying it is very attractive, spreading out its tail to its full breadth, and almost sailing through the air; and altogether the Chinese Blue Pie is an exceptionally handsome bird when in a large place, but quite wasted when confined in a cage.

It is decidedly delicate: but this particular bird has become so far accustomed to our climate that she can be allowed out for a fly, to advantage, in any but the severest weather; and all through the summer she is entirely out of doors.

Cherry, for that is her name, is a great pet, and delights in human companionship, and always comes to the front to be admired and caressed. With a friend she will be perfectly quiet, and is fond of being tickled under the chin. Such a liberty from a stranger is promptly resented; and she either keeps out of his reach or receives the offending digit with her bill; rarely will she allow herself to be touched with a gloved hand. Her great delight is to slip into the house, when she rushes to the stairs, screaming with all her might for the purpose of attracting attention, and then hops up, keeping just ahead of her pursuer, until she reaches the highest landing; at this point she turns and endeavours to dart down over his head—and will continue at this little game for as long as you may have patience to put up with it.

Cherry is a very careful body, so much so that ill-natured people might call her greedy. As soon as the food saucers are put out she rushes from one to another, and collects every particle of meat or other tasty food she can lay her "hands" on, until her mouth is distended to its utmost stretch; and then she proceeds to stow away her prizes in different holes and corners. Occasionally, when a great friend visits the aviary, she will unearth one of these dainty morsels, and bring it as an offering to this highly favoured one. She loves not feathered companions, and, although usually behaving well, will sometimes be very spiteful in the bird-room; in the aviary she has so much to do with looking after her hidden treasures that she rarely meddles with the birds there, unless they belong to one or other of the below-mentioned tabooed species. To the Drongos (*Dissemurus paradiseus*), of whichever sex, she is uniformly attentive and affectionate, even to the length of feeding them: this is the one exception. The different varieties of the Mynah Starling she always hated with an undying hate: their chattering tongues, perpetually on the wag, and upstart ways, she could not brook; and she never forgave nor forgot the circumstance that once during her moult, having been allowed into their aviary, they combined forces against her and gave her a humiliating roll in the mud. The Mynahs have long ago been sent away; but she has since transferred

her hatred to every member of the *Brothergys* family: and it has been found necessary to remove the latter to a distant room; but even the sound of their voices for a long time goaded her to madness. As her mistress says, "Cherry hates every thing with a long tongue."

She has many pretty whistles and chuckles, and, like her human sisters, occasionally indulges in the luxury of a good scream.

Cherry is very conscious of her own perfections, and has always been a great flirt; and many an avine heart has she broken in her time. For considerably over a twelvemonth, through winter and summer, the attentions paid to her by a White Jackdaw, who deserted his wife for her sake, were marvellous, and supremely ludicrous; but the White Jackdaw developed into a very rough suitor, and pressed his claims so fiercely that Cherry eventually became terrified at the spirit she had raised. To hinder her from flying away he used perpetually to be seizing hold of any article of Cherry's attire that came first to hand, which was usually the tail—so long as it lasted; but Cherry became tailless, and promised soon to become featherless; and the old Turk had to be dismissed from the aviary. During the last eight months or so a Hunting Cissa has been doing his best to soften Cherry's heart; but the arrogant beauty will not look at him; and he is as much afraid of her as Bailie Nicol Jarvie was of Rob Roy's wife, and dare not approach within some feet of her. Last spring Cherry commenced nest-building on her own account, but all her efforts were gnawed to pieces by some Parrakeets; the Hunter remembers this nesting business and keeps up heart, and, from a safe distance, chuckles away at her whenever she approaches.

If I were to write all I know, and feel inclined to write, about this bird, I should have to keep on for another six weeks, more or less, and Mr. Editor might protest; but I am glad to have had an opportunity, even in this sketchy way, of introducing to your notice our beloved Cherry.

THE MIGRATION OF BIRDS.

BY SEPTIMUS PERKINS.

Why do some birds migrate, while others do not? Why do some species leave us in hot weather when food is still plentiful, while others stay with us late into the autumn? These are questions with which every bird-lover has at some time or other puzzled his brains. Perhaps none of us yet know enough of the subject to give final and complete answers, yet recent researches have thrown a great deal of light on the matter.

It is quite clear that the arrival or departure of the migratory birds is not *directly* influenced to any great extent by the presence or absence of food. I mean that the true migrants do not remain in their summer quarters until food begins to fail and then seek other climes, nor do they remain in their winter retreat just so long, and so long only, as food is scarce in the country where they breed. Many of our summer migrants leave England at a time when insect food is abundant; but whether food be abundant or scarce, and whether the weather be cold or warm for the time of year, off they go at their appointed time. But although the movements of the migrants are not much influenced by the food supply in any particular year, or any particular series of years, yet undoubtedly the food question is the real ultimate cause of their wanderings. This may seem a little paradoxical, so let me explain. There was a time, not so very long ago in the geological sense, when few (if any) of our present European birds were to be found in Europe; and this not because the present species were necessarily then non-existent, but because of the intense cold which prevailed in the Northern Hemisphere during the glacial period. At the close of this period the region of ice and snow gradually retreated towards the pole, and as the climate became more endurable the birds followed on its margin, northwards. But those which came north in the summer, found it impossible to remain in the winter; they therefore wandered in search of food, and those which flew south again, survived, and returned to the north again in the spring, while those which flew in other directions perished. Thus, only those birds

which flew south at the approach of cold weather and scarcity of food survived and left descendants; and what in the ancestor was only a haphazard flight from a cold and foodless region, became in the offspring, after many generations, an ingrained habit or tendency, which we call instinct.

It may appear strange that the birds should leave the warm countries where they winter and come north to breed. The reasons which induced their ancestors to go north in the spring were probably the pressure of numbers and the consequent scarcity of food, and the dryness and barrenness of the warm countries during the summer months.

Migratory birds chiefly belong to the insectivorous class; birds which can subsist on grain and berries can generally manage to maintain themselves in their native country all the year round.

One very curious point in connection with the migration of birds is that those birds which breed farthest to the north generally winter farthest to the south. Thus, some Arctic birds, which rear their young in those parts of North America which lie within the Arctic circle, spend the winter in the more southern portion of South America.

Birds on their migration usually travel by night, and often at a great elevation in the air. How they know their way is a mystery. There used to be a notion current that they were possessed of some wonderful instinct, or sixth sense, which enabled them to direct their course infallibly to their destination, but this idea is now exploded. They sometimes make strange mistakes and wander thousands of miles out of their course. More than once a bird whose home is in Asia has turned up in our own island. Probably such birds have been confused and turned out of their course by storms.

The course pursued by birds on their migration is a very ancient one, sometimes more ancient and permanent than the land over which they fly. Their three great ways across the Mediterranean are by the Straits of Gibraltar, by Corsica Sardinia and Tunis, and by Malta and Tripoli; and along these routes the land was once continuous. They still follow the Malta and Tripoli route, although for many thousands of years it has led them across the sea at a point where it is broader than in many other places which they could choose. But land once stretched from Italy to Africa, through Sicily, Malta, and Tripoli; the birds adopted that route and still follow it although the land is gone.

It thus appears that though the search for food was what originally caused the migration of the ancestors of our travelling birds, their descendants now migrate from habit, which has in their case truly become second nature, and not generally with any conscious intention of searching for food. If any individuals show a tendency to abandon the habit by remaining in their summer home during the winter, they are almost certain to perish from hunger before the next breeding season, so that they leave no descendants, and the strength of the hereditary tendency in the race is unimpaired.

Besides the true migrants there are many birds which travel long distances in search of food; these are probably in the same stage as the ancestors of our migrants. If food be abundant in the neighbourhood of their breeding place they remain there all the year; but if scarce they fly to more bountiful regions. Their course is uncertain in extent and direction, and totally different from true migration.

NOTE BY DR. BUTLER.

I am very glad to see that Mr. Perkins has brought to light the facts respecting the general migration of birds which scientific research has revealed.

It must, however, be borne in mind that the rules laid down are not absolute, for many seed-eating birds are migratory whilst many insectivorous birds are resident.

Moreover many of our winter visitors are mainly insectivorous birds.

Lastly, in mild winters not a few migratory species delay their departure from our shores, and stragglers even pass the winter with us.

Mr. Perkins' paper will form a very good introduction to an article which will, I hope, shortly appear in our Magazine on the British Migratory Cage Birds.

A. G. BUTLER.

RECENT BIRD SHOWS.

By REGINALD PHILLIPPS.

(Continued from page 27).

II.

The London Cage Bird Association's Annual Show at "Lord's," November 10 and 12, 1894.

I visited "Lord's" on the morning of the last day of the Show, in a downpour of rain; and so dark was the room, or, at any rate, a number of the cages which were placed sideways to the light that, although I could recognise the species of bird encaged, I could do little more. Many of the Foreign Birds, happily, were in more fortunate positions, if I may except a few which were shelved a "little" too high for examination. The number of exhibits (remember I do not refer to the Canaries) was disappointing, but the quality was good: however, excepting Mr. Betts' Ornamented Lorickeets, rare birds there were none. Seeing how small the classes were, I think the authorities might have managed to get the numbers on the cages into agreement with the catalogue. There were several annoying blunders; and in one of the Mule classes I cannot think that the parentage of two birds, as published in the catalogue, was correct: having found the catalogue inaccurate in other cases, I had no confidence in its statements in this case, and think that the birds must have been crossed: and on a point of this kind any doubt constitutes a grievance.

Owing to the scarcity of entries some of the classes had been cancelled, and others contained only three or four birds. Thus the thought arises:—What is the value of a First, unless it be known how many birds are competing? A winner here can truthfully say that such and such a bird took the first prize; but the same bird in a larger class might have been ignored. "Well, Jack, how did you get on with your lessons?" "Oh! tip-top, uncle." "Where were you in your class?" "Second, uncle." "Hem! and how many were there in the class?" "Two, uncle." And so Jack loses his half-crown. Let me cite a case. In class 80 there were only three very common birds exhibited, a Chaffinch, a Yellow Bunting, and a Hawfinch, and these were awarded 1st, 2nd, and 3rd, in the order named, according to the cards on the cages; but even over these three birds someone had blundered, for the catalogue put the Bunting first. Here the winner of the third prize was actually at the bottom of the class, and in my judgment was not worthy of a prize at all. The third prize should have been withheld, and a fourth prize given instead in Class 86, where more than one bird was entitled to it by merit.

But to proceed. In Class 83, for any other variety of British Bird, Mr. Coggin won an easy first with a charming Grey Wagtail, and Mr. Cook's Whinchat, which came next, was worthy of much praise. According to the catalogue, and to those papers which give accounts of Shows only from the catalogues, the third prize was awarded to a Redwing: but a very ordinary Nightingale was the only tenant of the cage. I liked the look of Mr. Smith's Nightingale better: it had been awarded v.h.c., along with a Nuthatch and a Blackcap. A Robin was marked h.c.—highly condemned. If people must exhibit birds, at least let them be placed in fitting receptacles: let me refer the owner of this poor creature to the cage in which the Grey Wagtail was exhibited. Small wonder that so many people raise their voices against the keeping of Cage Birds. A Swallow was absent from its place on sick leave: comment is superfluous. Classes 84 and 85 had been cancelled; but 86, for small Foreigners, looked up with eleven entries and ten cages (of which four contained pairs) and the customary error in the catalogue. Here Mr. Castellan's Violet Tanager came first: it was in decidedly better trim than when I had seen it at the Aquarium, where it stood fourth in a class of about twenty-seven. The second prize was carried off by Mr. Steele, with a healthy-looking pair of Cuba Finches, a little rough in feather. I hardly think Mr. Castellan's Pekin Robin should have been placed next; it was a very nice little bird, but it is so common, and so easily kept. Its colour was poor, but perhaps this was a recommendation,

for those brilliant Pekins exhibited at the Palace are usually, probably always, colour-fed birds. As I have already inferred, there were other birds in this class well worthy of a fourth prize. Mr. Castellan's Parson Finch, v.h.c., was in excellent trim, and a pair of Java Sparrows belonging to Mr. Steele were as tight as drums. The latter gentleman exhibited a good pair of Chestnut Finches, but one of the birds was a little out of sorts. According to the cages these latter had been awarded v.h.c., but the catalogue was of a different opinion. A cock Red-headed Gouldian Finch, and two Orange Weavers, made up what was quite a nice little class. Forgive me, I am forgetting: for Mr. Steele likewise exhibited a good-looking pair of Ribbon Finches, which were commended. Class 87, for larger Foreign Birds, had only four entries. Mr. Stevens came first with a Lesser Hill Mynah, and Mr. Steele followed close behind, 2nd, 3rd, and v.h.c., with a Green Cardinal, a Red-crested Cardinal, and a Common, or Indian, Mynah. All were thoroughly good birds, so far as I could see, or rather had been, for the 1st prize winner was looking none the better for the Show.

With Class 88, for any variety of Parrot or Parrakeet, I must bring my remarks to a close. Let me be charitable, and suppose that I had visited the Show too early in the day, and before the cages had been arranged, for it took me a long time to make either head or tail of it. According to the catalogue there should have been five entries:—No. 1, not named, third; No. 2, Parrakeet, h.c.; No. 3, Budgerigar, v.h.c.; No. 4, Ornamented Lorikeets, first; No. 5, Green Parrot, second. The Budgerigar was not visible (I found it subsequently in another place); and, if it had not been for the Lorikeets, I should have failed to identify the class, for the four cages were skied, and all the labels on the tops and out of sight. I mourned over the Lorikeets; all their spirits had evaporated since I had seen them at the Aquarium, and one looked "poorly." Doubtless it is a fine thing to carry off first prizes: I can quite understand the feeling; but birds of this kind cannot stand knocking about with impunity, and, when lost, often cannot be replaced for years and years. The other birds in the class were all right, I dare say, but I am not a Giraffe. A Grey Parrot presumably was No. 1; a Ring Neck seemed to fit into place No. 2; Mr. Castellan's Budgerigar, found afterwards, was a good bird; No. 4 was represented by Mr. Betts' Lorikeets, which, as I have already said, took the first prize; and No. 5 seemed to be a nice hen Green Conure (*Conurus pavua*.)

BRITISH BIRDS WE HAVE KEPT.

I.

THE GREY WAGTAIL.

BY THOMAS MARSHALL.

The Grey Wagtail (*Motacilla boarula*), is a bird that is less often seen in captivity than its brethren, the Yellow and Pied species, this is probably due to its being much more rare than either, and to its retiring disposition.

Its favourite haunts are in the neighbourhood of inland streams and lakes, by the sides of which it builds its nest, and has generally two broods in the season, of four to six, and occasionally seven, young ones. The nest is composed of grasses and leaves somewhat loosely put together, and lined with wool or hair. The eggs are bluish white in colour, and are marked with small grey specks and larger brown spots all over.

Its food consists of such insects as abound in the moist places which it frequents, water flies and their larvæ, and the smaller aquatic mollusca.

The Grey Wagtail is partially migratory, travelling northward as the weather gets warmer, and returning south again in the autumn. Unlike the other members of the same family it is solitary in its habits, more than a single pair being seldom seen together.

In plumage the sexes resemble each other very much, the difference being more apparent in the breeding season when the brighter yellow of the under parts (which justifies another scientific name (*M. Sulphurea*), being

given) and the larger and deeper coloured "bib" of the male is sufficient to enable one to decide the point. The plumage generally may be described as grey, tinged with green, chin and throat black, the wings and tail are a mixture of dusky black, grey, and yellow; the legs are small and delicate.

It will thus be seen that the Grey Wagtail is a bird of no mean order of beauty, while its gracefulness is simply indescribable, and the undulations of the abnormally long tail, which seems to act as a counterpoise to the slim and delicately formed body, do much to enhance its attractiveness.

The specimen in my possession at the present time is confined in an aviary about six feet long by four feet high and wide, with a furze bush at each end, on the top of which it likes to perch. It has for companions, a Wheatear, a Whinchat, and a Titlark, and during the three months it has been in captivity it has thrived well on a diet of ant's eggs, hard-boiled egg, and stale bread crumbs in about equal parts, with half-a-dozen or so meal-worms daily. It soon became tame, and lives on perfectly amicable terms with its companions.

I have not heard of these birds breeding in confinement, except at the Zoological Gardens, London, where there is a very fine hybrid between the Grey and the Pied species.

There is another species of the Grey Wagtail called the Grey-headed, *M. neglecta*, but it is not, I believe, indigenous to Western Europe, and is considered by some authorities to be only a variety of the Grey Wagtail proper.

The Secretary would be glad to hear from any Members willing to contribute to this series.

CORRESPONDENCE.

HAWKS AND GULLS.

SIR,—While walking last November near one of the beautiful bays in Guernsey, I saw eight gulls feeding in a field. As I stopped to watch them, a kestrel, which I had previously noticed roaming along the cliffs, suddenly appeared, and seemingly attracted by the gulls, remained suspended over them, supported by its outspread tail and quivering wings, in the manner peculiar to that bird. The gulls, evidently not liking this attention, dashed off, and endeavoured to mount above the hawk. It was a lovely sight, the white plumage of the gulls as they wheeled round and round, rising at a great pace, and the kestrel always above them; the sky cloudless. I watched them till my eyes ached, when they were the tiniest specks on the bright blue. Can you tell me if kestrels will attack gulls, and was it fear on the part of the latter that caused them to behave as I saw them?

A. CRAFER.

GOULDIAN FINCHES.

SIR,—Miss Llewelyn asks:—"Should Gouldian Finches be kept warm?" My own experience goes to prove that a medium temperature is best for them; but they cannot stand the direct rays of the sun. I believe I lost the little cock of my first pair through not knowing this. He was in beautiful plumage, and appeared in perfect health, when suddenly one day it was evident that something was the matter, and soon after he died. I quite believe it was a sort of sunstroke. After this I noticed, with others I had caged in the winter, that they always shewed signs of distress if the sun was shining directly upon them.

I have been told that they are found among the long grass and reeds of marsh-lands in Australia, where, of course, the air would be damp; so that probably a very dry atmosphere would not suit them.

Mine never shewed the least sign of suffering from cold, and when the cold of winter came, and I brought them from the aviary to the house, it was done rather for my own satisfaction than because they appeared to

need it. Two nests were built by my pair: the first in a large cage, the other in an aviary, and four eggs were laid in each; but all the eggs were clear.

M. D. SHARP.

[It would be interesting to know the *exact* temperature in which Miss Sharp keeps her Gouldian Finches during the winter.—H. R. F.]

THE TEMPERATURE OF THE BIRD ROOM.

SIR,—I am very much obliged for the replies to my questions. I am already acting upon the advice given, and am having some aviaries built in my bird-room which will, I hope, enable me to be more successful in breeding Zebra Finches next year. The Cardinals already look better on their more generous diet.

I am particularly interested in Mr. Phillipps' account of his bird-room, although his birds seem to be chiefly large, and mine are chiefly small. I should like to ask him a few questions, and perhaps his replies will be useful to others as well as to me. (1) At what temperature does he keep his bird-room during the winter? (2) Should foreign birds be encouraged to nest during the winter? (3) If, in spite of discouragement, they want to nest in winter-time, should they be separated? (4) What is (generally speaking) a sufficient temperature to maintain when the hardiest foreign birds, such as Ribbon Finches, Saffron Finches and Parson Finches, are breeding?

(5) On one little point I beg respectfully to differ from Mr. Phillipps: I think it is the duty of every true Aviculturist to endeavour so to keep his birds as to cause as little inconvenience as possible to the other members of his household. But perhaps Mr. Phillipps was only joking.

SEPTIMUS PERKINS.

Answers.

(1) 53 degrees—54 degrees Fahr.; in close weather, however, it runs higher; but any more delicate birds are usually kept warmer, in another room.

(2) No.

(3) In my opinion, as a general rule they should be separated.

(4) This depends very greatly on circumstances, and on what the individual birds have been accustomed to. Personally, I am quite satisfied that they are customarily kept too cold. The frequent deaths from egg-binding, inflammation, etc., are brought about, directly or indirectly, from too low a temperature, more often than from other causes. Birds flying about in a large place, in prime condition, and judiciously treated, will often breed successfully, for a time, in a cool aviary, but this seldom lasts long; at the second or third nest, the hen often dies. In my opinion, the nearer to 70 degrees they are kept the better.

(5) Agreed; but, joking apart, the ladies of the household should have some regard for the tastes and pursuits of the bread-winner of the family, who often has much to worry him, and needs relaxation. A man, if worth anything, must be occupied; and they should be thankful that his occupation is an innocent one, and not forget that, if he has his "fads," they have theirs also, which are very often childish and irritating in the eyes of a man: bear and forbear on *both* sides, if you please.

REGINALD PHILLIPPS.

NESTING OF THE ORANGE WEAVER.

SIR,—I have a beautiful Orange Bishop which, with his mate, had been in my possession three years without showing any signs of nesting or pairing till about a month ago. I then placed them in an aviary, about 3ft. by 4ft. and 7ft. high, all to themselves, with the Hartz cage, which they had chosen, in the front corner rather high, with its opening towards the further end, to ensure privacy. This change caused delay, but after a time the cock continued his nest-building with wood wool packing stuff. The nest is not artistically made, but perfectly smooth inside although not lined with

anything softer. Three days ago, on the 4th inst, I found a chance of looking in, as the birds had flown out into the room while I was giving them food and water. There was one blue egg. They soon returned, and till now the hen is sitting closely, and I suppose there are now about four eggs, although I cannot be sure.

The male, from being aggressively noisy and fussy, has become singularly quiet, gentle, and tame, moving about the aviary with an almost noiseless flight, and now and then giving a pretty little whispering chirp.

As I am most interested in these birds, I am writing to ask your kind advice as to what food to place in readiness by hatching time, which I suppose will be between the 14th and 21st. At present they have millet, canary, Indian millet, paddy rice, ants' eggs, yolk of eggs mixed with sponge cake and powdered Osborne biscuits, and two mealworms each. Is anything else required for the young?

LUCY E. PHILLIPS.

Reply.

You cannot do better than continue your present treatment. The food you are now supplying should be sufficient for the successful rearing of the young. You might, in addition, give soaked millet seed, which is made by pouring boiling water on the seed and allowing it to stand for an hour, when the water should be strained off. Osborne biscuits contain butter, and are, therefore apt to turn rancid. Sponge cake is more suitable for foreign birds than any kind of powdered biscuit. A little watercress may be given, but should first be scalded, and dried with a cloth. Weavers seldom breed in this country—no doubt you maintain a high temperature in your bird-room. On no account touch the nest or eggs, or try to look into the nest. Foreign birds much dislike any interference, they are quite unlike canaries in this respect.

H. R. FILLMER.

—————
BALDNESS.

SIR,—I should feel much obliged if you could give me a little advice on the following matter. I have in my sitting-room a pair of Diamond Sparrows, and one is continually plucking the neck of the other. Can you tell me how to prevent this, as with the exception of the neck of one they are in splendid plumage? They are kept in a 22in. flight cage, fed on millet (white and spray), and canary seed, with a mealworm or two once a week, and a pinch of Abraham's yolk of egg. There are no other birds in the same cage. Do you think that if I separated them for a short time it would do any good?

I find on referring to the Magazine (part I.) that Dr. Butler attributes baldness in Waxbills to the cold; this certainly is not the case with mine, as, if anything, my room is too warm.

HEDLEY SPEED.

Reply.

On their journey from Australia to England, Diamond Sparrows are so closely crowded together that plucking, as a hint from one uncomfortable bird to another to give him breathing space, becomes the rule; some consignments, consequently, arrive in a deplorable condition of nakedness.

In some individuals the tendency to pluck, thus acquired, becomes a habit, and the mate of such a bird has to suffer the consequence. The only chance of reforming a bird of this character is to give it some more useful occupation. Turn the pair into a large aviary, and supply nesting materials and receptacles. If no aviary is available, hang up a Hartz-Canary cage in the corner of their present dwelling and give them a handful of hay and a piece of cuttle-fish. Unless they are breeding, do not give mealworms (my Diamond Sparrows get nothing but seed).

Dr. Simpson (not I, though I agree with him) suggests that cold delays the reproduction of feathers which have been lost; but my Waxbills in a cold aviary never become bare.

A. G. BUTLER.

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OUR BIRD-ROOMS AND AVIARIES.

IV.

MY OUTDOOR AVIARIES.

BY JAMES COOPER.

As I have been very successful in my small way with my two outdoor aviaries, I think perhaps the readers of the "Avicultural Magazine" may like to have a few particulars as to how I have proceeded. I have been a bird lover for very many years, and have a fair collection of eggs (among which is a clutch with nest of what my brother considers to be the Brown-eyed Flycatcher, but I myself think it more likely to be one of the Warblers, and at any rate it is as yet unauthenticated). I also have a fair collection of stuffed subjects.

I often thought of trying an outdoor aviary, and about five years ago set to work to make one, with the aid of our village joiner. It consists of a covered house, and an outside flight which is also partly covered. The house is 12 feet wide by 6 feet deep, and the flight 12 feet wide and 12 feet deep. The house and flight are both 6 feet in height to the eaves, and 11 feet to the apex of the roof. The aviary faces east, and is boarded up on the north side.

The house is made of wood; a framework was first made of red wood (3 inches by 3 inches) covered outside with 1-inch floor boards both top and sides, and the inside lined with $\frac{3}{4}$ -inch match-boarding. The roof is covered with corrugated iron, beneath which is thick felting. The flight consists of iron hurdles made by Messrs. Boulton and Paul, of Norwich, and cost very little. I got the blacksmith to make an iron frame to rake with the roof of the house, which is a gable, not a "lean-to," and the whole was covered with $\frac{1}{2}$ -inch galvanized wire netting. Part of the flight is also roofed in with corrugated iron, and I consider this a great advantage, as many birds prefer being outside rather than in the house. The hurdles are fastened into stones, and as they are about 15 inches above the ordinary ground level, I built a brick wall in cement all round up to the bottom of the hurdles, which prevents rats from getting in. The house floor I laid with bricks and jointed in with cement. A part of the house is wired off, and there I keep the seed and other food, and it also forms a lobby so that there is no fear of a bird escaping. I put in a lot of rotten logs, and have now made a shelf round the wall, about 5 feet from the ground, so that no mice can reach it, and on this I have placed hollowed logs, oyster barrels, and cocoa-nuts husks. I especially recommend oyster barrels as nesting places, for in them I have bred numbers of Cockatiels and also Rosellas. The flight I have decorated with gorse bushes and thorn branches nailed up against the wooden walls. I also have heaps of gorse in the corners of both flight and house. The entrance to the house is a large opening in front 5 feet by 2 feet, and I also have a window in front, and one at the side, covered with netting.

I have a large artificial tree in the middle of the flight, but I find this can be overdone, as it takes away from the space which is required for flight, and, in fact, I told my man when building up the tree that he evidently thought he could beat nature at tree building, he found so many places for branches.

For water I made a concrete basin which I swill out every two or three days, and in frosty weather hack out with a joiner's adze. The floor of the flight is covered several inches deep with sea sand. In this aviary I have bred, besides Cockatiels and Rosellas, scores of Budgerigars and Zebra Finches and also a number of Californian Quails. I added another aviary to this on the same lines but with a small lean-to as a porch, and should like to make some more, as I find medium-sized ones to be very handy, and much to be preferred to large ones.

Given a wall, say 9 feet high, what we want to know is the cheapest and best way to build the best sort of aviaries. I don't like gables, as the gutters are so much trouble; but if we make a lean-to, how are we to cover part of the flight? My wall is 9 feet high, and I should like to let the roof fall over it, and if I put up, say, 6 aviaries, I should have a back passage up the houses like Boulton and Paul's "dog and poultry ranges," so as to get at all of them through one door. I recommend a number of aviaries rather than one large one, because many birds cannot possibly be kept together on account of fighting, and if dividing them up costs rather more it will pay in the long run, as I know from experience. Canaries live very well in these aviaries, but for breeding my experience is that they do far better in cages. My great trouble is mice, and I find that they can run, aye, gallop, through $\frac{1}{2}$ -inch mesh netting. Cannot we get one of the big firms to bring out a $\frac{3}{8}$ -inch mesh at a reasonable price? This would stop mice, and it need not be made of nearly such strong wire as $\frac{1}{2}$ -in: the difference of price at present between the two meshes is out of all proportion.

If any members have kept Parrots or Cockatoos in outdoor aviaries it would be interesting to have their experiences, and if I put up more aviaries I propose constructing one or two specially adapted for Parrots. I already have Rosy Cockatoos in one of mine, but they eat the woodwork, and I think this might be protected by iron. Why not have the walls covered with corrugated iron or plain sheets of galvanized iron if they can be got? Even Macaws might then be kept in such aviaries.

In conclusion, can any member suggest a way or means of importing from, say Australia, the rarer birds, such as Red Rumps, Turquoisines and other Parrakeets direct? There is no getting such from the dealers except at absurd prices. Can't Mr. Camps help us?

THE TRANSACTIONS OF THE CAGE BIRD CLUB.

Lecture by Dr. J. Denham Bradburn, delivered before the Members of the Cage Bird Club, at the Inns of Court Hotel, High Holborn, W.C., on Thursday, October 18th, 1894.

MULES.

Dr. Bradburn's lecture, as he himself says, is not a digest of the entire subject; indeed, it only samples Mule-breeding; the Goldfinch-Canary hybrid serving as a model. From so experienced a breeder, no lecture, however short and sketchy, can fail to be useful; and in the present one several good points are made which it is to be hoped that all who either heard the lecture delivered, or have read it in print, will profit by. He says, on p. 148, speaking of the production of hybrids from British Finches: "If you wish success you should run one cock Finch with three or four hens (not necessarily of the same species) in a large out-door aviary, and you may sometimes be successful." No breeder will for a moment question the wisdom of such a plan: if generally followed, I am not at all sure that many crosses, which Mule-breeders are always scoffing at as impossible, would not become realized facts. This brings me to another part of Dr. Bradburn's lecture, in which he says:—"You will not get Mules from the alliance of distinct genera like the Bramblefinch and Canary."

Mule-breeders are, as a class, obstinate in their opinions; they usually commence operations with certain ideas well engrafted upon their minds, the chief of which is—It is useless to attempt to cross any genus of Finches with the genus *Fringilla* or with any genus of Buntings; but, on the other

hand, you may make the attempt and hope for success if you cross any genus of Finches, excepting *Fringilla*, with the Grosbeaks. This law being like that of the Medes and Persians, which may not be altered, no effort is made to cross *Fringilla* with its allies, and the fact that hybrids are consequently not produced is regarded as proof that they cannot be.

A Greenfinch-Canary or Hawfinch-Canary Mule may be attempted; though the Grosbeaks and Finches are far more distinct than one genus of Fincies from another. Greenfinch-Canaries are therefore produced, and we hear of fertile Hawfinch-Canary eggs.

A second good point in Dr. Bradburn's lecture is his recommendation to breeders to select large Canary hens for Muling stock. This is very sensible advice; because it is well-known that bulk always tells on the show-bench. Many a good bird, in perfect form and feather, is passed over entirely, because it is not big enough; or because a competitor, nearly as good in other respects, is decidedly bigger. This rule (which greatly needs revising) holds not with mules only, but with many of our wild birds.

Two or three years ago, I asked a Mule-breeder whether a Linnet-Canary Mule which I had bred was worth showing: it was a neat and nicely marked bird, and a really fine songster, but he assured me it would not even get a commendation; it was too small. Is it any wonder that a few days later that bird committed suicide in his bath? Doubtless he felt disgraced.

Another good caution is worth giving here. "Don't be led away by silly advertisements and buy Muling hens at a high price, or you will be grievously disappointed." This is sound advice, not only for the reasons given by the Doctor, but also for another reason: a breeder who possesses a good muling hen is in no hurry to part with it unless it be pretty well played out.

In spite of the recommendation, for it amounts practically to that, not to attempt to cross soft-billed birds, or to go out of the beaten track in the matter of *Fringilla*, there cannot be a question that Dr. Bradburn's trust was not misplaced, and that he has thrown out a few useful hints.

A. G. BUTLER.

"A NEW DEPARTURE IN BAZAARS.—A BIRD SHOW. . . . The great feature of the bazaar was an exhibition of live foreign birds from a private collection, which is one of the best in the United Kingdom, kept by Mr. J. B. Housden, Brooklyn, Cator Road, Sydenham. All the proceeds went to the Bazaar Fund, which benefitted largely by the Show. On the first day alone some 400 visitors paid to view the exhibits, which were in a large well-lighted room. The room was tastefully decorated with flags and some very fine paintings of birds, some large cases of bright plumaged birds, and a fountain (with gold fish) throwing up its silvery sprays in the middle of the room; besides this, a large quantity of palms and flowering plants were placed between the cages and in different parts of the room, forming quite a tropical promenade: in fact, it was one of the prettiest sights we ever remember seeing. The birds, some 400 in number, were contained in about 80 cages and large aviaries, all labelled with the names, and the names of the countries they inhabit.

In one aviary were seventeen Rosella Parrakeets in gorgeous plumage, quite a living picture; in another four Golden Pheasants not less beautiful; in several other aviaries, seven very beautiful Blue-bearded Jays from South America; twenty Weaver and Whydah birds in full plumage, some with very long tails; Gouidian Finches; a fine collection of Foreign Pigeons and Doves, some as large as domestic fowls, others not much larger than Sparrows; Scarlet Tanagers, and other bright birds from South America. A special attraction was a pair of Indian Racket-tailed Drongos, which are extremely valuable birds; and last, but not least, were several Macaws on stands that guarded the entrance to the Show. Some of the peculiar nests of the Weaver birds were also to be seen."

[The above appeared a short time ago in a local Sydenham newspaper. We hear that Mr. Housden's birds have since been to another Bazaar, and to a local Flower Show].

BRITISH BIRDS WE HAVE KEPT.

II.

THE YELLOW WAGTAIL.

BY ARTHUR G. BUTLER, PH. D.

The Yellow Wagtail (*Motacilla raii*, Bonap.) frequents brickfields, especially when they have long lain disused and the inequalities have been converted by winter rains into pools of water; also arable land and saltings. In such places in Kent I have frequently met with it; once or twice in company with its very rare relative the Grey-headed Wagtail,* a bird having no real affinity to the Grey Wagtail (any more than to the Pied or White species) beyond the accident of its having a good deal of yellow in its colouring.

The natural food of the Yellow Wagtail consists of insects and their larvæ, woodlice, small mollusks and small fish; the nest is constructed of dried grasses and rootlets, and is lined with finer rootlets, horse-hair and fine grass-bents, or sometimes with green moss, rabbits' or sheeps' wool. The eggs vary in number from four to six, of a light greyish or greenish stone-colour; usually unmarked, but sometimes densely speckled with grey, somewhat after the manner of the eggs of the Pied Wagtail. Breeding-season, end of May and June. I have found a favourite site for the nest to be under a large grass tussock or plantain, growing on the sides of a long-deserted and overgrown gravel-pit; also in a hole in a bank, shelving down to some little frequented narrow footpath.

As a cage-bird, this summer immigrant is well-known; when first caught, it is somewhat wild and sulky; but if turned loose in an aviary with other insectivorous birds, it soon begins to feed, and becomes accustomed to its surroundings. If, however, the bird is intended for the show-bench, the task of its owner is not so easy: in a cage the bird will probably sulk for at least a day, eating nothing that may be offered to it: it must be placed in a box-cage with a piece of muslin fastened tightly over the front to prevent the bird from cutting its face; inside the cage must be placed a pan of water and two small open pans, one containing some form of egg-food, the other a dozen or so of lively mealworms: the bird when thoroughly hungry commences with the worms; but afterwards, in its search for more, pecks at the soft-food which it finally devours. When once it has tasted the latter, it is safe; but no attempt must be made to remove the muslin until the bird has become somewhat accustomed to confinement.

Personally, I prefer aviaries for insectivorous birds, it always seems hard to confine these graceful little things in cages after they have known freedom; one does not feel the same thing with regard to finches, and we know (as a matter of fact) that, after the first moult, all these birds become perfectly reconciled to their fate, just as though they had been reared from the nest; nevertheless, constant association with birds makes us look upon them as brethren, with similar thoughts and memories to our own; we grow poetical and fanciful, and are startled when we decide to set a prisoner free and find that he will not stir from his cage, but cries plaintively to have the door shut upon him—an experience I once had with a Blackbird!

My first Yellow Wagtail died soon after it was brought to me (I suspect the bird-catcher had half starved the poor thing before he brought it to me); the second was a well-seasoned bird, given to me by a gentleman, who had already kept it for some time; this is the bird of which I have already spoken as having passed a winter without any artificial heat, and having rendered himself so objectionable to my Grey Wagtail last spring, that I had to cage him: he died in the autumn, a short time after I had acquired a hen of his species, which is now living amicably with the Grey species in my cold aviary. Their only other companions are a Redstart and three Blossom-headed Parrakeets.

*I received a nest of the latter with six eggs, taken from the short wiry grass on the saltings at Kemsley near Sheppy, in May, 1885: both nest and eggs nearly resemble those of the ordinary Yellow Wagtail, but the short description of the mother bird sent with them clearly indicated the Grey-headed species, which I had also seen within a mile or two of Kemsley the previous year.

Pen and Pencil Sketches, by Henry Stacy Marks, R.A.

These two large volumes contain a number of charming illustrations, but the literary portion of the work is of considerably less merit. Still, although very slight, the book is readable and amusing, and the author relates some valuable reminiscences of Ruskin—these, indeed, are the only things of permanent interest which we can find in the book. After all, there is no reason why the autobiography of a popular artist should be specially interesting, but as Mr. Marks is a celebrated painter of birds, we expected to find a great deal about birds in his book, and are disappointed that so little space is devoted to the subject.

Mr. Marks tells us that he first thought of birds as a subject for his art during a tour in the South of France in 1863. He says,—“We stayed a night at Amiens at the Hôtel du Rhin. It was while walking early the next morning in the hotel garden that I suddenly came upon two ordinary white storks (*Ciconia alba*) at liberty, taking, as I was, a stroll before breakfast. I was fascinated at once, and followed them, sketch book in hand. That habit of standing on one leg, the dainty, stealthy, striding walk, the quaint clattering of the mandibles, and a certain weird, almost human expression, as if ‘the soul of our grandam might haply inhabit a bird,’ were all very novel and delightful to me. I really believe, in thinking of that morning, that the storks impressed me more than all the churches, town-halls, and even (I blush to confess it) the picture galleries that we entered. Since then the storks, the cranes, the herons, and all the long-legged birds, have been special favourites of mine, and in many respects I prefer them to the human model. They are less vain and less greedy, they don’t bore you with their conceit, or with long gossiping stories, without point, of the artists to whom they have sat. Nor do they expect you to be talkative and amusing for their benefit, or require seven shillings a day and a hot lunch as a slight recognition of their invaluable services.”

In 1888, Mr. Marks became a haunter of the Zoo, and soon established intimate relations with his feathered friends. “Many of the birds, I believe, learned actually to know me, and watched my proceedings with evident curiosity. Some of the parrots, with their monkey-like mischievous nature, resented having their portraits taken, and the moment that pencil and sketch-book appeared became very restless and fidgety or indulged in shrieking remonstrances. ‘Not to-day, thank you!’ they would scream to me, and if, inadvertently, I had left my water-bottle within reach of one of them, he would incontinently tip it over and spill the contents with malicious glee. Other less excitable natures resigned themselves to fate, and became profoundly indifferent, regarding me with extreme contempt from the corners of their half-closed eyes. But of all the birds who entirely ignore you, commend me to the eagle, who won’t even look at you; or to the adjutant-stork, who looks wiser than any bird ever was, and is the best sitter of them all. On what weighty problem is he pondering, in what profound reflection engaged, as he stands there, often on one leg only, motionless as a statue, for a quarter of an hour at a time? The parrot-house is a good winter studio, kept at a comfortable uniform temperature. The heat in summer makes it impracticable for any one not blessed with a constitution like a salamander, and the glaring, untempered sunshine is distracting. The walls, coloured with that vile French blue, so much affected by the modern house-painter, or decorator, as he persists in calling himself, form the worst possible back-ground for parrots and macaws. And the noise, as everyone knows, is deafening; the house is a pandemonium of discordant shrieks, squeals, and screeches. Visitors open the door, look in for a moment, and retire with their fingers stopping their ears. Artists subject to headache are driven to frenzy and despair, and though I have at various times spent so many hours among the parrots and cockatoos, I have never got accustomed to the frightful racket in which they so gleefully indulge.”

CORRESPONDENCE.

THE CHINGOLO SONG-SPARROW (*Zonotrichia pileata*), BODD.

SIR,—I have some birds which I cannot identify. The following is a description. Can you tell me what they are?

Size of Bramble Finch; shape similar. Colour,—back, wings and tail similar to Hedge Accentor, but rather lighter and richer brown; wing coverts tipped with white; ash-coloured stripe from bill over crown of head, with a line of black each side of it, then another ash-coloured line from bill over the eyes; a black line from eyes to beyond the ears; cheeks ash, with another black line underneath; throat white, shading off to dirty white on abdomen; chestnut round back of neck, ending abruptly each side upper part of breast with a black spot; raises a crest as much as a Skylark; and scratches in sand or seed like a Whydah; eyes and beak black.

C. P. ARTHUR.

Reply.

The Chingolo Song-Sparrow is a native of South and Central America, where it is quite a well-known and common bird; it is, however, I believe, only occasionally imported in mixed lots of small Finches, chiefly from Argentina. A few came over in very rough condition this year, but I never before knew the bird to be offered in the London market, though it must have come from time to time.

It is very pretty, though not gaudy in colouring; fond of washing like most of the American Buntings (to which group it belongs), somewhat masterful towards other birds; its crest is frequently raised, which adds to its beauty, and its Whydah-like habit of shuffling backwards in the seed-pan is interesting.

A. G. BUTLER.

GOULDIAN FINCHES.

SIR.—On the 18th July a pair of Blackheaded Gouldian Finches, in one of my outdoor aviaries, were seen carrying grass bents, &c., into a box under the roof, in which, on more than one occasion, a pair of Trumpeter Bullfinches had nested, and reared young in previous years. After a few days, seeing that little progress was made, I hung up a cocoa-nut husk, and supplied the little birds with plenty of nesting material, which was at once made use of. After being much from home I returned on August 25th and found that young birds had been heard in the nest for several days. In spite of drenching storms of rain, and a very low temperature, two young were eventually reared, and in the second week in September were safely caged with their parents, and taken into the house. Two addled eggs were left in the nest. During the time that the old ones were feeding their young, their usual diet of millet, canary seed and spray millet, and flowering grasses, was supplemented by yolk of egg and ants' eggs, but I never could see that these were taken. The young were, I believe, entirely reared on half-digested seed, and the flowers and half-ripe seeds of various kinds of grasses and chickweed. The cock bird took almost entire charge of the young, during the day at least, feeding them quite five times to every single visit of the hen bird. As soon as the young began to fly, the hen showed evident signs of going to nest again; and a pair of Redheads with them were also stimulated by her example, and began to carry material about. But in view of the miserable weather, and the rapidly shortening days, I thought it prudent to take them all into the house during the middle of September.

W. H. ST. QUINTIN.

A GIFT TO THE SOCIETY.

SIR,—With the view of spreading a knowledge of aviculture, and of benefiting the funds of the Society, and understanding that others may be willing to follow my example, either by Will or Gift:—

I hereby make a present of a pair of Barnard's Parrakeets (*Platyercus*

barnardi) to the Avicultural Society, subject to the following conditions:—

1.—The birds are to go to a *bona fide* Member of the Society (not a dealer) who can offer them a good home, preferably in an aviary.

2.—The birds, which are not to be separated, are to be allotted by the Executive Committee.

3.—If there should arise any doubts as to whom the birds should be allotted to, the Member who shall make the highest offer in cash shall have them, if he be an approved applicant in other respects. Nevertheless, the Committee may allot them to a Member who can offer them a good home, or is desirous of studying aviculture, whether he make the highest offer or not.

4.—The Allottee shall be expected, in any circumstances, to offer for the birds a sum sufficient to cover all expenses.

5.—Any profit made on the transfer of the birds is to go to the Funds of the Society.

DESCRIPTION OF THE BIRDS:—They are a pair, three, or possibly four, years old, have been flying loose for more than a year, and seem to be in good health and plumage. The only known defect is that recently the male was bitten on the foot by another Parrakeet. The wound, which cannot be examined while the birds are in the aviary, is painful, but possibly only of a temporary character. Last March the birds wanted to nest, but there was no available accommodation for them.

18th January, 1895.

REGINALD PHILLIPPS.

[The warmest thanks of the Society are due to Mr. Phillipps for this most generous gift. Any Member wishing to have the birds, and able to comply with the conditions laid down by the donor, must apply to the Secretary within 14 days, who will submit all applications to the Executive Committee.]

BEQUESTS TO THE SOCIETY.

THE BLACK-HEADED CAIAQUE, &c.

SIR,—I am slowly convalescing from typhoid fever, and during my seven weeks' imprisonment in bed, the question which constantly recurred to me was,—What will become of my feathered friends if I die? Will it be dealing fairly by them to pack them off wholesale to the dealer? For my birds, though not rare, are used to individual petting.

Grey Polly has found a future owner, but there is Jot, the jolly little Caiaque, with his pretty whistle and merry ways. A word about him. His chief amusement is to climb up the window-cord, sailor fashion, or to hop up stairs and have a good chuckle at the top, after which he will creep into my pocket and there go to sleep; and when I was ill in bed he would lay his little head confidently on the pillow and cuddle under the blankets. Eminently sociable, he will go to any stranger and very gently pinch ear or finger to test their powers of endurance, if they show signs of fear he has a hearty laugh at their expense, for vice he has none, and he never means to hurt them. He plays with balls and reels of cotton, and like Dr. Greene's Hawk-headed Parrot "Piuto," he will drive an imaginary wheelbarrow across the table with his beak. He is a good dancer, and loves to display his talent whenever a tune is whistled, preferably the "Old Kent Road." Bathing, splashing, and rubbing himself dry in a cloth is indulged in weekly, but to being bathed he will not submit, and to soap he has a decided objection.

His colours are black hat and boots; yellow cravat and knickerbockers; green coat; and white waistcoat—at least white it should be, and this is my only complaint, for it is not as white as his brother's, the "Master of the Buckhounds," exhibited by Mrs. Pretzman at last year's Palace Show, though when afterwards she came here to see Jot, she said Jot was in every other respect the nicer bird of the two. The eyes are bright red. He is as

much of an epicure as Mr. Phillipps' Chinese Blue Pie "Cherry," nothing good comes amiss, but if he can steal an almond, crack the shell, and scold till every bit of the kernel is gone, he is in his glory. I said his grey (which ought to have been white) waistcoat is his only drawback, but there is another. It is that he has never done moulting, fresh spikes are always coming out. I tried claret, by Mrs. Pretyman's advice, but Jot takes but one sip and shakes his head; while Parrish's chemical food he takes readily, and still he bristles.

Jot has been with me since the Foreign Bird Show at Brighton in October, 1893; he never tries to fly, and last autumn he used to accompany me along the Wish Parade at Eastbourne and round by the Duke's Drive. Reckless and fearless little creature, he will go at my fox terrier puppy and hold his own bravely too (but needless to say this pastime is not encouraged by me). A "kitten in feathers," that is the only way I can describe his most comical character. Enough about Jot.

Outside, in the garden aviary, are King Rufus and his Queen; Rosella, something of a flirt; Redstar, a New Zealand Parrakeet, the best mannered bird of the lot, with a funny little bleat like a kid; two talking Cockatiels, who, on retiring into their tub at night, remind each other that "Joey's a pretty bird, Joey's a beauty, pretty Joey, kiss, kiss Joey,"—pair of Lovebirds; Virginian Nightingales; Budgerigars with their infants; Bullfinches; Goldfinches; and Linnets. While in the house living harmoniously together are six Waxbills; a Paradise Whydah; a Combassou; a Nun; Spicebird; Zebra; and other small Finches,—none, however, so friendly, or so interesting as the larger birds. And the question I should like to ask is:—

Would it be feasible for Members of the Avicultural Society to bequeath their birds to the Society, to the mutual advantage of Birds and Bird-lovers?

Yours faithfully,

A MEMBER.

GOULDIAN FINCHES WITH DISEASED FEET.

SIR,—I have four Gouldian Finches—one pair Red-headed and one pair Black-headed. I bought them three months ago of a seafaring man who had brought them himself from Queensland. They were deep in the moult but seemed quite healthy. He told us that they had been fed on white millet, white bread, and lettuce. This regime I have generally followed, adding at times canary seed and green turf. They are kept in a big cage in a dry, sunny bird-room, which is heated on cold nights. They have long been well through the moult, but suffer from swelled feet. All have suffered in turn and by degrees have got better, except the Red-headed hen whose feet are bad now, and who seems to suffer much. None of their feet, however, have quite got back to the normal state. The birds were very fond of bathing, but since the first one had swelled feet I have stopped the bath in case the complaint might be rheumatism from a chill.

Can you make any suggestion as to treatment?

O. ERNEST CRESSWELL.

The following reply has been sent to Mr. Cresswell:—

Gouldian Finches are extremely liable to inflammation of the feet, which frequently terminates in gangrene, the toes becoming black and falling off. The only remedy I have found to be of any use is a saturated solution of boric acid. The latter may be purchased from any chemist, and dissolved by pouring boiling water on it, taking care to have rather more of the powder than the water will dissolve, to ensure the solution being strong enough. This may be kept in a bottle and used as required. To use it a small cup should be half filled with the solution, and an equal quantity of warm water added. The bird's feet should be held in this for about ten minutes at a time, twice (or better still, three times) a day.

C. S. SIMPSON.

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BRITISH BIRDS AT THE CRYSTAL PALACE SHOW.

I.

By ARTHUR G. BUTLER, PH. D., &c.

It is a thankless office to be a judge at any Show, and still more so to criticise the decisions of a judge: nevertheless, I have been asked to give some account of the British Birds at the Palace, and I find that I cannot do so without expressing my private opinion, which is, that the judging of the different Classes was not uniformly good: in some cases the best bird was recognised, in others—? The catalogue states that "Preference in judging will be given to recognised Cage-moulted Specimens." Yet in the Bullfinch Class the Extra Third alone of all the prize-winners was recognisable as Cage-moulted; all the others had blackish legs and were unnecessarily wild. I should certainly have awarded *First* to No. 1240, a grand steady bird, with fine cap and bright colouring, and *Second* to No. 1235, neither of which birds was noticed. The judging of the Goldfinches, though more difficult on account of the size of the Class, was decidedly better, Mr. Davies' bird was decidedly good and deserved its position; No. 1285, though steadier, should have been superseded by Major Fisher's bird (No. 1301) which was far finer in colouring, with brighter and broader blaze.

The Chaffinches were judged much as usual—the First (Mr. Winter's bird), was best in colouring, but had a droop in the wings, which rather spoilt it; the Second was good, but too wild, and the Third was not entitled to any notice; why birds of the previous year, which have not acquired the green cap, long pale beak, or broad white wing-bar, should always take Second or Third, when there are plenty of good adult birds to choose from, passes my comprehension.

The Linnets formed a very large and difficult Class, and, on the whole, the judging was satisfactory; I think, however, that the honours awarded to Mr. Jones' two birds might have been transposed with advantage. In the Redpolls, the Mealies carried the prizes, the English birds being only represented by two or three recently caught examples. By-the-way, should birds which do not breed in Great Britain be admitted? I thought it had been decided to exclude the Serin for this very reason.

None of the Siskins were exceptionally fine birds, and I should have been somewhat at a loss to judge them satisfactorily: there were, on the other hand, several good Skylarks and in my opinion the first prize should have been awarded to No. 1475, Mr. A. C. Alloway's bird; No. 1479 was somewhat too fat, and I cannot help thinking that the fact that this bird seemed unable to rise without elevating its crest, must have influenced the judge: a crest gives the heaviest bird an alert appearance. Mr. Bonhote's Robin was, perhaps, the best of a by no means remarkable Class, it showed unusual breadth of red on the breast, but appeared dull and listless; possibly the cold affected it.

There were some very handsome Blackbirds, and the prizes were fairly earned, but Mr. Lott's bird (No. 1517), deserved more than a simple commendation. In the Song-Thrushes, on the other hand, Mr. J. Joyner's bird

would, I think, have failed to take the highest rank in an inferior cage; to my mind No. 1532, which only took H.C., was in every respect more meritorious, its breast-spotting was far clearer and more regular. In the Starlings the heavy fat birds, mostly in summer livery, were elevated over the heads of those which had been kept at a normal temperature, which therefore were still in winter plumage; the long snaky head and slim alert carriage, which should constitute one of the chief points were entirely ignored.

Mr. Godfrey's Magpie well deserved its honours, as also in the Mule classes did Mr. Vale's Goldfinch-Greenfinch, though, for beauty, I should prefer Mr. Hart's Linnet-Bullfinch, which took the third prize: No. 1600 was not remarkable. Among the rare-feathered varieties, Mr. Herbert's White Blackbird was in fine form and deserved a Second; but the much rarer White Twite ought to have taken First.

In the "Any other variety" classes the Grey Wagtails were by no means extraordinary, neither of them being very distinctly marked; the Nuthatches generally, were "not at home" to visitors, the Bramble-Finch which took Third, was quite ordinary; as was the Missel-Thrush, which took First, and the Hawfinch which obtained Second. Mr. Clarkson's Ring-ouzel was decidedly better, but with a somewhat dull collar.

Among the Migratory birds, Mr. Cook's Nightingale and Mr. Wright's Lesser Whitethroat were far and away the best; the Wheatear which took first did not look well, and was by no means a specially fine example of the species.

II.

BY REGINALD PHILLIPPS.

The Pied and Albino Class was not so good as usual, but I must except the winner, Mrs. Herbert's Blackbird, a first class Albino; and Mr. Swailes' Cinnamon Redpoll, which came second, was a pretty little thing. In the next Class of 28, for any other variety of small British Bird, Mr. Laskey's nice Grey Wagtail came first, and Messrs. Francis's Nuthatch second; the latter declined to be interviewed. Four other Nuthatches were more brazen-faced, and none of them seemed to have had any cause for being ashamed of showing themselves. These birds make most interesting pets, if allowed a fair amount of liberty. There were several Yellowhammers, Miss Herbert's being catalogued as a Bramblefinch, and Mr. Ritson's as a Serin Finch; or, if Mr. Ritson's two birds were crossed, the Serin Finch resolved itself into a Common Bunting, if my old eyes did not deceive me. The Bearded Tits, shewn in two classes, were ignored by the judge, I know not why; although entered in classes for British Birds, probably not one was British. During the last two years or so, quite a number have been imported from the Netherlands; they are pretty little things. In the next Class, (15 exhibits,) for the larger A.O.V. British Birds, some good Missel Thrushes were exhibited, Messrs. Francis's coming first. There were two good Ring Ousels, Mr. Clarkson's taking the second prize: happy thought, these birds are migratory; what were they doing in this class? Some Hawfinches, a nice Long-eared Owl, and a seedy-looking cock Kestrel, also appeared here. Class 102 (Blackcap or Nightingale) was very poor, only six entries, and only three of the former and one of the latter present, and not calling for any special remark; but the next class, for any other species of migratory bird, brought 16 into the field, the first five entries being somewhat mixed. No. 1685, Shorelark, V.H.C., was absent when I paid my visit; 1686, fourth, Tree Pipit, was represented by a cock Redstart; 1687, Tree Pipit, was represented by a Shorelark. The owner of this bird seems to be unaware that the Shorelark should be supplied with perches or, at any rate, with a block or something; 1688, V.H.C., Shorelark, in a cage with perches arranged so that the bird could not run freely along the bottom. In consequence of this, its feet were clogged with dirt, and even had the appearance of being diseased; 1689, Scarlet Grosbeak, but no such bird was visible: perhaps it was the absent bird referred to above: but

cage 1689 was in position, and contained, I think, a Tree Pipit. No. 1690 was a Bearded Tit, and should, I think, have been noted "Wrong Class." I have already written about this bird under Class 98. And should a Waxwing, obtained from abroad, be in this class? Russian Goldfinches and Bullfinches are recognised as foreign; and the Waxwing is by no means a regular visitor to this country like the Fieldfare, Redwing, and Ring Ousel: forgive my little lit in mentioning the last, which in 1893 and 1894, as well as this year, has been placed in the wrong class and passed. I think Mr. Foster, this year, who has had one Waxwing disqualified, has been rather hardly treated, for all Waxwings are imported birds. There were three exhibited in this class last year, and each of the three cages was labelled "Disqualified," although each was "commended" in the catalogue. In 1893, one in a foreign class was "highly commended." As regards any doubtful bird regularly exhibited, especially when a change of front is made, some notice in the schedules should be given to exhibitors. The 1st prize in the Migratory Class was given to a nice, if rather small, Wheatear, the 2nd to a good cock Redstart, and the 3rd to a capital little Lesser White-throat. A nice Redwing and Fieldfare, the latter not often exhibited, and a very faintly marked Spotted Flycatcher, were likewise present. The latter should not be caged, especially by any one living in the country, for in its wild state it is so tame and confiding that its little ways, its very pretty little ways when free, can be watched and examined without the slightest difficulty; as often as not, it builds its nest against one's house, in almost any climbing shrub or tree, sometimes within reach of one's hand.

FOREIGN FINCHES AT THE CRYSTAL PALACE.

BY HORATIO R. FILLMER.

The Aviculturists who sent their birds to the Crystal Palace in the great frost of 1895 must possess a considerable amount of courage; nearly sixty entries in the Foreign classes were "absent"—and I am inclined to think that the owners of the absent entries exercised that discretion which is said to be the better part of valour. I have to deal with the so-called "small seed-eating" classes only (Classes 104 to 112). These contained 132 entries, 21 of which were absent; but as this number includes 42 foreign Goldfinches and Bullfinches, about the "points" of which I am densely ignorant, and about which I shall therefore preserve a discreet silence, I have only 69 exhibits to discuss. In Class 104 (Waxbills or Mannikins) were to be found 5 cages of Waxbills and 6 of Mannikins. The only birds of special interest were those exhibited by Mr. J. Smart, who secured both first and second prizes by his two entries. The first prize was awarded to a pair of very pretty and very rare Mannikins, the Rufous-backed Finch, a first cousin of the Bronze Mannikin. The second prize fell to a pair of equally rare Waxbills (*Bathilda ruficauda*), sometimes called the Red-headed Waxbill. Class 105 (Gouldian and Parrot Finches) contained only three, all Gouldians. The first prize was taken by a fine cock Red-head exhibited by the Rev. J. W. A. Mackenzie. In Class 106 (Java Sparrows) Dr. Butler was easily first with his really perfect pair of Grey Javas, bred in his own aviaries from a grey father and a white mother. Unfortunately the cold proved too much for one of these birds, which succumbed to laryngitis before the Show was opened to the public.

In Class 109 (Cardinals) Miss Jackson's well-known birds took their usual positions, her Green Cardinal being first, and her Red-crested second. The success of Miss Jackson's two birds, which have never touched any so-called "colour food," ought to be sufficient to demolish the theories of the colour feeders. Mrs. Vernon Brown's Crestless Cardinal, which was placed third, was a singularly beautiful bird—indeed this class, taken as a whole, reached a remarkably high standard of excellence. It contained 5 of the green, 4 of the red-crested, and 3 of the crestless species. Class 110 (Virginian Nightingales) was unusually full with 11 entries, two of which were absent. Mr. Babb's first entry struck me as being a very perfect bird.

The second prize fell to a hen—a bird which is very seldom exhibited. It was a really splendid show of Cardinal Grosbeaks.

Class III (Any kind of Foreign Finch or seed-eating bird not mentioned in Schedule). This is always a large class and sadly wants subdividing—it is to be hoped that when the much-needed division is made it will be based upon scientific principles. The most scientific and at the same time the really simplest plan would be to abolish Classes 104 and 111 and substitute for them three other Classes, one for the Fringillidæ (Grosbeaks, Finches and Buntings) single or pairs—one for the Ploceidæ or Ornamental Finches, single—and one for the Ploceidæ or Ornamental Finches, in pairs. The family Ploceidæ of course includes Mannikins, Waxbills, Weavers and Grass Finches, all of which groups merge into one another. The attempt now made at the Palace to form a separate class for Mannikins and Waxbills leads to great confusion, and endless disputes as to whether a particular bird really belongs to either of those groups. But to return to Class III. Here were 30 exhibits (there were 37 entries) to share 5 prizes. It will be most convenient to take the birds in catalogue order. Dr. Butler's two entries were reversed so that the V.H.C. intended for the Chingolo Song Sparrow appears by the catalogue to have been awarded to the Yellow-shouldered Marsh Troupial, which really received only H.C. The Rev. J. W. A. Mackenzie's Long-tailed Weaver, which very properly received the first prize, was a fine specimen of a very showy species—the bird and cage were cheap at the catalogue price of £5 5s. Mr. Babb exhibited two "pairs" of what he called Orange Bishops—it was singular that he should so describe them, for while both the hens were of the Orange species the cock in each case was an Oryx Weaver—a comparatively rare bird and much more valuable than the common Orange Weaver. Both entries were, of course, disqualified. Mr. Babb also exhibited a newly imported, immature, and shabby specimen of the rarely imported Black-headed Siskin (*chrysomitris icterica*), a really lovely bird when clean and in full plumage. Next came a Grey-necked Serin Finch (*serinus canicollis*). Mr. Smart's beautiful White-crested Finch (*donacola pectoralis*) took the third prize. Its owner is to be congratulated on the possession of some very uncommon birds. Mr. Smart also showed two cock Oryx Weavers—calling one of them a Grenadier Bishop and the other a Crimson-headed Bishop, the first is the ordinary dealers' name for the species, but "crimson-headed" is more applicable to the Flammiceps Weaver. Mrs. Hawkin's Bicheno's Finch, in perfect feather, received the fourth prize. She also exhibited a rather poor pair of Parson Finches and a single cock Combasou. Miss Hopwood's Saffron Finches were in splendid condition and I do not remember that I have ever seen better ones—they really deserved more than an H.C., but had, I suppose, to make way for rarer birds. Mr. Arthur's Chingolo Song-sparrows took the second prize. Mr. H. B. Smith showed a pretty little cock Cuba Finch and a single specimen of the *Bathilda ruficauda* of which Mr. Smart exhibited a pair among the Waxbills. Mr. Barnes' Military Starling was of course in the wrong class. Mr. Steele's Cuba Finches were not in the best of plumage; he also exhibited a Nonpariel and a Saffron Finch. Mr. Swainsland showed a pretty pair of Lined Finches and a pair of Cherry Finches. Messrs. Kneen and Forsyth's so-called Petykeeper was the female of some species of Cow-bird. Mr. Fulljames exhibited a Flammiceps Weaver under the name of "Oriole Weaver"—it was a rather poor specimen. The same exhibitor's so-called "Madagascar Weaver" was a singularly fine Magpie Mannikin or Pied Grass Finch. His Pin-tailed Whydah, in full plumage, obtained an extra fourth prize. His next entry was a Lined Finch. Mr. Fulljames also showed two specimens of the female of some species of Spermophila Grosbeak, probably the White-throated Finch—as they were exhibited together as a pair they were disqualified. He also exhibited a Cherry Finch. It is a pity that so many birds should be entered under incorrect names. Sometimes this arises from the exhibitor having substituted one bird for another after he has sent in his entries, and in that case it is excusable although tiresome. But now that the Avicultural Society,

and other Societies, exist for the purpose of assisting the amateur, it is unpardonable that birds should be entered in the wrong names through ignorance. Of the 30 exhibits in this class no less than 9 were wrongly named, while 6 were unnamed.

There were only 4 exhibits in Class 112 (Doves)—two of them belonged to Mr. Houslen, whose Australian Crested Doves, well-known prize winners, took the first prize.

No. 1212 (in one of the Mule Classes) was an exhibit of great interest to Aviculturists. It was a hybrid between an Alario Finch and a Canary.

It is worth notice that in the classes which I have been discussing 8 out of 20 prizes awarded went to Members of the Avicultural Society, and in the Parrot Classes the proportion was about the same. As our Society does not encourage exhibiting this fact is rather remarkable.

INSECTIVOROUS BIRDS AND PARRAKEETS

AT THE CRYSTAL PALACE.

BY REGINALD PHILLIPPS.

Many of the classes at the Great Show this year were not so well filled as usual, the entries for some of them being very few in number; and this misfortune was aggravated by the severe weather, which caused a few intending exhibitors to keep their birds at home: consequently some good ones we should have liked well to have seen were not on view. I understand Show is held thus early in the year to accommodate the Canary breeders; but this is hard on the Aviculturists. This year, not a few birds which, according to the catalogue, were before the judges on the judging-day, were not in their places on the Monday when I visited the Show—I fear absent on sick leave or worse, and others were looking none the better for their terrible journey to the Palace. At the Palace, the birds on view were very comfortably "housed," but not too well attended to in some cases. I could not help noticing one attendant going round with spray millet: at a cage which did not open its door so readily as he desired, he passed on, leaving the poor little tots without their food. Why could he not have thrust it between the wires? Door or no door, this would have been a better mode of dealing with the case than shoving his great awkward hand into the tiny cage.

Year after year at this Show, I observe how awards of various kinds, oft-times first prizes, are given to birds which have deformed, diseased, or mutilated toes, bills, or wings; and surely Aviculturists should protest against this. To ignore these imperfections is to encourage the careless keeping of birds. If the judges were not to give prizes or commendations to imperfect birds (this year they have given them as freely as ever, or more so), Exhibitors would be more careful when making purchases, and then dealers would take a little more care of their wares.

In the class for small foreign non-seed-eating birds, twelve cages were present, Mr. Smith's Scarlet Tanager coming first. I do not know how it may have looked when before the judge, but I found it lumpy and drooping, and much the worse for the cold, as were some of its neighbours. The same gentleman took the second prize with a pair of Indian Zosterops, rather rough in feather; Mr. Arthur coming next with a good Superb Tanager. There were other Superb and Scarlet Tanagers, Pekin Robins, and Blue Birds, a nice little class altogether. Cage 1839, by the way, contained a pair of Blue Birds, not Spectacle Birds as printed in the catalogue.

The next, for the larger non-seed-eating foreigners, was a better class, but not up to the average for a Palace Show, only 19 cages being present; two of which were marked Wrong Class. Two Green-billed Toucans were very conspicuous, the Rev. J. W. A. Mackenzie's taking the first prize. It was a good bird, and Mr. Arthur's, which took the fourth, was not to be despised. I have never kept this species, but have had the Ariel Toucan,

which I found was easily kept in health and plumage. It was a conical but noisy pet; and its mode of retiring for the night, when in a large place, was worth going many a mile to see. A good Purple-headed Glossy Starling came second, and a neat Malabar, third. After Mr. Arthur's Toucan came a bird whose range all authorities, ancient and modern, are agreed is confined to the North American Continent, and which is almost universally known by the name of "American Blue Jay." This name is suitable, and should be adhered to; that of "Brazilian Jay," given in the catalogue, is meaningless and misleading. It is a common and hardy bird, easily kept in health and plumage; and its appearance at the head of the class last year, in good company, was not satisfactory. This specimen was a good bird; and although the ends of the longer tail feathers were rubbed off, owing to its perch not having been placed high enough, it is quite welcome to the fifth place assigned to it this year. Among the other birds were a hen Shâma, much the worse for an over-dose of mealworms (for the rarity of the female Shâma in this country, many ridiculous reasons are given); a good Alpine Chough, presented with an extra third prize; and a capital Black-backed Piping Crow, which received V.H.C. The plumage of this bird was very much in advance of the 1 year and 6 months given to it in the catalogue; its piping was rather erratic, but attracted the admiring attention of several visitors. There was also a good Green Glossy Starling; a rather good Long-tailed Glossy Starling, which was dragging about a tail feather broken by the shallow show-cage; a good Mocking Bird; and the somewhat rare Black-headed Mynah, all fully entitled to the V.H.C. which had been granted to them. For a wonder, not a single Hill Mynah, of any variety, graced the Show; some Common Mynahs, making but poor substitutes.

The next class was a failure, consisting of two pairs of Peached-faced Love Birds, and a wrong classed Budgerigar. Why will people call the latter Love Birds, and thus mislead the weaker brethren? The Love Birds were awarded first and second, and rightly so if the wings of the winning pair were all sound; one wing was not full; but doubtless it was examined, and found to be not fully grown (primaries) after moult. The class for Budgerigars contained some nicely-marked birds, and some indifferent ones, 19 pairs altogether, Mr. Guy's standing first. There were six cages in the Rosella class, Mr. Housden taking the first prize with a good pair, the only two Mealy Rosellas taking second and V.H.C.

In the class for Kings or Crimson Wings, there appeared one of the gems of the Show, which we duly admired, although placed in the wrong class and duly sat upon by the judge. It was a Pileated Parrakeet (*Prophyrocephalus spurius*, but more commonly *Platyercus pileatus*), a bird I have only once before seen. Years ago, before I went in for Parrakeets, I obtained one from Dr. Greene, but did not appreciate it, and after a time exchanged it for some birds which were not equal in value to one of its tail feathers: since those days, how often have I looked back upon my folly with tears and bitter lamentations. It was the old, old story of failing to value one's blessings until one has lost them. The first prize was awarded to Mr. Dutton's Kings. The fourth prize fell to Mr. Smith's Crimson Wings.

In the class for Ring-necked Parrakeets, Mr. Jordan took the first with a good Alexandrine, Mr. Housden the second with a nice pair of Blossom-heads. The poor hen seemed to feel her situation acutely, as much as would a respectable lady if brought up before a magistrate; I could not help comparing her with my own hen, who is comfortably nesting. Another Blossom-head, two Javans, some Ring-necks, and a hen Alexandrine complete the list of those present. The Lories and Lorikeets made a poor show this year, a Ceram or Chattering Lory coming first, the word "second" appearing in the catalogue against entry 1930; but the cage was absent—the frost again, I fear. Two Swainson's Lorikeets made up the number of those present on Monday to three.

In the class for any other variety of Parrakeets (single), 13 appeared; but one of them should have been elsewhere. Some of these mistakes

are incomprehensible; did not its owner know that the bird was a Rosella? Could she not see that there was a class for Rosellas? The first prize went to a good Patagonian Conure, exhibited by Mr. Rose. I have seen several of these birds during the last year or two, and they seem to be easily kept, and much inclined to be tame and familiar. The second prize went to Mr. Babb, for a bird which was labelled "Red Shining Parrakeet" but catalogued as a "Tubeun." But *Pyrrhulopsis tabuensis* is distinct from *P. splendens*; and I am not sufficiently acquainted with these rare birds to say positively which one this was; or even, as I could not see a blue nape-band, whether it were not a specimen of a still rarer variety. It is in cases like this and the Lory that the amateur "Reporter" is placed at such a disadvantage. I should like to have taken the cage down, so that I might examine the creature; but did not like to do so, with a burly policeman close by and watching me as if he thought it were about time he did something to justify his *raison d'être*. I am sorry I was such a suspicious-looking character. I feel inclined, indeed, to think that the bird was the Tabuan (not Tubeun, please), not the Red Shining Parrakeet. It was very rough in feather. Mr. Smith's Red Rump and Messrs. Bottomley's Many-coloured were awarded equal thirds. The Red Rump, so common some years back, is now not often seen. The class likewise contained a Masked Parrakeet, a relation of the Tabuan, and also hailing from the Fiji Islands: squatting on the bottom of its cage, it swayed its body to and fro like a bear at the Zoo; but even with this it could not get more out of the hard-hearted judge than a V.H.C.; there were also a V.H.C. Barraband, two Pennants, a Barnard, a Bauer, a Yellow-nape, and a Green Conure, all seemingly nice birds; but I could not do more than glance at them. In the next class, for the same in pairs, Mrs. Palmour's now well-known pair of *Brotogerys pyrrhopterus* came first. They are, I suppose, exceedingly rare. It is a pity that the family name of *Trichoglossus* should have been attached to them, I am told by the N.H.M. authorities: much wisdom is no excuse for want of care; and coming from wise heads, the statement is all the more calculated to cause confusion. It would be interesting to know on what authority Mrs. Palmour states that these two birds came from the Sandwich Islands. My experience with the *Brotogerys* family teaches me that they feel the cold when the thermometer falls below 45 degrees, and these birds were looking none the better for their journey; let us hope that they reached their home safely. A very nice pair of Quakers took the second prize. Two pairs of Cockatiels (why Cockateals?) and a pair of Jendayas made up the class.

SHORT-TAILED PARROTS AT THE CRYSTAL PALACE.

BY C. S. SIMPSON.

Under this heading are included six classes (Nos. 123—128). Curiously enough, the class for Lovebirds comes in an altogether different part of the catalogue; but since Lovebirds are parrots and have short tails, it is a logical conclusion that their proper place is among the short-tailed parrots. Furthermore, it is the time-honoured custom at the Palace that the Macaws should find a refuge among these classes. Now it requires a considerable stretch of imagination to call a Macaw a Short-tailed Parrot.

CLASS 123, (*Grey Parrots*) contained three good birds, two of which belonged to members of the Avicultural Society. A good class of Grey Parrots is always very popular, and it is a pity that greater inducements are not offered to the owners of these valuable birds: a class with two prizes (of 10/- and 5/-) can hardly be expected to attract a large number of entries.

CLASS 124, (*Amazon Parrots, any variety*). The word "variety" is used throughout the catalogue whenever "species" is meant; but a variety and a species are two different things.

First prize in this class went to Mr. C. Martin's Green-cheeked Amazon (*Chrysotis viridigenalis*), a remarkably fine specimen of a rare species. The popular name of this bird is not very appropriate: as the red cap is a far more striking feature of the plumage than the green cheeks. The second prize fell to a bird which was catalogued as a Yellow-fronted Amazon,

which it was not. It was a specimen of the *Chrysotis Antunialis*, a very beautiful bird, much resembling the Diademed, but with yellow cheeks. Third prize was awarded to a good Double-fronted; and Mr. H. B. Smith took fourth, with a Mealy. The remaining birds were Double-fronted and Blue-fronted.

CLASS 125, (*Electus Parrots*) had five entries, all of which were present and all were males or females of the Grand Electus. As there may still exist some doubts as to the differences between the sexes of these parrots, let me say that repeated dissections have shewn conclusively that the male of each species of Electus is green, and the female, red. The first prize was won by a fine female belonging to the Rev. J. W. A. Mackenzie; second, Mr. F. Bellamy; third, Mr. Swaysland.

CLASS 126, (*Any other variety Parrot*) had six entries; but only three put in an appearance. Since Macaws are by custom exhibited in this class, Mr. Storey's Illiger's Macaw well deserved its place; being in admirable plumage. Second prize was taken by Mr. Smith's Red and Blue Macaw, in a hideous and uncomfortable cage. The same exhibitor's little parrot was probably an immature Senegal. No. 1980, marked "absent," by a misprint in the catalogue, was an Amazon, and therefore in the wrong class.

There were only six Cockatoos entered in the two classes provided. Cockatoos require strong cages, which are heavy and expensive to send by rail, and the prizes in these classes are not large enough to attract good classes. Mr. C. Martin's Leadbeater, which took first in class 127, was a fine bird and deserved his position. Mr. Babb's Rose-breasted was very poor in colour, and the third entry in this class was absent.

In class 128, Mr. J. B. Housden took first prize with a Slenderbill, which has taken a prize at the Palace every year since 1890. Mr. Bellamy was second with a very good Lemon-crest; and another bird of this species, exhibited by the Rev. J. W. A. Mackenzie, was H.C. It might be an advantage if Cockatoos could be exhibited in pairs. I should be disposed, indeed, to go further, and throw open all, or nearly all, the Foreign classes, to birds "singly or in pairs." At present, the fortunate possessor of a blue Budgerigar or a single specimen of the rarest Waxbill in existence, would be unable to exhibit his treasure; while the equally happy owner of a pair of Ornate Lorikeets, can only exhibit them in separate cages.

RARE FOREIGN BIRDS.

V.

THE VIOLET TANAGER.

BY V. CASTELLAN.

As this is the first time that the Tanager family (*Tanagridæ*) has been mentioned in our Magazine, it may not be out of place to say a few words about its classification.

According to Dr. Selater, "a Tanager is a dentirostral Finch; that is, a bird which, having all the essential characters of the Finch, is yet so far modified, as regards certain parts of its structure, as to fit it for feeding, not on grains and seeds, which are the usual food of the Fringillidæ, but on soft fruits and insects, the habitual food of the Sylviadæ" (Warblers). They, therefore, are intermediate between the Finches and the Warblers. The strong massive bill and the open cup-shape nests they build are true signs of their close relation to Finches.

From these general remarks on the Tanagridæ I will proceed to describe more minutely the subject of my article, namely, the Violet Tanager (*Euphonia Violacea*).

He is one of the smallest of the Tanagers, being about the size of our English Siskin, and also one of the less brilliantly coloured. The back is dark shining violet and the underside orange-yellow, with a frontlet of the

same colour above the beak. The tail is black beneath, and so are the beak and legs. The beak is large and powerful, with the upper mandible rather longer than the lower, and somewhat bent downwards at the point. The hen is light green on the back and greenish yellow underneath. The song, though not very loud or melodious, is yet pleasing and varied, and somewhat comical, ranging from a low warble to a harsh grating sound. My experience of this Tanager has not been very long, but during the time I have had my present specimen he has shown himself peaceful towards his cage-mate, a superb Tanager, and also seemed less susceptible to the cold than the latter. The temperature I keep him in averages about 50 degrees. I have given him a medium size box cage for a home till the small aviaries I am putting up in my bird-room are ready. I do not find he makes much more mess than most feeders on soft food; I clean his cage out thrice a week, as I do my other bird cages and it is always sweet.

His principal article of food consists of bananas, of which he is very fond; I give him two pieces a day, about an inch long, which I peel and put in his food trough. Besides that, he gets ants' eggs and Abraham's preserved yoke of egg mixed together, and an occasional mealworm, which, by-the-by, he does not swallow whole, as most birds do, but passes it several times between his beak till the skin has been emptied of its contents, the former being rejected; this I notice my Superb does as well. On the above fare he thrives and is in the best of health, but fruit must not be forgotten, otherwise the result might be fatal; at the same time beware of stone-fruit, as it is rather indigestible; I believe I lost my first Violet Tanager because I fed him on peaches. I offer him a bath, tepid in cold weather, occasionally, of which he sometimes avails himself.

To sum up, I consider this Tanager a rather interesting and desirable bird, for he is active, being nearly always on the move, except after a meal, and frequently singing; I can, therefore, recommend him to the notice of amateurs who have had some experience with foreign birds that feed on soft food. The price is about 25s.

BRITISH BIRDS WE HAVE KEPT.

III.

THE SPOTTED FLYCATCHER.

BY J. LEWIS BONHOTE.

The Spotted Flycatcher (*Muscicapa grisola*, Linn.) is a bird with which all readers of the *Avicultural Magazine* must be familiar, as it sits on a post or some railings, darting down every few seconds at a fly, and returning again to the same perch.

In this country it is a Summer migrant, arriving about the end of April and leaving again in August. The nest, built chiefly of moss and cobwebs and lined with horsehair and feathers, is placed in any convenient situation, often in the ivy growing up a tree; sometimes in old barns, dovecots, or on the projecting end of a beam: whence the country name, 'Beam Bird,' is derived.

Three years ago a pair took up their abode in a box placed over one of the pigeon-holes in my loft. The nest took eight days to complete. During the first three days they collected a quantity of rough material, such as moss, cobwebs, pieces of bark, etc. On the two following days, these were somewhat moulded into shape, and by the sixth day the lining was begun: this consisted of bits of dried grass and feathers. The nest was completed on the eighth day; during the following day the hen sat on the nest, and the first egg was laid on the morning of the tenth. After this, an egg followed regularly every morning till the full complement of five had been laid.

The eggs are of a pale blue colour, thickly blotched with rust red; in some specimens the markings are very indistinct, or even entirely absent.

It is noticeable that during the building and incubation, the birds

were always to be seen sitting on some railings a few yards distant ; while during the five days the eggs were being laid, they were never to be seen.

In captivity, they should be fed on ants' eggs and hard-boiled eggs mixed in equal parts, and as many mealworms as their keeper can afford to give them. They become very tame, and will rise in the air and catch mealworms as they are thrown to them. In catching a mealworm, they leave the perch and hover in the air, waiting for the mealworm to drop, and catch it as it passes them ; if they should miss it, they follow it closely and catch it as soon as it reaches the ground.

The reason they are so seldom seen in the cage, is probably due to the difficulty with which they are 'meated off' when first captured.

The best plan for meating them off, is to get two or three together in a moderate sized cage, giving them some water and food (as described above) in some open receptacle, such as the lid of a cocoa tin. On the food place some dozen or so of mealworms, which have been killed to prevent their escape, and throw some alive on to the floor of the cage. The cage should be placed in a quiet place, and left for some time. Look at them in the evening, and unless there is a visible decrease in the food, it will be best to cram them with two or three very small pieces of white of hard-boiled egg, a mealworm and a drop of water. Give them their breakfast in a similar way, and watch them carefully. If they begin to look 'thick,' that is, with their feathers puffed out, give them a meal regularly every two hours. Should no improvement show itself by the following morning, and they have begun at the same time to lose flesh, it is best to let them go, as they will never live in a state of confinement. If, on the other hand, they remain close-feathered, they will probably be well on their food in a few days, though it is best to watch them carefully for at least a week.

This plan would apply to all birds whose diet is an insectivorous one ; but most of these submit themselves to captivity with better grace.

I make no mention here of handrearing, as it is a far more trying job, and is, as a rule, far less satisfactory in its results.

There are three species of Flycatchers found in the British Isles: the Spotted Flycatcher (*Muscicapa grisola*) ; the Pied Flycatcher (*M. atricapilla*), a small black and white bird ; and the Red-Breasted Flycatcher (*M. parva*). The last two species are, however, scarce, and not likely to be met with by ornithologists.

NEW BOOKS.

Foreign Finches in captivity, by Arthur G. Butler, Ph. D., etc. Part II.

The second part of Dr. Butler's charming work has, at length, made its appearance, after a delay for which, it is only fair to say, neither author nor artist was in any way responsible. The account of the typical Finches (*Fringillinae*) is now completed, and that of the Buntings (*Emberizinae*) is commenced. The several species of the genus *Serinus* are clearly distinguished and described, and a coloured illustration of each species is given, which it is hoped will serve to clear up the confusion on this subject, which has hitherto existed in popular works on aviculture, the term, "wild canary" having been impartially applied to at least four distinct species, namely, the Cape Canary, the Sulphur-coloured Seed-eater, the St. Helena Seed-eater, and the Green Singing-finch.

The illustration of the Grey Singing-finch is particularly life like, but the altitude of the male Alario finch in the same coloured plate is hardly characteristic of that bird, which usually sits rather upright on its perch.

The Buntings treated of are the Nonpareil, the Indigo Bunting, the Pileated Finch and the Red-crested Finch. Both sexes of the Nonpareil are represented: it is curious that the female of this species is so seldom imported. Most amateurs like to keep their birds in pairs and probably dealers would have little difficulty in finding customers for hen Nonpareils.

We have no doubt of the accuracy of Dr. Butler's statement, that the cock bird having once acquired his adult plumage never again assumes the inconspicuous plumage of the hen.

The fact that both sexes of this and other species are described and illustrated adds greatly to the value of the book: it is often very difficult for Aviculturists to be certain whether hen birds offered for sale, really belong to the species which they are represented to be. We have no hesitation in saying that "Foreign Finches in Captivity" is a work that must be accepted by Aviculturists as the standard treatise on the subject with which it deals.

*Hard-billed British Birds, by Dr. W. T. Greene, M.A., F.Z.S.
A lecture delivered before the Cage Bird Club.*

Dr. Greene, who occupies a well-assured position as the most popular English writer on Aviculture, has in this lecture fully maintained his reputation, and has compiled a most interesting account of the British Birds which subsist more or less exclusively on seeds. He reckons that there are 19 species of Hard-billed British Birds. These he divides into 5 groups, namely:—the Finches proper, the Pseudo-Finches, the Buntings, the Sparrows, and the Tits. For the purposes of a popular lecture a scientific classification is of course supremely unimportant, but as Dr. Greene appears to claim something more than this for his system, we cannot help remarking that it seems a pity that he should endeavour to set up a classification of his own, which is quite at variance with that adopted by the best modern ornithologists. Thus, he calls the Greenfinch a true finch, although it does not require much scientific knowledge to perceive that the bird is a Grosbeak; while, on the other hand, he will not admit that the Chaffinch and Brambling are Finches at all, and, for some inscrutable reason sets up the genus *passer* into a separate family by itself.

It appears to us that Dr. Greene very much over-rates the facility with which British Birds can be induced to breed in confinement—practical Aviculturists tell a different tale.

It is the function of a critic to find fault, and if we have dwelt more upon what we deem to be the defects of the lecture than upon its merits, we have done so merely because its merits lie upon the surface, and can be perceived by all Dr. Greene's readers, among whom will we hope be numbered all the members of the Avicultural Society. But we cannot help regretting that so attractive a writer should go out of his way to teach a system of classification opposed to that now generally adopted by the scientific world—as the multiplication of systems leads to endless confusion.

We are glad to find that the Cage Bird Club continues to grow—it has now 57 members. It is a Society which performs much useful work, and deserves the good wishes of all Aviculturists.

CORRESPONDENCE.

RARE VISITORS.

SIR,—The following from the *Yorkshire Post* for February 4th, may interest members.

"The presence of Arctic birds in these latitudes, a frequent phenomenon of hard winters, has been noted within the past few days by several correspondents. The little Auk, with the Puffin, is widely distributed over the northern temperate as well as the true Arctic zone; but its appearance in Yorkshire in large numbers may be taken as an indication that the cold will not quickly pass away. More remarkable is the alleged capture of an Arctic Guillemot (*Uria Briennichi*) near Wisbech St. Mary's, in the Cambridgeshire Fens. This bird is almost as rare a visitor to the British Isles as the great Auk, of which, we believe, no specimen has been secured

here for a quarter of a century. But it is only distinguishable from the common guillemot of our coasts by its stronger bill, and naturalists will probably think that the report of this capture needs to be confirmed on good authority."

I think it would be a very good thing if we could have all records of rare birds noted or shot, published each month, as they would be most valuable for reference.

STANLEY BRIGG.

Since writing the above, I see in the *Yorkshire Post* for February 8th, "that a number of Iceland Auks have been picked up at Filey, Yorkshire, in an exhausted condition." What are Iceland Auks?

I feel sure there must be any number of rare birds noted during this last six or eight weeks, and a record would be most interesting. S. B.

[The Secretary would be very glad to receive and publish notes on any rare birds observed during the severe weather, by Members of the Avicultural Society.]

BEQUESTS TO THE SOCIETY.

52, SHIP STREET, BRIGHTON.

17th January, 1895.

SIR,—

In reply to your letter informing me that the Executive Sub-Committee have decided to refer Miss Llewelyn's letter to me for a legal opinion upon the practicability of her proposal that members should bequeath their birds to the Society, and for advice as to the best means of carrying out the idea, I beg to report as follows:—

The Avicultural Society not being a corporate body, birds cannot very well be bequeathed to the Society direct, and the intervention of trustees becomes desirable. It is generally most convenient to have two trustees and no more, perhaps the Secretary and Treasurer might be the trustees. It would be a very difficult and invidious task for the officers of the Society to distribute birds bequeathed to the Society, gratuitously among the members, I would therefore suggest that the birds should be sold by tender to *amateur members of the Society only*, and that the proceeds of the sale should form part of the general fund of the Society.

I append a form of bequest, which might be published in the 'Avicultural Magazine,' and which those members who desire to insure, as far as it is possible to do so, that after their death their feathered pets shall pass into good hands, may lay before their own Solicitors, with instructions to incorporate the same in their wills, with such modifications as may be deemed necessary.

Yours truly,

HORATIO R. FILLMER.

To Dr. C. S. SIMPSON,

Hon. Secretary of the AVICULTURAL SOCIETY.

PROPOSED FORM OF BEQUEST.

I bequeath all my Foreign and British Birds (but not Poultry, Pigeons, or Canaries) [and all my bird cages and aviary fittings (other than fixtures)] to the Secretary and Treasurer for the time being of the Avicultural Society for the Study of Foreign and British Birds (free from legacy duty) upon trust to sell the same to any amateur member or members of the said Society for such price or prices as can be obtained, and to apply the proceeds of such sale for the general purposes of the said Society. Provided that no bird shall be sold to any person not a member of the said Society, or to any member of the said Society, who shall be a dealer in birds or aviary stores. And as to the fact of any member being a dealer, the decision of the Committee of the said Society shall be final.

Avicultural Magazine,

BEING THE JOURNAL OF THE
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No. 6.

APRIL, 1895.

OUR BIRD ROOMS AND AVIARIES.

V. MY AVIARIES.

BY NORMAN H. JONES.

Birds I have always admired and loved, but it is only within the last two years that I have gone in for practical Aviculture, consequently my experience is not very extensive, but when I read a request from the Editor of our Avicultural Magazine for accounts of private aviaries and Bird rooms, it gave me an impression that a little description of my own might be of interest. Having decided to put up a small stable and coach-house for a pony—in prospect—and having spare ground beyond what was required for this purpose, I decided to add to this building a couple of wings—one on each side—in which to keep some feathered favourites. This I did—giving a good amount of light by placing large windows back and front—and adding a skylight, north and south, to each. Into one of these aviaries I have turned some Java Sparrows, Saffron Finches, Waxbills, and other small birds, also some White Java Doves; these are all in splendid condition, and have stood the extreme cold through which we have lately passed, exceedingly well. In the other I intend placing some Budgerigars, and similar birds, though at present it is occupied by various British Birds. I may add that the buildings are fairly large, one of them measuring nine feet by twelve feet, by twelve feet in height, the other being much larger. They are fitted up with plenty of tree branches, and other perches, with a good number of snug corners, which I find are the delight of many of the inmates. I am looking forward to the coming season with interest, for I quite think that with so much in their favour, I ought to be successful in rearing many young birds.

I have still to give an account of what I consider my most attractive aviaries. I have a fairly large green-house, which unfortunately, as far as the growth of plants is concerned, is overshadowed by a number of large trees; this is fatal to any successful blooming of plants, and proved rather disappointing. It occurred to me, however, that upon the staging at the back of the house (which is quite level, and about five feet from the roof, and about four feet in depth) could be placed some splendid cages. I called in a handy joiner, who put me up eight to my own design, measuring two feet by four feet, by four in height, leaving a space of two feet or more between each cage, in which I have placed either creeping plants or green shrubs, in pots. Some of the creepers I am training over the cages, giving a very pretty effect.

Number one contains four pairs of Budgerigars, which appear very busy just now about some coconut husks, in fact one is now sitting. Number two contains a pair of Cockatiels. Number three several pairs of Orange Bishops, which were a beautiful sight last summer. Number four, a collection of Foreign Finches. Number five, a pair of Rosella Parrakeets, looking very effective amongst the green foliage. Number six, small brown and white Nuns, Combassous, and Cordon Bleus. Number seven a cage of Love Birds. Number eight, a solitary Crimson Cardinal. On the opposite side

of the footpath, and on a second stage, gaining a little more sun, and on which I grow some very good Begonias, are placed about the same number of smaller cages, eighteen inches by two feet, by two feet, these contain pairs of Canaries for breeding. Most of these are shaded on the top by Ivy geraniums, making the places nice and snug. I may add that these latter are of more recent make, and breeding Canaries in this position is more an experiment than anything else. My greatest fear is that it may prove too warm in the summer, but these are all moveable, and can be placed in a cooler position if necessary. The foreign birds stood the heat (not extreme) well last summer, and their condition, health, and plumage was excellent. I have a boy, who, amongst his other duties, looks after the cleaning, watering, and feeding, and I find he does his work fairly well, though a walk round, and a little supervision is a most pleasing and necessary recreation.

Besides these, I have a large round wire aviary in the dining-room, in the recess of a French window, leading on to the lawn, this measures seven feet round, and stands eight feet high, and contains a mixture of foreign birds and canaries; they get plenty of light, and do very well indeed. What I am wanting, and what I find very difficult to meet with, are Turquoisines. If any of our Members wish to part with these, I should feel obliged if they would communicate with me.

MIGRATIONS OF BRITISH BIRDS MORE OR LESS SUITABLE FOR CAGE-CULTURE.

BY ARTHUR G. BUTLER, PH.D., F.L.S., ETC.

In Great Britain we have comparatively few resident cage-birds; moreover, even of some of these, a more or less large proportion of the individuals bred here, retreat to sunnier lands at the approach of winter. In October and November not a few even of such hardy birds as the Missel and Song-Thrushes migrate to Southern Europe and Northern Africa; in some winters the Blackbird also becomes partly migratory; and the Robin, most typical of all winter birds, sends recruits to swell the ranks of departing songsters.

Most of our Goldfinches betake themselves to Egypt in October, returning home in April; so also the Crossbill, Bullfinch, Linnet, Twite, and perhaps the Hawfinch, House and Tree-Sparrows, are partial migrants. Many Grey, Pied, and probably White Wagtails travel southwards in September or October, to return in the following March; lastly, numerous Titlarks and Woodlarks make their way to Southern Europe, Asia Minor, Palestine and North Africa.

Whether only the more delicate individuals thus avoid the severity of our cold season, or those which have the keenest appreciation of comfort, we cannot decide; but, whatever the reason, it should give us satisfaction to be assured, when frosts are long protracted, that all our pretty ones are not being slaughtered.

But, whereas the numbers of many resident birds are thus temporarily reduced, on the other hand those of some resident species are very largely increased by autumn or winter immigrants from more northerly regions: large flocks of Goldcrests with here and there a Firecrest, crowds of Ox-eyes, Blue-Tits, Starlings, Greenfinches Siskins, Bramblings, Chaffinches, Corn, and Yellow Buntings, Skylarks, and a few Shore-larks come to claim our hospitality.

Why do all these birds remain on our bleak islands? They are travelling southwards from colder lands, yet stop short before they reach a haven of comfort and plenty; so weary of wandering that they must fain content themselves with the meagre fare which a British winter affords them: a miserable provision it must often prove to the unhappy vagrants! Doubtless, in very severe winters, many are driven by sheer starvation to journey

further south, thus depriving us of one of the few alleviations to the annual torment of that most dismal season.

If housekeepers throughout Great Britain would but think a little of the birds; not only freely scattering their table scraps, but (in houses which are more or less infested with cockroaches) putting out their beetle-traps for the hungry wayfarers, instead of emptying these wholesome insects in myriads down the scullery sinks, how many useful lives would be prolonged! No need then for futile Acts to be passed for the preservation of our wild birds; for it would be folly to deny that the wholesale death from starvation which even one long protracted general frost causes, does immeasurably more towards reducing the numbers of our feathered friends than all the bird-catchers and bird's-nesters in the kingdom.

The Stonechat is one of the most remarkable of our resident birds, inasmuch as it is a migratory species on the Continent. On the other hand, whereas the Blackcap, as a rule, migrates to Africa (probably about September, returning in April), it sometimes leaves a few stragglers which remain with us throughout the winter.

The Dipper, Dartford Warbler, Coal Tit, Marsh Tit, Crested Tit, Long-tailed Tit, Bearded Tit, Hedge Accentor, Wren, Common Creeper, Nuthatch, Redpoll, Reed and Cirl Buntings, and Rock Pipit are strictly resident birds, and if their numbers are ever increased by immigration, I have failed to note any record of the fact.

The strictly migratory birds belong to two categories, those which come to us from colder climes and winter here, and secondly those which emigrate to warmer countries in the autumn. The former of these, curiously enough, are largely insectivorous birds; and indeed, with the exception of Greenfinches and Siskins, most if not all our autumn visitants are more or less insect eaters.

The Redwing arrives on our shores from Norway, Sweden, and Russia in October, returning in April; the Fieldfare, from the Arctic circle, reaches us one month latter, and leaves us early in May; sometimes a few Waxwings come to remind us of the Pine forests of the circumpolar regions, or, between the months of September and October, perchance the Snow-Bunting, another visitor from the same ice-bound area, appears on the scene and remains until the following March or April.

Most migratory species, however, leave Great Britain for Africa in the autumn and return to breed here in the spring. The following is a list of these:—

The Ring Ouzel, which may perhaps be locally resident in this country, migrates between September and October, to Southern Europe, North Africa, Asia Minor and Persia.

The Nightingale in August or September, to North Africa and the South of Abyssinia.

The Redstart in September, to North Africa: these all return in April.

The Wheatear in September, to North and West Africa, returning in March.

The Whinchat in September, to South Europe, North, East and West Africa, returning in April.

The Spotted Flycatcher in September, to Asia and Africa, returning between April and May.

The Pied Flycatcher probably leaves us for Africa in September, returning in April.

The Grasshopper Warbler migrates at the same time and for the same term to Spain and Northern Africa.

The Sedge-Warbler retires between September and October to Algeria, Egypt, and Asia Minor, returning in April.

The Reed-Warbler in September to Central Africa returning between April and May.

The times of departure and return of the Marsh-Warbler are probably the same as with the preceding, but it wanders through Africa even as far south as Natal.

Of the Blackcap I have already spoken.

The Garden Warbler, in September, starts for Western Africa, and the Sahara, returning in May.

The Whitethroat between September and October for North West Africa, returning between April and May.

The Lesser Whitethroat from September to November, to the Southern parts of North Africa, returning with its larger relative.

The Wood-Wren in September, to North Africa, returning in April.

The Willow-Wren in September, to Spain, Sicily and Africa, returning between March and April.

The Chiff-Chaff between September and November, to Southern Europe, North and North East Africa, returning between March and April; a few stragglers, however, occasionally remain in the South of England throughout the winter.

The Red-backed Shrike migrates in September to South Africa, returning in May.

The Blue-Headed Wagtail visits the same country, but returns a month earlier.

The Yellow Wagtail leaves for Africa from September to October, returning in March.

The Tree Pipit leaves in September or October, winters in Palestine or Africa, and returns from April to May.

The Wryneck is not very attractive as a cage-bird; but he departs, probably for the South of Abyssinia, in September, returning in March or April.

Most of the Swallow-tribe have been kept in cages and, if once cured of their greediness, are delightful pets; indeed, I can speak very highly of the House-Martin as a cage-bird. Although none of these birds ought to be permanently confined within narrow limits, I think they have a claim to consideration in this paper; but I deny the right of the Cuckoo and Swift, which are both utterly uninteresting and unsuitable for pets.

The Chimney-Swallow usually leaves in October and returns in April, the Sand-Martin between August and September, returning in April, the House-Martin in October, also returning in April, but later than the Swallow: all three winter in Africa.

Among rare cage-birds which have visited Great Britain on migration, some are met with more or less regularly every year, whereas the majority have only appeared as accidental stragglers; the following list enumerates most of them:—White's Ground Thrush, the Siberian Ground-Thrush, Black-throated Ouzel, Arctic Blue-throat, Rock-Thrush, Desert Wheatear, Black Redstart,* Black-throated Chat, Red-breasted Flycatcher, Aquatic Warbler, Great Reed-Warbler, Icterine Warbler, Barred Warbler, Orphean Warbler, Rufous Warbler, Yellow-browed Willow-Wren, Alpine Accentor, Wall Creeper, Rose-coloured Pastor, Golden Oriole, White-winged Crossbill, Pine Grosbeak, Scarlet Rose-Finch, Canary, Serin-Finch, Lapland Bunting, Black-headed Bunting, Richard's Pipit, Tawny Pipit, Alpine Pipit, Crested Lark and Short-toed Lark.

* Occasionally this species is said to breed here; indeed I have the remains of its nest with one egg, taken in Hertfordshire; this nest originally contained three eggs, but only one was given to me.

The main cause of migration is undoubtedly scarcity of food; consequently in very mild seasons many migratory birds delay their departure beyond the regular time, and have sometimes to suffer for their foolhardiness. It has been said that migratory birds become restless at the season of migration, implying that they instinctively know when the time comes round. From my own observation of birds in aviaries, I have become very sceptical on this head: of all the migratory species I have kept, I never knew one to be more restless at the season of migration than at any other time. I kept a pair of Redwings for over two years and finally sold them in such fine condition that, going straight from my house to a show, they took a First: these birds never were restless after their first moult, but were as tame and quiet as Song-Thrushes; and, as spring came round, the male sang his singular song cheerfully enough at all hours of the day.*

As with our British Birds, so it is with foreigners: I never knew an Indigo-Bunting to be restless at the season of migration. I believe all statements of this nature are based upon an error of observation: if you stare at any bird persistently, it must be tame indeed, not to become restless; and, if you desire to ascertain whether it is anxious to migrate, you stand still and watch it. Even in a large aviary, a bird soon discovers whether it is singled out for observation: take a net into an aviary to catch a particular bird and the latter discovers, in next to no time, that he is the one to be captured, and becomes the most frantic of all in his efforts to escape. In like manner, if you sit down in front of cage or aviary to sketch a bird, it immediately begins to fidget about, turn round and round on the perch, fly hither and thither, and in every possible manner do its utmost to render your task more difficult: it feels that it is being singled out for observation, and becomes nervous as a natural consequence. Some birds, such as Goldfinches, Siskins and Redpolls, are restless at all times; but not more so at one time than at another; all birds are most restless just before going to roost. "Migratory instinct" is little more than a pretty way of describing the cravings of unsatisfied appetite, sometimes accompanied by a shrinking from cold.

BRITISH BIRDS WE HAVE KEPT.

IV.

THE KINGFISHER.

BY C. P. ARTHUR.

Considering how much has been written and said, lately, against keeping Kingfishers in captivity, I feel rather loth to have anything to say on the matter; and should not have done so, had not our Hon. Secretary, Dr. Simpson, asked me to give my experience of them. In the first place, I should like to say that I utterly disbelieve all that has been written about Kingfishers soon becoming extinct. I firmly believe there are as many, or more, about than there were thirty years ago; but probably they have shifted their quarters to more favourable localities. Has the preservation of fish anything to do with this? Thirty years ago, when I was a boy, if anyone had seen a Kingfisher "round the river," it soon got noised about, and probably two or three dozen persons would take their walk the following Sunday afternoon (if in the Summer), to try to get a glimpse of this wonderful bird; but now they are one of our commonest birds, comparatively speaking. I have refused to give a shilling for six young ones, and have had lots of fresh shot birds offered me at threepence per head and refused to give it. Without looking at my book, I believe it is about three years ago that I had, in three months, fifty-four Kingfishers brought to me to be preserved, either for hats or cases; yet along our river and the brooks they seem as plentiful as ever. Many are caught by cats; and

* A Fieldfare which I obtained and parted with at the same periods as the Redwings, also seemed quite indifferent to the season of migration.

many more fly into people's houses at night, when a window is left open, of course near the river.

But to return to the Kingfisher as a cage pet. I have reared them by hand, and also successfully "meated off" adult caught birds. To rear them by hand, they should be taken before fully fledged, or otherwise they will have to be crammed until they can feed themselves. When a Kingfisher's hole is found, try to ascertain first what the contents of the nest are likely to be by watching the old birds; for when the young ones are newly hatched, and for some time afterwards, the parent birds swallow the fish first and when partly digested disgorge it into the beaks of the young. So, if the old birds are fishing and do not take the fish in their beaks into the hole, the young are scarcely fit to take; but when the parent bird is taking very small fish into the nest, then is the time to see about them.

It is best not to disturb the entrance-hole if possible, as the burrow is generally some distance below the level of the field, and always rises inside towards the surface. The best plan is to take off a few turfs over where you think the nest likely to be, and it will generally be found very near to the surface. They lay from four to six eggs, rather stunted in shape and of a transparent pinky-white colour. The young should be fed on very small fish at first; then cut up some lean beef about the size of horse beans, soak this in cold water till the blood is out of it and it has turned white; then give a meal of this alternately with a meal of fish. They sometimes seem to prefer meat prepared like this, to fish—after they can feed themselves. The fish could then be dispensed with, if there be great difficulty in getting them; but here, the offer of a penny a dozen for small fish, to the school-boys, soon brought enough fish to feed all the Kingfishers in the parish, although they are such gluttons. I once tried an experiment, and found that one of my Kingfishers would eat *more than double its own weight* of fish per day. This I reported in the *Feathered World*, so need not repeat it here.

Kingfishers become very tame, flying to your hand and taking a fish and on to the roost again, without a stop. But there is one thing against keeping these birds in cages, which I cannot overcome, in spite of all kinds of experiments—so I have given up keeping them. That is, it is impossible to keep their plumage perfect. Their little claws are quite incapable of clinging to the wires of the cage, and they never seem to realise that they cannot go straight ahead, if they think fit. So, if they want to fly to the person they know, or see a tempting perch a few yards from their cage, (no matter whether it is a large cage or outdoor aviary), they fix their eyes on it, and away they go, straight ahead until stopped by the wires, where they remain fluttering like a wasp on a window pane; then they drop back on their tails, breaking off their tail feathers: their legs being so short and apparently weak, that they do not protect the tail in the least. The same action against the wires also frays the wings. I find coarse canvas over the front of the cage better than wires; but then, who wants to keep a bird one can never see and admire? I tried hay and straw on the bottom of the cage, but this got twisted round their legs. Then I tried a thick layer of sawdust, and found this much better. It also answered another purpose, taking the place of fish-bones for pellets. For the sawdust naturally got fluttered into the meat dish, and particles being swallowed with the meat were thrown up again with the fibrous parts of the meat as pellets. Kingfishers seldom, if ever, swallow their prey alive; but kill it by knocking it first on one side of them and then on the other, in the same way as a thrush does with a snail. Even when fed on beef, they knock it about in the same way, as if it were a lively minnow they were killing. I have never seen a newly-hatched Kingfisher, but should think their bills would be short and wide at the gape. Even when fully fledged, their bills are short, compared with the adult birds. They do not seem to moult at all the first year, at least, none of mine did; and I have had many Kingfishers brought in for stuffing, in February and March, which still retained their nest feathers. They become much brighter red on the breast, bill much longer, lower mandible red, and feet and legs bright vermilion when adult.

There is not the slightest difference in plumage in the sexes. I have dissected scores after skinning, and find a very bright coloured fine bird as often turns out to be a hen as a cock.

Kingfishers are liable to fits in confinement; in fact, I think that is the end of most of them. In conclusion, I must say I cannot strongly recommend them as cage pets. Their cage very soon becomes offensive. they cannot be kept in good plumage, are short-lived birds in confinement, and have no song whatever. Any real lover of birds would soon tire of keeping a bird with no tail, and wings with about as much beauty in them as there is in a poor butterfly's, after a child has been playing with it.

CORRESPONDENCE.

A PIED BLACKBIRD.

SIR,—During the late hard frost, a pied Blackbird was seen frequenting our back yard. Many attempts were made to capture it, and finally a gin was set, into which the bird at once ventured and was caught; although it was caught by the head no damage occurred, and it was immediately released from its unpleasant position and caged.

Four weeks have now elapsed since its capture and the bird is in fine plumage, looks healthy and is growing fairly tame. It is fed on barleymeal, oatmeal and groats, and various tit-bits. As it whistles it is probably a cock. The body is glossy black; the head, neck and throat much speckled with white; there is a white bar behind the head, and one white spot in the centre of the breast. The wings are evenly marked with four white feathers on each shoulder, and the first primary is also white. The beak is very long and brilliant orange-yellow.

E. E. THOYTS.

FOREIGN FINCHES AT THE CRYSTAL PALACE.

SIR,—I have read with much pleasure Mr. Fillmer's interesting article in the March Magazine, on "Foreign Finches at the Crystal Palace."

As he has evidently undertaken to set me right in regard to some of my exhibits, perhaps I may be allowed to reciprocate the compliment by correcting him. He says my second prize Waxbills are "*Bathilda ruficauda*" sometimes called the Red-headed Waxbill. In this he is not quite correct. According to my information and understanding they are "*Estrellda ruficauda*" or Red-tailed Finches, as "*ruficauda*" clearly denotes. He also says "Mr. Smart's beautiful White-crested Finch (*donacolu pectoralis*) took the third prize." Here again he is wrong. The finch is not white *crested*, but white *breasted*, as it ought to be, and as *pectoralis* demonstrates. In regard to my two Bishops or Weaver Birds, both are certainly Oryx cocks, as I was well aware. The Crimson-head entered was too far gone out of colour to be sent, and at the last moment I substituted an Oryx rather than cancel the entry. I could not, of course, alter the entry-form *then*; although I might have affixed the name to the show-box, if the rules permit of that being done, which I rather think they don't. The alteration, however, was so palpable, that it could mislead no one with any pretensions to knowledge of foreign birds. In these circumstances my mistake, if it be one, is "excusable although tiresome." In future, the better way perhaps will be, to cancel an entry where the bird entered is not presentable, rather than substitute another, and be thought ignorant of its name.

For the benefit of others, as well as in vindication of myself, I trust you will give this a corner in the Magazine for April.

The plan of having the Palace Show reported in the Magazine by various experts is, I think, a capital idea—at least, I have enjoyed the March Magazine very much.

JOHN SMART.

SIR,—If Mr. Smart will refer to the British Museum Catalogue of Birds, he will find that his birds which received the second prize in the Waxbill class are there called *Bathilda ruficauda*—the genus *bathilda* being placed between *aidemosyne* (Silverbills and Cherry-finches) and *poephila* (Parson-finches and Gouldian-finches). Their mode of singing would seem to separate them widely from the genus *Estrilda*. They have a strong, though perhaps only superficial, resemblance to another Australian waxbill, the Crimson-finch, *Neochmia phaeton*. If Mr. Smart prefers the generic name of *Estrilda*, by all means let him stick to it; he errs, if he errs at all, in very good company—but the British Museum Catalogue is now generally recognised as the highest English authority on the nomenclature of birds, and much confusion would be prevented if all aviculturists would follow it. The English name of Red-headed Waxbill is much more appropriate than the scientific name *ruficauda*—the red face being a far more characteristic feature of the bird than the reddish tail. It is not essential, although usually convenient, that the English name should be a translation of the scientific name. By the way, I think Mr. Smart's birds are both cocks.

White-crested finch is, of course, simply a printer's error for White-breasted finch. I had not noticed this blunder until Mr. Smart pointed it out.

I do not suppose that so experienced an aviculturist as Mr. Smart would confuse the Oryx with the Flammiceps, but many people do confuse them; and for this confusion the illustration in Cassell's "Canaries and Cage Birds" is no doubt largely responsible.

It will be seen that Mr. Smart and I do not differ so much as he supposes.

HORATIO R. FILLMER.

RARE VISITORS.

SIR,—The following notices of rare birds appeared in the *Feathered World*, for March 8th:—Great Grey Shrike, killed at Hook Norton on February 15th; Little Bittern, killed near Horsham; Little Auk, killed near Horsham, during the late severe weather.

S. BRIGG.

WINTER VISITANTS TO THE NEIGHBOURHOOD OF SCARBOROUGH.

SIR,—Some of the readers of the Magazine were wishing to hear of any rare birds which had been seen or obtained on our coasts. The following is a list of birds reported to me by local Bird-stuffers and others.

The Little Auk has visited us by hundreds, and one taxidermist has stuffed more than 80 specimens. These little birds were seen flying past the Brigg at Filey, in droves of scores and hundreds, and were picked up dead and alive in many places, and even inland as far as the city of Leeds. One was found dead on my land, and a male Swan, shot in Cayton Bay, measured 8 feet from tip to tip.

Glaucous Gull, Iceland Gull, Little Gull, Barnacle Goose, Canadian Goose, some of these were caught alive, and my brother has one now on his pond.

Fulmar Petrel, Eider Duck, Tufted Duck, Goldeneye. I heard of one man shooting two of these at one shot. A mature Drake was also obtained, which is said to be very rare in these parts.

Brünnich's Guillemot, one picked up at Scarborough, and a second at Filey. Exceedingly rare birds, Merganser, Goosander, Pink-legged Buzzard, Merlin, Hawfinch, Scaup Ducks.

I heard that at Pickering, numbers of Crossbills were seen.

No less than ten wild Swans were seen flying over our village one morning. A peculiar thing is that I never saw a single Mountain Finch in my stack yard all the winter, whereas on previous winters there have been scores of them, and also Tree Sparrows.

JAMES COOPER.

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RARE FOREIGN BIRDS.

VI.

THE PURPLE-CAPPED LORY.

By C. S. SIMPSON.

The Lories and Lorikeets, though the most beautiful, and, in some respects, the most interesting of the Parrots, have never been very popular as cage-birds in this country. They are generally rather expensive; they have the reputation of being delicate and short-lived in captivity; and they require more attention in the matters of food, temperature, and cleanliness, than most aviculturists are able to bestow upon their birds. As a result, their habits and proper treatment in captivity have been less studied than those of other parrots, and are still but imperfectly understood.

The Broad-tailed or True Lories require to be treated in some respects differently from the Sharp-tailed Lories or Lorikeets: of the former group, the Purple-capped Lory is the best known species; but it is not very often kept, and may perhaps be fairly included in the series of "Rare Foreign Birds." This species is also called the Black-bonnet Lory; but it must not be confounded with the rarer Black-capped or Lady Lory (*Lorius Lori*). Although therefore its cap is rather black than purple, it is better to retain the name by which it is generally known in this country.

The Lories inhabit the islands of the Eastern Archipelago, and the Purple-capped species is said to be indigenous to Ceram and Amboyna. I have never been able to meet with a trustworthy account of their habits in a state of freedom; but they are said to feed upon soft fruits, unripe seeds, the honey from flowers, and insects. The latter, however, they will not eat in confinement, and I think it is doubtful whether animal food is natural to them.

The prevailing colour of the Purple-capped Lory is a rich crimson; the wings are green, with a golden lustre in certain lights; the pileum or cap is black, merging behind into purple; the thighs and the feathers at the bend of the wing are bright blue; a band of golden yellow crosses the breast, this varies considerably in breadth in different specimens; the tail is dull red, with a terminal band of reddish brown; the feet and claws are black; the beak orange; the cere, and a narrow rim of bare skin round the eye, black; the iris brown. The plumage has a beautiful silky texture, and the effect of the varied colours in the sunlight is most brilliant. The colouring of some specimens is much brighter than of others; but this is not an indication of sex, as has sometimes been stated.

Individuals of this species vary greatly in temper and disposition. Most of the birds I have come across have been wild and untameable, and for a long time I was rather sceptical as to the Purple-cap deserving the eulogistic description given of its character by Dr. Russ, and other well known aviculturists. A year ago, however, a Purple-capped Lory came into my possession, which, though rather bad tempered at first, rapidly became very tame, and is now one of the most charming birds I have ever had. She (for the bird is a hen) is rather nervous with strangers, but most

affectionate towards anyone she knows well. When taken from the cage on my hand, she utters shrill cries of joy and shews her pleasure by dancing and bowing in the quaintest manner. She hops up my arm with curious side-long hops, and arrived at the shoulder, gently nibbles the ear or hair. The filamented tongue is constantly in motion, being inserted into every crack and crevice, and being used to explore every strange object. She shews much ingenuity in undoing the fastenings of her cage, and having escaped, always makes for the bananas; but she will always come on to my hand when called. She has never attempted to talk, nor does she imitate the other birds. I believe that Purple-capped Lories rarely talk: at any rate, I have never met with a talker. She is most playful, and will lie on her back on the palm of the hand to be tickled under the wings, kicking her legs in the air like a kitten. She is fond of hanging head downward from the finger, and allows herself to be carried about in this attitude. She never sleeps on her perch, but lies on the floor of the cage at night.

On the question of the most suitable food for Lories, various conflicting opinions are held. The most generally accepted doctrine is that of the eminent aviculturist, Dr. Russ, who teaches that "Lories may only be considered as likely to live if they take hemp and canary seed as their chief food." He afterwards, however, qualifies this statement by adding "good soft fruits are absolutely necessary for all Lories." Dealers in this country, when selling a Lory, usually recommend an exclusively seed diet. My own experience is, that Lories and Lorikeets will not live very long on seed alone. The Lorikeets undoubtedly may be habituated to a dietary consisting principally of canary seed, if a moderate allowance of fruit be also given; but a Purple-capped or Ceram Lory requires a much larger proportion of soft food. Such a bird may certainly be trained with some trouble to live principally or even entirely upon seed; but it will soon be found that the *excreta* contain a large quantity of undigested seed, and sooner or later the result will be death from an apoplectic fit. Even Swainson's Lorikeet, if fed entirely upon canary seed, as is usually advised, is very liable to die suddenly from the same cause.

My Purple-capped Lory has a tin of canary and hemp seed in her cage, and she eats some of this, but not very much. Every morning she has a saucer of bread soaked in boiled milk and made rather moist. Later in the day she has fruit; half a banana, a fig, some grapes, or a piece of apple; she is exceedingly fond of all kinds of fruit. She also likes boiled rice, potato, and sponge cake. This diet is not a very elaborate or expensive one, but it is all that is needed to keep a Lory in perfect health. A supply of clean sharp grit must of course be given, and plenty of clean water both for drinking and bathing.

It must be admitted that Lories kept in this way require a good deal of attention in the matter of cleanliness. A metal cage is essential: the ordinary square parrot cage does well enough, and the floor should be covered with a thick layer of pine sawdust, which must be daily renewed. I consider this an important point in keeping birds of this description. Sawdust is very absorbent, and the turpentine which it contains is of great value in preventing any unpleasant smell. At one time I used sand in the cages of my Lories, but found it of little use. The cages required cleaning twice a day, and even then could not be kept sweet in warm weather. With a good layer of pine sawdust, however, a daily cleaning is all that is necessary to keep the cage of a Lory perfectly sweet.

The Purple-capped Lory is somewhat impatient of cold; but a temperature of 50 degrees will keep it in health, and an occasional fall to 45 degrees will do no harm. Like most birds, it will do better in a bird room in which a tolerably even heat is maintained than in a sitting room where the variations of temperature are, as a rule, considerable.

All the Lories are spiteful toward other birds, and the Purple-cap is no exception to this rule. It is therefore a more suitable bird to keep in a cage as a pet, than in an aviary with other birds.

THE MIGRATORY INSTINCT.

By REGINALD PHILLIPPS.

In our magazine for April, at page 65, referring to the restlessness of some birds at night during the season of migration, Dr. Butler rejects the old fashioned idea that it is caused by the migratory instinct, and advances a theory to account for it which is new to me. When a novel proposition is brought before us, we naturally test it by our own experiences; and I am bound to remark that if I were to go to my bird-room (and I frequently go to the bird-room at all hours of the day and night) at roosting or any other time, and endeavour to stare my pets out of countenance, I should get worsted in the encounter. Commencing with Cherry, whom I have already introduced to you, they would one and all cosy their heads between their shoulders, and leave me decidedly out in the cold. And Dr. Butler's theory does not meet the more frequent cases of birds going quietly to roost, but knocking themselves about during the night, without any human eye being present either to disturb them or to witness what actually does take place. Many of these cases, however, as is well known, may be accounted for—who can say how many or how few—by a visit from our common foe, the mouse.

Nevertheless, cases of restlessness amongst birds at night do occur which cannot be accounted for either by fear of the mice or of the evil eye. Let me mention some which I can speak of as facts.

First let us consider the Cuckoo; not, indeed, the uninteresting Cuckoo referred to by Dr. Butler at page 64, for a Cuckoo may be rendered intensely uninteresting by its human jailor, but a well brought up bird, which I know from many years of experience makes a most interesting pet. When I place such a Cuckoo in a large cage facing a window, or loose in the bird-room, it goes to roost quite peaceably, night after night, for some weeks. But alas for its beauty, a change always comes sooner or later. Although quiet all the day, going up to its roosting place as usual at even, after a while it seems to get up steam, to work itself into a fever, and it launches forth against the wires of its cage, or against the wire-protected window, time after time, during the greater part of the night, caring nought for its self-inflicted injuries, and regarding my presence as lightly as my absence. Now if you will look back to the first number of our magazine, at page 11, you will see that, partly for the sake of the migratory birds, I usually have a lamp burning in my bird-room all night. How does the light affect the Cuckoo, and how does the bird behave under these altered circumstances? For a time, as before, there is not any disturbance at night; but the old weird change unfailingly comes on at the usual season. Not long after night-fall, it leaves its roosting-place, and quietly flies on to the perch nearest to the window, and directly in front of it. Always on this perch, and always facing the window, which can no longer attract it by its light—but the clever bird knows well it is there—with neck stretched out to its fullest extent, hour after hour it sits on that perch beating the air wildly with its wings, ever just on the point of dashing forward, but rarely actually flying. And if the bird be in a large cage, although I cannot see it, yet for hours I can hear the swish, swish, swish, of those magnificent wings. Usually when there is a light, whether in a cage or loose, it quiets down towards midnight, and goes to sleep.

This remarkable restlessness of the Cuckoo, which is almost painful to behold, lasts longer with some specimens than with others, but never fails to develop itself when the birds are in good condition and kept as described. It continues more or less into the winter, but does not re-occur to any serious extent as the birds grow older. As a rule, the males are taken with the complaint, whatever it may be, very much worse than the females.

Then there is the Hoopoe. For a time the nights pass quietly by; but before the autumn has grown very old a change comes over it as in the case of the Cuckoo. When there is not a light in the room, the bird flounders about, takes reckless flights from time to time, but passes so much of the night

on the floor that it usually takes a chill, and dies. It evidently makes for the window, but, not being able to hang on to the wire, very soon comes down. When there is a light, it seems unable to find the window, and passes some few hours flying round and round the room as if mad, usually the "way of the sun," and only stopping for a brief space now and again to rest on the highest perch near the wall, the others being evidently too far away from the track of the bird's flight to attract notice. This flight rarely continues later than about 11.30 p.m., by which time I have generally found that it has composed itself to sleep on its accustomed perch. The wave of uneasiness in the Hoopoe lasts only a few weeks; and all through the winter it sleeps like a top, just occasionally dropping down for a moment to take a bite of food. It is worthy of remark that a Hoopoe I now have (April, 1895) has recommenced to be very restless: does he think it about time to leave the villages and oases of Africa, or wherever he may fancy he has passed the winter, and fly north to Europe, where he was born, and bred, and imprisoned?

I should like to mention one more case, that of a male Blue Rock-Thrush. During the autumn it was over-shadowed by another, and never moved at night from the dark corner in which it slept, a corner so hidden away that no human eye could detect the bird in it. A few weeks ago the instincts of the two birds developed to such an extent that I had to turn the stronger one out into the garden. But now the Thrush in the bird-room, after an inaugural period of uneasiness, has become almost frantic at night; and I am doubtful if it gets a single wink of sleep. It rushes round and round the room, stops midway in the air, and rushes as madly round and round in the opposite direction, with an occasional side-dash at the window. Like the Hoopoe, perhaps it thinks it has had enough of Africa, and would like to try the Tyrol air again. And really this is very likely, for the bird-room is a little extra-warm just at present; and some little thing of this kind may just make the difference which causes one bird to sleep quietly and another of the same kind to develop a kind of frenzy. These two Blue Rock-Thrushes have practically never seen a female of their own species, and never look at one of another, and yet their pairing instinct has developed. Why, then, under conditions which in a sort of way may happen to be similar to those which prevail in the natural state, should not the migratory instinct develop in like manner? Anyway, taking the cases I have cited, more especially that of the Cuckoo, we have a something, an indescribable something, a madness, a frenzy, which has such complete control over the bird that it is literally "possessed," and for the time insensible or indifferent to pain. I know that the mice have nothing to do with it, nor yet the eye of man; and if it is not the migratory fever I shall be glad if somebody will kindly let me know what it is.

OUR BIRDS.

I.

MY SMALL FOREIGN BIRDS.

By H. R. FILLMER.

This is not to be an article on Small Foreign Birds in general, or even upon those species which are represented in my own collection; but simply a chat about some individual birds now inhabiting my bird-room.

Therefore I will ask you, my reader, to walk into my bird-room, and I will act as showman. I say *into*, and not *round* my bird-room advisedly, because there really is not room to walk round; there is standing-room and that is all.

You will see only one bird-cage in use, (there are a few empty ones about), and that is a double canary breeding-cage containing a pair of Australian Crimson Finches, each in a separate compartment; you will naturally ask: "Why are those birds kept in that cage, instead of being in one of the aviaries with the other birds?" The answer is that they have

had to be condemned to life-long solitary confinement on account of their insufferable quarrelsomeness. They are a true pair and have been in this country for three years or more, and before they came into my possession they lived together, without any partition between, in peace, as husband and wife should. Very likely you have seen them yourself, at the Crystal Palace or other Shows, for they were noted prize-winners in their day. They never could be trusted with other birds; that was tried, with unfortunate results to the *others*; but still they did not quarrel, or at any rate not much, with each other. However, shortly after their removal to my bird-room, I left them safely one morning in a roomy cage together—when I returned at mid-day I found the hen huddled up at the bottom of the cage, apparently just expiring. It seems that the cock had had a dispute with his wife; from words he had proceeded to blows, and in the end had nearly pecked her to death. I took the hen out of the cage; but she was very cold and showed no symptoms of reviving until I poured a little brandy and water down her throat, after that she recovered a little and in time got well—but her head was denuded of feathers and for a long time I thought her eyes had been permanently injured. I have often wondered why they took it into their heads to quarrel so desperately just after they came to my house—I really don't think that a bad example has been set them here. These Crimson-finches are very fond of all kinds of soft food, mealworms, ants' eggs, egg; anything which insectivorous birds will eat is appreciated by them, and yet they will live perfectly well on seed alone. Now, in their old age, they have a tendency to baldness about the sides of the face and over the beak; but not on the neck and back where baldness generally commences. They seem to be very hardy. It is a great pity that their quarrelsomeness prevents any attempts at breeding.

Now, leaving the occupants of the double breeding-cage and turning in the same direction as the hands of a watch, you will next see before you one of my aviaries which contains a mixture of Waxbills and other birds which I do not expect to nest. Many of these are birds which seldom or never breed except at a much higher temperature than that here maintained; others are birds which might be expected to breed if they were kept in pairs, but unhappily I have only solitary specimens or two of the same sex. Beginning with the waxbills, you will notice a pair of Avadavats and an odd hen. The pair were brought from India by an acquaintance of mine, along with about 50 others of the same species, in one of those beautiful Indian cages which the natives make out of cane and wire—they and their owner made the passage in the very hot summer of 1893, and during the voyage, and for some months afterwards, only one of the birds died, and that was accidentally drowned. This shows that if birds be carefully imported the mortality, so great under ordinary conditions, may be reduced to very small proportions. The odd hen Avadavat is the patriarch of my collection—I have had her a year longer than any of my other birds. A pair of Orange-cheeks and a pair of Golden-breasts do not call for special notice; but a fine pair of the rather rare Sydney Waxbill are worth more than a passing glance, while the gem of the collection of Waxbills is the very uncommon Dufresne's Waxbill (a hen), unfortunately a solitary specimen and in rather bad plumage.

Of the *Spermophilæ* I have only the Half-white Finch (*S. hypoleuca*) and the Lined Finch (*S. lineola*). The latter was sold to me as a hen White-throated Finch, and for more than a year I believed it to be a hen—it then began to sing and to assume the distinctive plumage of the cock Lined Finch. Moral: buy female *Spermophilæ* of unknown species when you can get them cheap, for you never know what they may turn out to be. My Lined Finch is a very good songster, in my opinion a far better one than the White-throated Finch. I have never heard the Half-white Finch sing during the year-and-a-half that he has been in my possession.

There are only two Manikins in this aviary, but they are both rather rare ones: the Striated (*Uroloncha striata*) and the Sharp-tailed (*Uroloncha acuticauda*)—they are cock and hen and *ought* to breed mules; but somehow they don't, although the hen (the Sharp-tail) lays an egg now and then.

No, I am wrong, there are some more Mannikins here: for I must not forget my old pair of Chestnut Finches which won me a good many prizes during the short time that I went in for exhibiting, but which now repose upon their laurels and look fully as old as they are. They have been good servants, but they were never favourites of mine—the Chestnut Finch is the most stupid and timid of birds.

Probably the most uncommon bird in my room is the *Jacarini volatine*: he is a little South American bird of a very graceful shape, and similar in colour to the male Combasou—as I mean to describe him, some day, in a paper for our “Rare Foreign Birds” series, I will say nothing more about him now. But I take much more pride in my Parrot Finch, which I bought for 5/- in answer to an advertisement of an “Australian Green and Red Finch,” in the *Feathered World*—this beauty brightens up the whole aviary with his lovely metallic green.

Although a much less valuable bird, my Alario Finch is an even greater favourite than the Parrot Finch: he is by far the tamest of all my birds, and much the best songster (except, perhaps, a hen Grey Singing-finch which sometimes, but very rarely, indulges in a song; the cock Grey Singing-finch is, alas! dead). The Alario sits on a bough close to the netting which divides his aviary from the one adjoining it, and on bright days sings away almost constantly, as if he were defying the Ribbon-finches and Weavers in the next aviary. I wish I could obtain a wife for him.

Another solitary, but equally cheerful, little bird is the Cuba-finch—it seems even more hopeless to try to get a wife for him, for Cuba-finches so rarely reach England and are so rapidly bought up when they do. Oddly enough, the Cuba Finch has struck up a great friendship with the Dufresne’s waxbill, and they often sit side by side and preen each others feathers.

The Whydahs are out of colour and therefore not worth looking at, although the Combasou still retains his summer plumage. This Combasou is getting an old bird, and I find that each year he remains longer and longer in colour; perhaps, if he survive long enough, he will be in perpetual colour!

An odd Parson-finch, and a Cherry Finch whose wife fell a victim to the Crystal Palace Show of 1894, complete the list of birds in this, my most thickly populated aviary. I must leave the contents of the other aviaries to be described some other time.*

BRITISH BIRDS WE HAVE KEPT.

V.

THE ROBIN.

By THOMAS MARSHALL,

Hon. Sec. of the Cage Bird Club.

There is no bird which I take greater pleasure in writing about than the Robin (*Sylvia rubicola*), because I feel he is well worth all that I can say about him, not only as regards his song and personal appearance, but also because of the comfortable, not to say philosophical, manner in which he adapts himself to surrounding circumstances. And this sentiment does not apply solely to his manner of adapting himself to captivity, because he is by no means so conservative in his methods, when at liberty, as birds generally are: for instance, the places chosen for the purposes of

*This paper was written some months ago, and several of the birds mentioned died last February from the effects of the dense smoke which arose from a lamp left burning in the bird-room all night, and which in some inexplicable way got out of order. Oil lamps and oil stoves are highly dangerous in bird-rooms. The article is now published chiefly in the hope that others will follow my example and send the Secretary a chatty informal account of their birds. This is a series to which all can contribute, and those members who have not yet written for the Magazine are especially urged to send some notes, however rough, which can be published under the heading of “Our Birds.”—H. R. F.

building the nest vary very much, sometimes in a bush, sometimes on the ground, occasionally in the crevice of a wall; but always carefully concealed, and this is curious to note in a bird which displays so little mistrust in mankind as does our red-breasted friend, a farther description of whom I feel it quite unnecessary to write; because that is a matter in which we are all fairly well posted, almost before we leave the nursery.

His radical instincts do not stop at the selection of a site for his domestic operations. The materials chosen for making the nest varying slightly in different districts, and even the eggs are said to vary in color and markings; they number five or six, and as a rule may be described as pale reddish-white, faintly splashed with darker red, chiefly at the larger end; but cases are on record where Robin's eggs have been found entirely white.

The Robin is an early builder, and young birds have often been found in the nest at the end of March.

When at liberty the diet of the Robin is mainly insectivorous, consisting largely of earwigs, flies, beetles and worms. It is said to be a prodigious eater; one writer going so far as to state that it will devour nine times its own weight in earth-worms per diem! However that may be, it is very certain that the Robin does not subsist entirely on earth-worms, but takes toll of the smaller fruit-bushes in their season; and its wages should not be begrudged, for considering the countless thousands of destructive insects a pair of Robins will devour, they are indeed well earned.

The pugnacity of the Robin is almost proverbial, and the aviarist should not attempt to keep two males in the same aviary, for sooner or later one of them would decide that life was not worth living; and in an aviary where some of the smaller warblers are kept, one will sometimes make himself much too officious at feeding time and will secure for himself an unfair share of the mealworms or other dainties supplied; a proceeding to which there is necessarily a deal of objection.

It is as a cage bird that our sprightly little friend excels; for there, with proper care and attention, he will cheer us with his merry song the greater part of the year, and certainly in the winter when the others are silent. He is not at all difficult to cater for: ants' eggs of course should form the staple food, and grocer's currants, soaked or scalded, are much appreciated; and of mealworms he never seems to have enough, although I consider ten a day ample. I can also say from experience that he will partake of any of the soft foods that may be going, even to crushed hemp seed; but if there are ants' eggs in the food they are carefully picked out first.

In the management of freshly-caught Robins, I would warn my readers against keeping them too warm, especially if taken during the colder months of the year, or they will surely go into moult; at least, such is my experience. I recommend that each one be caged separately in a box cage with food and water inside, (for a newly-caught Robin will not, as a rule, put his head through a water hole, even to take a live mealworm) and the cages hung in the hall or, preferably, in an outhouse; care being taken of course that they are protected from draughts.

Robins make charming pets, they soon become delightfully tame and will take food from the hand within a few days of being caught. They vary somewhat in their song qualities, some singing with tremendous gusto, others contenting themselves with a gentle little trill which is perhaps quite as acceptable, especially indoors. Of their confiding little ways much might be written that is scarcely within the province of *The Avicultural Magazine*; while the keen interest Bobby appears to take in all that goes on around him, entitles him to a high place in the scale of ornithological intellect.

NEW BOOKS.

Foreign Finches in Captivity, by Arthur G. Butler, Ph. D., Etc., Part III.
(L. Reeve & Co., 6, Henrietta Street, Covent Garden).

Dr. Butler's account of the Buntings is concluded in this part and the Cardinals and the American genus *Spermophila* are dealt with. A good description of that most attractive bird, the Green Cardinal, is given, but the illustration of the female of this species is by no means first rate: the artist has failed to render the delicate blending of green, grey, and yellow tints which make the original so beautiful and has given his picture a somewhat patchy appearance in consequence. As far as our experience of this species goes, we should feel disposed to agree with the description of its song, which Dr. Butler quotes from Mr. Hudson, "its song is composed of four or five mellow notes of great power, and in tone somewhat like the whistle of the blackbird." This exactly describes the song of a fine male bird which we kept for some years. Dr. Butler, however, tells us that his experience was different, the explanation doubtless being that individuals vary much in this respect.

Both description and illustrations of the next two species, the Yellow-billed and the Dominican Cardinals are altogether excellent, and the same may be said with regard to the Red-crested Cardinal, though the latter is represented in an attitude which it seldom assumes. We are quite in accord with the author's opinion that hemp-seed in moderation has no injurious effect on the colour of the plumage of the Cardinals, but we think that he under-estimates the importance of soft food and especially of fruit of all kinds in feeding these birds. Of the latter they are all extremely fond, and in our opinion it has a most beneficial effect in improving the colour and condition of the plumage.

We are glad that Dr. Butler has discarded the misleading name of "Virginian Nightingale;" "Virginian Cardinal" is much better, and we hope will be generally adopted. A specimen as brightly coloured as the one illustrated would probably, if exhibited in this country, give rise to suspicions of colour-feeding: the account of this species is particularly interesting.

The genus *Spermophila* is represented in this work by two species only, the White-throated and the Bluish Finches. The former is the species best known to aviculturists, and it deserves to be more popular than it is, for it is a charming little cage bird. The Bluish Finch is neither a very well-known nor a very attractive bird, and we should have preferred an account of the prettier and commoner Lined Finch.

With this part is concluded the account of the *Fringillidæ* and aviculturists will await with interest the parts dealing with the *Ploceidæ* or Weaving Finches.

CORRESPONDENCE.

THE SONG OF HAND-REARED BIRDS.

SIR,—It seems to be rather a difficult matter to decide whether birds sing by instinct or imitation.

I have two hand-reared Yellow-hammers nearly two years old. There are no wild Yellow-hammers to be heard from our house, and the song of my little pets is a very curious production. They have loud clear voices, and have a slight idea of the well-known ringing notes of the Yellow-hammer, but it is a very imperfect one. One of them last summer had a feeling that a very high prolonged squeak should form part of his song, but did not know when to bring it in. So instead of finishing with it, he used to begin with it, and go on with the quick repetition of low notes afterwards. The rest of the performance was very much like the attempt of a young hen canary, who fancies that she can sing as well as her father!

My Yellow-hammers are not succeeding any better this year, but I hope soon to take them out into the fields, and let them hear their brethren, and then I trust they may learn their song correctly. It would be interesting to have the experience of others who have hand-reared birds out of hearing of their parents. I have had several bullfinches, but it is almost impossible to draw any conclusion from these, as no two bullfinches seem to me to have quite the same song.

H. B. R.

FOREIGN FINCHES AT THE CRYSTAL PALACE.

SIR,—Mr. Fillmer refers me to the British Museum Catalogue, which, he says, is the generally recognised highest English authority on the nomenclature of birds. It may be what he claims for it; I do not know, not having seen it. Be that as it may, however, for my part I prefer to accept the information I received from the importer of the waxbills in question, who has a life-long and daily practical experience in these matters, to the theorizing and speculations of so-called scientists who are, like aviculturists, generally very much dependent upon practical men for their information. I refer to Mr. Abrahams, who is the father of us all in these matters. I don't myself pose as an authority by any means—far from it—but simply rely on information thus received, and my understanding of Latin to translate into plain English the scientific names given to each species by men who presume, or are presumed, to know. But Mr. Fillmer says, "it is not essential, although usually convenient, that the English name should be a translation of the scientific name." If scientific names are not intended to reveal, but rather to obscure, the English meaning, then I ask what is the use of scientific names at all? They are a delusion and a snare. *Rufus* means red, and *cauda* a tail, clearly showing that this species should be and was intended to be known as the red-tailed finch or waxbill. At the same time, I quite agree with Mr. Fillmer that the red face or head is a more outstanding feature of the bird (at least of the cock), than the tail; and that red-headed finch might have been quite as, if not more, appropriate a name had the scientific nomenclature permitted it, or scientists thought of it. Probably they had in view the difference of sex-marking.

Similarly, *Pectus* means breast not crest, and hence white-breasted, not white-crested, is the correct name of my finch in the other class. Mr. Fillmer admits this to have been a blunder, but blames the printer for it. He is a terrible fellow the printer! He makes Mr. Fillmer say white-crested and you, Sir, blue-crested (see *Feathered World* report) when all the time both of you meant and wrote white-breasted.

As to the Weaver-birds, Mr. Fillmer exonerates me from all blame and ignorance, so that we are at one on that point.

In conclusion, I cannot understand Mr. Fillmer thinking my waxbills to be both cocks. His memory is playing him false. I can assure him a clearer case of cock and hen could not possibly be. In size, colour, and marking, the one is simply an adumbration of the other, and the expression of face and eye is altogether different. What Mr. Fillmer regards as the characteristic feature of the species is almost entirely absent in the hen, and the spots are fewer and smaller. The tails, however, are identical, and this may account for the name. His friend, Mr. Dewar, successfully shewed a pair of the same species at Glasgow and Edinburgh last autumn as cock and hen, and they were similarly marked, and were exhibited as "*Estrelida ruficauda*."

JOHN SMART.

[I certainly wrote "white-breasted" in the notes I sent to the *Feathered World*, and as I had no opportunity of correcting the proof, I am not responsible for any printer's error that may have occurred.]

I most strongly dissent from Mr. Smart's opinion that the work of Dr. Bowdler Sharpe and other writers of the British Museum Catalogue is "the theorizing and speculations of so-called scientists."—C. S. SIMPSON.]

SIR,—I think that Mr. Smart has fallen into the common error of supposing that, however many English names a bird may possess, it can have but one scientific name—the truth being that in the case of many birds the scientific names are more numerous and diverse than the English. One set of ornithologists call the Red-headed Waxbill *Estrellda ruficauda*, another set call the bird *Bathilda ruficauda*—everyone is entitled to use the name which he prefers, but not to accuse others of making a mistake because they employ the name which he rejects.

On a purely scientific point, Mr. Smart sets up Mr. Joseph Abrahams as an authority against Dr. Bowdler Sharpe! I don't think Mr. Abrahams will thank Mr. Smart for placing him in such a position; that well-known and highly respected dealer is an acute and painstaking observer, and I have no wish to minimise his services to aviculture, but I feel sure that he has no desire to pose as an authority upon classification. I am sorry that Mr. Smart should think it necessary to speak disparagingly of the scientific ornithologists, especially as he confesses that he himself is not a scientific man. It is always a mistake to "run down" that which you do not understand. There has been in the past far too much jealousy and suspicion between the "practical man" and the "scientific man"—each has much to learn from the other, and I hope that our Society may help to bring them together.

Dr. Sharpe's classification is based upon the study of structure, and structure alone—no one but a morphologist (which I am not) possesses the knowledge necessary to enable him to criticise Dr. Sharpe's work *upon its own ground*. No doubt, if Dr. Sharpe had studied bird life as carefully as he has studied dried skins, his conclusions would have been considerably modified. But what we aviculturists require is not a perfect system of classification, but a book which shall describe with great care and accuracy the plumage of every known bird, a book which shall be found in every Public Library, and be generally accepted as the highest authority—those requirements are fulfilled by the British Museum Catalogue of Birds, and by no other book of which I have any knowledge. Moreover, the nomenclature adopted in the B.M.C. is followed by Dr. Butler in his "Foreign Finches in Captivity," which will be the standard English work on small foreign cage birds for many years to come. For these reasons I repeat that it would be well if all aviculturists would use the scientific names adopted by the B.M.C. and abandon the use of all others. Much confusion would thereby be saved. But while advising the adoption of Dr. Sharpe's *nomenclature*, I do not advocate the adoption, by aviculturists, of his *classification*, in its entirety.

The following is a description of the female *Bathilda ruficauda*, which I have extracted from the work in question—it will enable Mr. Smart to decide for himself whether his bird is a cock or a hen. "Similar to the male, but duller everywhere, with no rosy spots on the upper tail-coverts, but only a subterminal rosy white bar; very little crimson on the forehead and face and scarcely any on the chin." Dr. Butler tells me that *B. ruficauda* is really a Grass-finch and not a Waxbill.

HORATIO R. FILLMER.

ICELAND AUKS.

SIR,—I see Mr. Stanley Brigg asks a question, "What are Iceland Auks?" I have no doubt a great many of your members can answer this question. I may say the bird is the Rotche or Little Auk, length about eight inches, and is something like a Guillemot only half the size. While duck shooting on Filey Brigg this last October, I saw the little fellows several times, and the Filey fisherman look upon them as a forerunner of hard or bad weather. They call them Iceland Auks.

Yours faithfully,

HOWARD WILLIAMS.

CARDINAL GROSBEAKS.
BALDNESS.

SIR,—I have for some years past kept in my outdoor aviary (amongst other birds) a pair of Virginian Nightingales. They have never nested, the chief reason preventing them being, I think, that the hen bird loses her head feathers, and seems to get generally out of condition. She keeps very well all the winter, and recovers from the moult all right, but when spring comes her head gets quite bald, and during the summer she appears mopy.

With regard to a lot of little Australian Waxbills I bought a short time ago, a couple of pairs of which I gave to a lady, who kept them in a cage together, one of them after a week or so got pecked about until it had no feathers on its head. It seemed to like being pecked, putting its head down for the purpose, and a few days later it was found dead in the bottom of the cage. Is this the fault of the food? They were fed on canary and millet seeds and were given green food. The rest of the lot I purchased, I put in my aviary, and they are all as healthy as possible.

I should like to know if you have ever been successful in rearing Virginian Nightingales, and if so, under what treatment, and also as to the baldness of the hen bird, and generally on the points raised in this letter.

Yours faithfully,

HARRY L. PIKE.

—

The following reply has been sent to Mr. Pike :—

The Virginian Nightingale or Cardinal Grosbeak will frequently nest in captivity. An outdoor aviary is the most suitable place for experiments in breeding this bird. It prefers the fork of a tree for a nesting place. Mealworms must be supplied very sparingly or withheld altogether during incubation, and while the young are small.

I have never bred this species—will some member who has been successful in so doing kindly give the Society the benefit of his experience?

You do not state how you feed your birds, but possibly the baldness of the hen may be due either to an excess of animal food or to the want of it. The staple diet should be canary seed, but a small quantity of sunflower seed and occasionally some hemp seed should also be given. Millet seed, paddy rice and maize may also be given for a change. A few mealworms are decidedly beneficial, but never give more than two a day for each bird—it is better, every alternate day, to substitute some egg for the mealworms, the preserved egg answers well. Supply plenty of green food and fruit.

Probably the lady to whom you gave the Waxbills kept them in a room which was hot in the day time and very cold at night—violent changes of temperature are very trying to these tiny birds. Waxbills will often survive many degrees of frost in an outdoor aviary, provided they be first turned out of doors in the summer and are provided with snug sleeping places. They generally keep in good plumage out of doors. I am not certain what species you mean by "Australian Waxbills," but if you refer to Sydney Waxbills they are decidedly hardy birds.

Waxbills as a rule eat very little canary seed, but besides white millet they should always have French millet—this may be given either in the ear, when it is called "Spray millet," or in the ordinary form when it is most absurdly called "Indian millet."

HORATIO R. FILLMER.

—

RARE BIRDS.

SIR,—A Bittern was shot in the Island of Anglesey last January.

HEDLEY SPEED.

GOULDIAN FINCHES.

SIR,—Will the Red-headed and Black-headed breed together ?

“GOULDIAN.”

The following reply has been sent to the Member who asks the above questions :—

Certainly Red-headed and Black-headed Gouldian Finches will breed together and produce fertile offspring: They even do so when wild, and in the aviary Black-headed hens show a decided preference for Red-headed mates. The two forms are only varieties of one species, and therefore it is quite possible to breed Red-heads from Black-head parents, though not usual. Last year I purchased a pair of Black-headed Gouldians; neither of them showed any red on the face. The male bird died, but the female is still living, and after her moult she showed several red feathers on the cheeks, thus proving that one of her ancestors was a Red-head.

A. G. BUTLER.

OIL STOVES *v.* GAS STOVES FOR THE BIRD ROOM.

Mr. Fillmer, in the foot-note to his article in this month's Magazine, expresses a strong opinion against the use of oil stoves in bird rooms. I have used one of Rippingille's paraffin stoves, for two years, in my bird room, and have found it free from smell, easily managed, and in no way injurious to the birds. On the other hand, I have twice known serious accidents to occur from the use of gas stoves. In one case, the flame was extinguished in some way during the night, the gas continuing to escape; and in the other case, a "syphon gas stove," which had acted satisfactorily for some time, got out of order, and filled the bird room with a dense suffocating smoke. In both instances the accident was fortunately discovered before very much harm was done.

I should be glad if any members of the Avicultural Society would communicate their experience on a point so important to aviculturists.

C. S. SIMPSON.

CHAMBERS' ENCYCLOPÆDIA AND AVICULTURE.

SIR,—Messrs. W. and R. Chambers have recently brought out a new edition of their very useful Encyclopædia. I have been much amused by reading the articles therein under the headings "Cage-birds" and "Canary-bird." It is a great pity that the Editor did not obtain the assistance of some practical Aviculturist.

From the many extraordinary and erroneous statements contained in these two short articles, I select the following for the edification of the readers of the *Avicultural Magazine*. "English soft-billed songsters . . . all have to be fed on crushed hemp and bread-crumbs, with animal food in the shape of meat or insects." (How long would the unfortunate soft-bills live on this diet?) "It is far better to err on the side of short commons than to feed too high." (I suppose this means; "Be liberal with the bread-crumbs and sparing with the meal-worms.") "The safest and most useful medicine is a drop of castor-oil." (It kills twice as many birds as it cures.) "The Canary *seems* thoroughly reconciled to its cage life." (It ought to be by this time!) "The male (Canary) assists the female in building the nest." "Canary and millet seed are their (Canaries') principal food." "The Canary can learn to articulate words." It is much to be regretted that a standard work like "Chambers' Encyclopædia" should give currency to such arrant nonsense.

SEPTIMUS PERKINS.

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THE CLASSIFICATION OF FOREIGN FINCHES.

By H. R. FILLMER.

This subject having been raised incidentally in our correspondence columns, it has occurred to me that a few notes upon it may prove of interest to some of the members of our Society. Having had no scientific training, I am not well qualified to write upon the subject, but I propose simply to reproduce the classification laid down in the British Museum Catalogue of Birds, and, therefore, my readers may take it that there is good authority for what I tell them.

The whole subject is necessarily dry, and some may perhaps think that it has not much bearing upon aviculture. But when I first commenced the study of Foreign Birds, I experienced so much difficulty from the want of a popular explanation of the modern system of classification, that I feel emboldened to endeavour to supply this want, however imperfectly, and thus smooth the path of some of our younger students. Still, I could wish that some more competent hand had undertaken the task.

The Class *Aves* (Birds) is divided into a number of Orders, one of these Orders, which contains a larger number of species than all the others put together, is called *Passeres* (the Perching Birds). The Order *Passeres* includes, practically, all the birds which can properly be called cage-birds, with the important exception of the Parrots, which form an Order by themselves. The *Passeres* are divided into many Families, but I have to deal with only two of these, viz: *Fringillidæ* and *Ploceidæ*.

The *Fringillidæ* (Finches) are further sub-divided into three sub-families called *Coccothraustina* (Grosbeaks), *Fringillina* (True Finches), and *Emberizina* (Buntings).

The following is a list of those genera of the *Fringillidæ* which are of most interest to aviculturists. I give, in each case, the names of one or more of the species comprised in the genus, with the English name added. It is the absence of the English names which makes the Museum Catalogue so puzzling to beginners.

SUB-FAMILY <i>Coccothraustina</i> .	
GENERA.	SPECIES. ENGLISH NAME OF SPECIES.
<i>Chloris</i> ..	.. <i>C. chloris</i> Greenfinch
<i>Eophona</i> ..	.. <i>E. melanura</i> Black-tailed Hawfinch
<i>Coccothraustes</i>	.. <i>C. coccothraustes</i> Hawfinch
<i>Spermophila</i>	.. <i>S. albigularis</i> White-throated Finch
	.. <i>S. hypoleuca</i> Half-white Finch
	.. <i>S. plumbea</i> Plumbeous Finch
	.. <i>S. nigro-aurantia</i> Reddish Finch
	.. <i>S. cærulescens</i> Bluish Finch
	.. <i>S. gutturalis</i> Guttural Finch
	.. <i>S. lineola</i> Lined Finch
<i>Phonipara</i> ..	.. <i>P. canora</i> Cuba Finch
<i>Volatinia</i> ..	.. <i>V. jucarini</i> Jacarini Finch
<i>Cardinalis</i> ..	.. <i>C. cardinalis</i> Virginian Nightingale

SUB-FAMILY *Fringillinæ*.

<i>Fringilla</i> ..	..	<i>F. cælebs</i> ..	..	Chaffinch
		<i>F. montifringilla</i>	..	Brambling
<i>Carduelis</i> ..	..	<i>C. carduelis</i>	..	Goldfinch
<i>Chrysomitris</i>	..	<i>C. spinus</i> ..	..	Siskin
		<i>C. icterica</i> ..	..	Black-headed Siskin
<i>Acanthis</i> ..	..	<i>A. flavirostris</i>	..	Twite
		<i>A. cannabina</i>	..	Linnet
		<i>A. linaria</i> ..	..	Mealy Redpole
		<i>A. rufescens</i>	..	Lesser Redpole
<i>Passer</i> ..	..	<i>P. montanus</i>	..	Tree Sparrow
		<i>P. domesticus</i>	..	House Sparrow
		<i>P. luteus</i> ..	..	Yellowish Sparrow
<i>Alario</i> ..	..	<i>A. alario</i> ..	..	Alario Finch
<i>Serinus</i> ..	..	<i>S. flaviventris</i>	..	St. Helena Seed-eater
		<i>S. icterus</i> ..	..	Green Singing-Finch
		<i>S. leucopygius</i>	..	Grey Singing-Finch
		<i>S. serinus</i> ..	..	Serin Finch
		<i>S. canaria</i> ..	..	Canary
<i>Sycalis</i> ..	..	<i>S. flaveola</i> ..	..	Saffron Finch
<i>Loxia</i> ..	..	<i>L. curvirostra</i>	..	Cross-bill
<i>Pyrhula</i> ..	..	<i>P. europea</i> ..	..	Bullfinch

SUB-FAMILY *Emberizinæ*.

<i>Emberiza</i> ..	..	<i>E. citrinella</i>	..	Yellowhammer
<i>Zonotrichia</i>	..	<i>Z. pileata</i> ..	..	Chingolo Song-sparrow
<i>Cyanospiza</i> ..	..	<i>C. ciris</i> ..	..	Nonpareil
		<i>C. cyanea</i> ..	..	Indigo Bird
<i>Coryphospingus</i>	..	<i>C. cristatus</i>	..	Red-crested Finch
		<i>C. pileatus</i> ..	..	Pileated Finch
<i>Paroaria</i> ..	..	<i>P. cucullata</i>	..	Red-crested Cardinal
		<i>P. larvata</i> ..	..	Crestless Cardinal
<i>Gubernatrix</i>	..	<i>G. cristata</i> ..	..	Green Cardinal

(To be continued).

OUR BIRDS.

II.

A TALKING STARLING.

By JOHN FROSTICK.

A few weeks ago, during one of our customary country walks with a couple of "faucier" friends, we passed a picturesque ivy-covered cottage romantically situated in an ancient stone quarry, surrounded with fine old trees; the whole a very paradise for birds, big and little. Knowing the occupant of the cottage, an old-fashioned country tailor, who generally has a few good British birds of his own rearing on hand, we decided to call on him.

Old Barnes smilingly received us, and soon exhibited to our admiring gaze a lovely talking Starling, which, on our being told of its many accomplishments, vocal and otherwise, soon passed into our hands at a price pleasing to both parties.

Jacob, (for such is his name) on our arrival home, delighted us with his marvellous power of speech, and his tame, quaint, and amusing manners. He was so different from other birds, so human in fact, that we could see he would not have to be barred up in a cage all day; and as for putting him away in the bird-room, it was not to be thought of: so he lives with us in the dining-room, and has as much liberty as he chooses to take. When not otherwise engaged, we find him calling himself a "pretty boy, pretty Jacob, give us a kiss, (makes a kissing sound) coach and six for pretty Jacob," etc.; he also whistles "Garry Owen" fairly well. When I open the

cage-door and offer him some little tit-bit, he flies out on to my hand for it. Sometimes he will fly gracefully all round the room, and finally settle on the top of my head. Then he fairly delights to walk all over my body and examine me thoroughly; looks down my neck, up my sleeve or into my pocket; tries to steal my ring or watch-chain, until I get tired of him and put him into his cage—he won't go himself. He loves to take his bath in a large bowl on the table, and doesn't he make the water fly! but the worst part of it is, that as soon as he is thoroughly saturated, he makes for my shoulder and gives himself a good hearty shake, the surplus water running freely down my neck; but I know his little ways, now, and prepare accordingly, by turning my coat-collar up.

A gentleman writing to me the other day said, he would like a Starling, but he had been told "they were such dirty birds," so he had changed his mind. Well, all I can say is that anyone calling a Starling a "dirty" bird doesn't know what he is writing about; and the person who keeps a Starling dirty, is either lazy, or ignorant of the management of cage-birds. Insectivorous birds are, I admit, a little more trouble than seed-eaters; but then, if the bird is not worth a little attention, it is not worth keeping: such is my opinion. My bird's cage is cleaned out two or three times a-week, and is never in a "mess;" it is of the box kind, with moveable wire front, 2ft. 6in. by 1ft. by 1ft. 8in. in size, with china troughs for food and water hung outside.

I find that a mixture of fine sand and rice-husks, in equal parts, makes by far the nicest and most cleanly dressing for the moveable drawer-bottom. For all soft-bills, sawdust or garden-mould is very objectionable from many points of view. For food, I give a mixture of my own making, the receipt of which I published in the *Feathered World* some time ago; for those who don't care about making their own, I can strongly recommend Abrahams' Insectivorous Food as first-class.

In conclusion, let me advise all who are in want of an intelligent, comical, and highly amusing pet (not to mention his great beauty), to try a *hand-reared* Starling, and I think they will not regret it.

BRITISH BIRDS WE HAVE KEPT.

VI.

THE WRYNECK.

By ARTHUR G. BUTLER, Ph.D.

The Wryneck (*Lynx torquilla*) is a summer visitor to Great Britain, and is almost exclusively insectivorous; its favourite food consists of ants' cocoons, and consequently it is frequently seen on the ground, generally on an ant-hill. When feeding, it crouches close to the earth, and its long glutinous tongue darts in and out so rapidly that its food seems to disappear down its throat as if magnetically attracted: when the cocoons are scarce, this bird by no means despises living ants, of which it devours great numbers.

This species frequents orchards, gardens, enclosed fields, parks and plantations; it breeds in holes, usually in trees, but it makes no proper nest, but deposits its pure white eggs, which vary in number from five to twelve, upon the decayed wood or rubbish at the bottom of the hole: when the latter is shallow, the eggs may sometimes be seen from the opening; when fresh they are very pretty objects, with the rosy glow of the yolk showing through the shell.

On the ground, or when moving up a tree, the Wryneck progresses by long hops; its feet are adapted for climbing, with two toes in front and two behind, and although the tail feathers are not stiff like those of a Woodpecker, I observed that my birds always used them to assist in climbing, contrary to the statements of some ornithologists.

I first obtained eggs of this species towards the end of June, 1880: visiting an orchard on a birds' nesting excursion a few days before the close of my Spring holiday, I observed a Wryneck examining a hole in a decayed old apple-tree. The hollow which seemed to be most attractive, was one which had been occupied the previous year by a Robin; in the bottom there was still a little withered grass. I called the son of the man who rented the orchard, and pointed out the hole to him, promising him a shilling if he would take the eggs for me as soon as the clutch was completed—about a week later they were forwarded to me and I had the pleasure of preparing them for my collection. In all probability the birds laid again in the same hole; for it has been observed that this is a peculiarity of the Wryneck; Mr. Frank Norgate, in 1872, having taken forty-two eggs from one nest of this bird, and the same number the year following—a proceeding which I should regard as simply abominable.

In July, 1887, I found a nest of five young Wrynecks in a brick-earth cutting at Kemsley, in Kent. I was searching for nests, and was attracted by a sibilant twittering; I had slightly to enlarge the entrance in order to get my hand in, when there was a loud hissing sound like that which would be produced by a nest of snakes; as I hastily drew back my hand a young bird flew past it and escaped; its form, and wild undulating flight, proclaiming it a Wryneck. I at once plunged my hand into the hole and secured the other birds; one of which, however, escaped as I was putting a second into my basket.

As soon as I reached home, I made up a mixture of moistened Abrahams' food and ants' cocoons, and had little difficulty in persuading the three young birds to feed: I placed them in an ordinary wood and wire Canary-cage and left them to sleep off the effects of their meal. To my astonishment, when I returned to feed my birds again, they were sitting in a row on the back of a chair, having all escaped through the water-hole—a passage barely large enough to admit my thumb: how these large birds managed to squeeze through, I could not understand; but there they were.

I kept these Wrynecks for but a short time, one dying at the end of the month, one on the 14th August and the third on the 9th December: I fed them largely on ants' cocoons and caterpillars, of which at first they would only eat green ones, until I gradually persuaded them that the brown specimens were equally good. When hungry, their call for food sounded like the jingling of sixpences between one's hands. Wrynecks make interesting, though scarcely attractive pets.

NEW BOOKS.

The Royal Natural History—Parts 16, 17, 18, Edited by Richard Lydekker, F.R.S. (Frederick Warne & Co.).

These parts of the Royal Natural History contain the opening chapters dealing with the class *Aves*, and are therefore of special interest to aviculturists, who will find illustrated and described many species with which they are familiar as cage and aviary birds. Each part contains nearly one hundred pages of letterpress, illustrated with numerous woodcuts and two coloured plates.

One chapter, of sixteen pages only, is given to the important subjects comprised under the head of "General Characteristics," including the distinctive characters of the class *Aves*, the anatomy of birds, plumage, eggs, migration, distribution and classification. This is obviously far too small an allowance, even for a popular work, and consequently these subjects are treated in a very imperfect and superficial manner. For instance, the anatomy of the soft parts is altogether omitted, and the interesting questions of reproduction and development are hardly mentioned. It seems to us that one of the most important objects of a work of this description, namely, that of leading the lover of birds to take an interest in scientific ornithology, is thereby missed. On the other hand, a good description of the skeleton is given, and the aeration of the body and skeleton is briefly

discussed. Chapters II.-VI. are devoted to the order *Passeres*, and chapter VII. commences the order *Picariæ*.

Commencing with the *Corvidæ*, aviculturists will read with interest, an account of the Blue Pies, illustrated by an excellent wood-cut of the Red-billed species. Readers of the *Avicultural Magazine* will not need to be reminded that an account of the Chinese Blue Pie, from the pen of Mr. Philipps, appeared in our January number.

The Piping Crows, Glossy Starlings, Mynahs, Drongos and Troupials are also treated of in this chapter, and the account of these birds will be of much interest to aviculturists who are acquainted with them in a state of confinement.

Those of us who are specially devoted to the care of the smaller cage birds will be disappointed at the very short space allotted to the weaving-finches. We trust that the cumbrous and ugly name "blood weaver-finches" here applied to the waxbills, will not be generally adopted. A brief description of the typical finches calls for no special notice, and these are followed by the Larks, Wagtails, Pipits and Creepers.

The Poë Honey-eater is well-known as a cage bird, and the page given to this species will be of interest to aviculturists. Those very rare and very delightful birds the Zosterops are briefly mentioned.

The Tits and Shrikes are followed by the Waxwings, which are dealt with rather fully, and Chapter V. contains an account of the Thrushes, Rock-thrushes, Blue-birds, Chats, Redstarts and Warblers. The Shamas and Dyal birds have a page allotted to them, but the woodcut of the Indian Dyal bird (*Copsychus saularis*) is inaccurate, for the rump and upper tail coverts are represented white, whereas in this species they are black. The Green Bulbul, the most charming of all cage birds, is illustrated and described, and the Flycatchers, Martins and Swallows conclude this chapter.

Chapter VI. (Families *Tyrannidæ* to *Menuridæ*) is of less interest to us as these families contain but few species kept in confinement in this country.

Chapter VII. treats of the Woodpeckers, Creepers, Barbets and Toucans, several species of which are known to aviculturists and are occasionally seen at shows.

Members of the Avicultural Society will find these parts of the Royal Natural History well worth reading: the information given is reliable and interesting and the woodcuts are fairly accurate. The coloured plates are very poor indeed.

CORRESPONDENCE.

THE SONG OF HAND-REARED BIRDS.

SIR, -H. B. R. wishes "to have the experience of those who have hand-reared birds out of hearing of their parents."

As a rule, birds do not sing by instinct; but the Skylark and Chaffinch are exceptions to this rule. I found that both of these species sang the wild song; the Skylark, however, picked up the song of a Persian Bulbul, and introduced it into the middle of its own natural performance. The Pied Wagtail sings its wild song naturally; it is not unlike that of the Swallow.

On the other hand, the Missel-Thrush, Song-Thrush, and Blackbird certainly sing by imitation; so does the Nightingale.

I have hand-reared many Linnets, but always turned them out with wild-caught birds, so that it is probable that they learnt their song by imitation. Canaries, hand-reared out of hearing of their parents, have no idea of singing; I had one which never got beyond a sort of Red-poll trill. Indeed, it is well known that, in Germany, high prices are given for perfect singers, as teachers for young Canaries.

ARTHUR G. BUTLER.

SIR,—An account of a few of my pet birds may interest aviculturists.

About ten months ago, a young Bullfinch was given to me, from the nest. I reared it on the usual food, and kept it in a large cage with several foreign birds in an empty room; they were often let out to fly about in it, and bathe, etc.

The only singing-bird I then had, was a Virginian Nightingale. These birds (about ten) were kept together all the year; and just before Christmas, I was surprised to hear the Virginian Nightingale (as I thought) beginning to sing very prettily, as they do not generally begin until March. However, I discovered that it was the Bullfinch, which had learnt the exact notes of the red bird: and he has no natural Bullfinch notes. Every one admires his very sweet song; he is so tame and friendly, and will take seeds, etc. from anyone's fingers. One day, when his cage was out of doors and he the only occupant, he escaped and flew among the trees; as there are plenty of woods near, we were afraid he was lost. But the next morning, he flew into one of the windows and seemed glad to get into his cage once more. Since then, we let him fly out purposely, and he always returns after a few hours absence. I am not quite sure that *he* is not a hen, as he shews no colour on the breast yet, and it is nearly a year since I got him.

An African Sparrow (*Pyrgitopsis simplex*), that I have had two years, is also very good about returning to his home. He got out of doors, accidentally, three times; now, on fine days, I let him out of the window, and put his cage either inside or out, and he enters it as often as he feels hungry, and then flies out again; but he always comes back for the night. He never gets very tame.

A. M. WORDSWORTH.

THE MIGRATORY INSTINCT.

SIR,—The observations by Mr. Phillips on this subject are very interesting, but not conclusive. Two of my aviaries are situated just below my son's bedroom window, and for several nights, when (during a domestic whitewashing mania) I was obliged to sleep in his room, I was aroused repeatedly by hearing my birds flying violently about and striking the wires in the night. I find that this sort of thing goes on throughout the year. In my bird-room also, I constantly hear my peaceful Doves flying wildly round and round their aviary when it is pitch-dark; my Weavers, Java Sparrows, Saffron-finches, etc. cursing them heartily as they brush past them. Why they do it, I don't know; but it certainly is not migratory fever—more likely the fidgets.

A. G. BUTLER.

THE RUFOUS-TAILED GRASS-FINCH.

(*Bathilda ruficauda.*)

SIR,—With reference to the question at issue between Mr. Smart and Mr. Fillmer, I should like to make a few observations. The name *Estrellda ruficauda* was formerly given to this bird, and became the popular scientific name in consequence of want of knowledge of the habits of the species. In this sense alone Mr. Abrahams used it.

Soon after Mr. Abrahams imported the birds now in Mr. Smart's possession, he wrote to me and urged me to go and see them; and when at last I was able to get away from business, Mr. Abrahams possessed only one pair, which he told me I ought to become the owner of, and figure them in my book. Had I been a wealthy man, I should have been tempted; but my book was then written, and all the plates decided upon. I, however, learnt one thing about them, which I have since been able to confirm: Mr. Abrahams called my attention to the position of the male-bird when singing, and the sibilant, scarcely audible, character of its song; both were precisely the same as in Gould's Grass-finch (*Poëphila mirabilis and gouldiae*).

Now the Australian bird-catchers and dealers call *Bathilda ruficauda* "Star-finches," that is to say, *Estrelidæ* or Astrilds; yet Dr. Sharpe places *Bathilda ruficauda* next before the genus *Poëphila*, clearly recognizing its affinity to the latter, although he had nothing but structure to guide him. In like manner, Budgerigars were, at one time, popularly, though erroneously, known as "Love-birds;" but gradually, as people became educated up to the correct names, the dealers, who (like Mr. Abrahams) know the habits of their birds, are able to leave off calling things by names which are misleading, and the Red-tailed Astrild of the past becomes the Rufous-tailed Grass-finch.

Now I will say a few words touching my personal experience of this finch. I am not wealthy, therefore I could not purchase Mr. Abrahams' pair; but, this year, a friend unexpectedly received three pairs from Australia, and the cost of importing them being heavy, he asked me if I would care to take a pair off his hands. They were dear, decidedly dearer than Gouldian Finches; but not so very much more than I have sometimes had to pay for pairs of rare birds. I was tempted, and fell. My friend unfortunately lost a second pair a few days later. Importing is not all profit, by any means; sometimes it means a dead loss.

My pair looked very lovely for a month; but, as I noticed one or two little feathers knocking about, I would not let the birds breed, thinking they were moulting. At last, to my horror, I discovered too late, that the male bird alone had moulted every feather, from the nape of his neck to the root of his tail: his beloved wife had been looking for grey hairs all day long, and had completely plucked his back. I now tried turning the pair into a much larger cage, fixing up a little breeding cage screened with evergreens at the back. The hen was overjoyed; but her poor old man made shift to scramble up beside her to roost, and that was his last effort. In the morning he was a corpse.

My hen bird is very healthy as I write, and I mean to obtain a husband for her, but not a Rufous-tail; he must be made of sterner stuff, and not lead his owner in the direction of that refuge for the destitute which is supposed to be the abode of industry.

ARTHUR G. BUTLER.

"UP WITH THE LARK IN THE MORNING."

SIR,—I have seen it stated that this old saw,—which, of course, conveys the idea that the lark is one of the first of the birds to stir about in the morning—should be modified, as the lark is by no means an early riser, and that many of our songsters could claim priority in that respect.

I have often been among the birds at break of day in the spring and summer, but without particularly noting which were the first to sing their matins. I do not think the habits of our wild birds are studied as they ought to be, and I would suggest that some of our members who live in the country and have opportunity of studying the habits of our feathered friends, should send their notes to the *Avicultural Magazine*, where I am sure they will be read with interest by many of the members.

I heard recently of a school teacher telling her pupils that the lark sang only at night! She gathered this from a poem which, in speaking of the lark, said its song could be heard though the bird itself was invisible.

On the morning of April 11th, I arrived, at four o'clock in the morning, at a small country station, near Tours, on the bank of the Loire. It was, of course, at that time of day quite dark, but it was a fine calm cloudless morning. I had to wait about twenty minutes while the driver of the mail cart got his horses ready, and during that time I was listening to a most delightful chorus of song. High up in the sky a lark was pouring out a flood of sweet music; some hedge-sparrows joined in the song every now and then, and the hooting of some owls made a good substitute for the "band." I thought that possibly French larks were earlier risers than our

English ones, but be that as it may, it was a delightful twenty minutes, and I was sorry when the time came for *en voiture*, for after travelling all night it was quite refreshing to be welcomed, on stepping out of the train, with such a concert; the country being otherwise so still added effect to the situation.

Talking of hedge-sparrows, I have frequently heard them sing in my garden at night when disturbed by a passing footstep.

It may interest some of your readers to hear what migratory birds I observed during my ten days stay in France (April 10th to 19th, when many of them would not have reached this country).

Swallows were plentiful, and had been seen several days previously, but I saw no house-martins, sand-martins, or swifts.

Cuckoos, nightingales, blackcaps and redstarts, were also very plentiful, and I noticed hoopoes, whinchats, stonechats, shrikes, whitethroats, willow-wrens, chiffchaffs, nuthatches, corn-cirl-, and blackheaded-buntings.

Landrails are as rare as nightingales in the suburbs of Birmingham, and when one was heard a few years ago near a village where I stayed, the whole population went out to listen to it.

I found very few nests, except magpies', and these were as common as sparrows' here. I counted twenty-one magpies feeding in one field, and nests are to be found in about one out of every ten trees in many parts of the country.

J. C. POOL.

BREEDING FOREIGN BIRDS.

SIR,—I want to compile a tabular statement of the various species of foreign birds which have bred in this country, and I shall be much indebted to all who will help me in the matter. I shall be glad to hear from those who have either bred the birds themselves, or who can speak to the facts from their own positive knowledge. I want in each case to know (1) the species (2) the name of the breeder (3) the place where bred (4) the date when bred (5) whether bred indoors or outdoors, and if the former whether in cage or aviary (6) whether the young were reared, and if they died while still in their nest feathers, what age they attained (7) any additional information (such as food, etc.) which can be given. I do not want to hear about either Zebra Finches, Bengalese, Ribbon-finches, Java Sparrows, Saffron-finches, Budgerigars, Cockatiels, or Rosellas; nor do I wish to hear of cases where no young were hatched.

HORATIO R. FILMER.

ALTERATIONS IN RULES AND ADDITIONAL RULES.

The following alterations in the rules and additional rules have been passed by the Council:—

Throughout, alter the word "Committee" to "Council," and the word "Sub-Committee" to "Committee."

10.—All members intending to resign their membership at the end of the current year of the Society, shall give notice of their intention to the Secretary before the 14th of October, and all members who do not so give notice shall continue to be members for the year following the last year for which they shall have paid their subscriptions, and shall be liable for their subscriptions accordingly.

11.—Neither the office of Scrutineer, nor the office of Auditor, shall be held for two consecutive years by the same person.

12.—The Scrutineer shall not reveal to any person how any member shall have voted.

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RARE FOREIGN BIRDS.

VII.

SOME RARE FINCHES.

By F. MOERSCHELL.

Amongst the many foreign birds I have kept at one time or another, none interested me more than some which a resident on the West Coast of Africa brought over about 18 months ago. Unfortunately, he understood next to nothing about their treatment, and his ignorance, coupled with some very cold wet weather between Lisbon and Liverpool, caused him to lose about 100 out of the 140 he started with. Even the survivors were in a miserable condition. Amongst them were a pair of *Pytelia wieneri*, a cock-bird of *Pytelia melba*, some pairs of *Granatina granatina*, (Grenate-finch), some Red-headed Finches, some Whydahs, a few Red-faced Love-birds, and some hen Whydahs, and other birds which may be hen Combasous.

Naturally, these rarer birds, such as the pair of *Pytelia wieneri*, the cock *Pytelia melba*, and the Grenate-finches, which I only knew through Mr. Wiener's and Dr. Karl Russ' books, interested me most. The batch of Red-headed Finches somehow escaped out of the cage into the bird-room, and almost immediately—that is, within a week of their arrival—began to pair, and lay eggs in almost all sorts of places: in cocoa-nut husks, on the bottom of cages, even in seed-bags. However, only one pair of young ones was reared, while a number of fledglings were thrown out by either the parents themselves or some of the other occupants of the bird-room: I strongly suspect a Japanese Robin or a hen Virginian. The pair of *Pytelia wieneri*, the three pairs of Grenate-finches, and the *Pytelia melba* cock, I kept together in a large cage until they had recovered, and then turned them out in the bird-room, which I have regretted ever since: for not long afterwards the cock *Wieneri* got into an empty cage, and when I discovered it was past recovery; while I lost two of the Grenate-finch hens, later on, as well as the three cock-birds, through an escape of gas taking place; the surviving hen Grenate-finch is as lively as possible and sings her little, but very sweet, song, perched on the cage in which the cock *Melba* and hen *Wieneri* pass their time. The former is quite a diligent songster, certainly the best of all the African birds I have had, his notes being superior to those of both the Green and the Grey Singing-finches, although not quite so loud and strong.

As some of your readers may not have seen a description of *Pytelia melba*, I translate it from the work on "Foreign Cage-birds" of Dr. Karl Russ: "Forehead and upper-throat, bright scarlet-red; nape of neck, light grey; back and wings, olive-green; root of tail, bright red, the tail itself being bright brick colour; upper part of breast, orange colour, each feather having a dark spot with a whitish bar; lower portion presents wavy lines of dark grey and white; the beak is coral-red, rather long and pointed; feet, grey." In its general appearance the bird is not built on such elegant lines as the Grenate-finch. It is about the size of a Combasou, and I should say is a bird which spends its life in low bushes. So far, I have fed it on millet,

white and spray, with a few green flies, when procurable. The caterpillars found on rose-leaves appear to be a great treat. I have tried it with small mealworms and ants'-eggs, which it will not touch. It does not seem to care much for flowering grasses or groundsel, but will pull and peck at sods of grass, as if seeking for food. From the shape of its beak, I should say it is more an insect or worm-eating than a seed-eating bird. It has a habit of giving sharp taps, just like a Woodpecker, at a piece of sepia fixed in the bars of its cage.

The hen *Wieneri* has not always an easy time of it, as the cock *Melba* chases it about very often, especially if the former should attempt to bathe first.

I have impressed on my friend at Lovada, that when next he visits Europe, he should bring me fewer and more selected birds; especially have I impressed upon him to bring as many pairs as procurable of the various birds, and as I took the precaution of providing him with a model of the travelling bird-cage he should use—one which admits of fresh water and seed being given more frequently—I cherish the hope that I may be able, at some future time, to report some further rare birds from the West Coast. It is astonishing how very seldom one sees scarce African birds advertised. I have not seen or heard of any Aurora Finches for more than 18 months. I bought a pair in Liverpool, some nine years back, and it was only 12 months ago that the last one died. They did not nest; but, for three or four years, the hen laid two or three eggs on the bottom of the cage: though perhaps if given a larger cage in a quiet corner, I might have succeeded in breeding them. At the present time, I have two hen Red-headed Finches sitting on eggs.

BREEDING VIRGINIAN CARDINALS.

By A. SAVAGE.

Seeing in last month's number of the magazine that the experience of members who have attempted breeding these handsome birds is solicited, I am pleased to give mine. But although I have not been, so far, very successful, they have undoubtedly been bred frequently by other, more fortunate, amateurs. Success, in my opinion, much depends on the disposition of the pair kept: for some I have had made attempts to nest, and others, none. The first bird of this species I ever had, was offered to me, five or six years ago, by a bird-dealer in the town where I reside, being "a disgrace to his establishment." The poor thing was nearly naked: scarcely any feathers on it; but as it seemed plump and lively, I accepted it, and took it home to nurse. It had been living, or rather lingering, for weeks on *alpiste** and millet, and had got, with such insufficient food, into the above wretched condition. I lost no time in putting it into a large cage, with plenty of sand and water. It immediately took a bath, and seemed quite proud in preening its dozen feathers! I changed its diet to the following: A constant supply (mixture) of *alpiste*, millet, sunflower-seed and a little hemp; a spray of millet in the ear hung in the cage; a teaspoonful of scalded ants'-eggs given daily in a separate saucer, and two or three mealworms, also, daily. With this treatment and a little green food, my Cardinal (a hen) improved rapidly. In a week, spike-like feathers were to be seen growing all over its body, and in six or eight weeks, the bird was in perfect health and plumage. As Spring came round, I mated her with a fine male bird, and placed the pair alone in a good-sized garden aviary fitted up with bushes and nest boxes, in the hope that they would breed. A good deal of chasing about took place, but no attempt at breeding was made; not even a nest was begun that year. I lost the hen the following winter, and have now an imported male, mated with an aviary-bred hen, purchased. They are in a large aviary with various other birds, and are in the best of health and plumage. In 1893 they built a nest in a bush, and

* *Alpiste* is the French name for canary-seed.—Ed.

after the hen had dropped several eggs about the aviary, she laid two in the nest and hatched both. The young grew well for a few days, then disappeared: eaten, I presumed, by their parents. Last year, they built another nest, in a box, the hen acting exactly as the preceding year: several eggs were dropped about the aviary; eventually, three were laid in the nest and all hatched. They disappeared again, one after the other, as the year before; the last, when nearly a week old. The parents are fed as already stated, and get a more liberal supply of ants'-eggs and mealworms, and a little preserved yolk of egg, when young are in the nest. So far, this year, I have found one egg on the floor of the aviary; no attempt, yet, at building a nest. The eggs are similar to those of the House Sparrow for colour, but larger and rounder, and there are generally three to each nest. They are said to have two nests in the year; and this I think correct; for my hen has laid six eggs each year, dropped on the floor and in the nests.

Although some amateurs give the Virginian Cardinals a bad character towards small birds kept in the same aviary with them, I cannot say mine have done any harm. I firmly believe, though, they ate their own young on the two occasions mentioned; and at one time, I thought they had filched, too, a nest of four newly-hatched Blue Robins; but when the second nest (five) came, and I saw the Blue Robins themselves flying about with a young one in their beaks, I freed the Cardinals from the disgrace of having eaten the first four. The male-bird chases the hen about a good deal as the breeding season comes on. I have seen the tables turned with my pair, and the hen chasing the cock; *singing*, when about to do so, the same notes he does, but in a softer tone. Hen Virginian Cardinals, therefore, sing.

THE CLASSIFICATION OF FOREIGN FINCHES.

By H. R. FILLMER.

(Continued from page 82).

The Family *Ploceidæ* has no representatives in the British Isles, but to this Family belong by far the larger number of species of our common Foreign Cage-birds, for it comprises all the Weavers, Waxbills, Mannikins, and Grass-finches. All the small seed-eating birds from Australia belong to this Family, for that Island-Continent contains no indigenous species of *Fringillidæ*. The term "Ornamental-finches" is sometimes used for all the *Ploceidæ* to distinguish them from the *Fringillidæ*.

The *Ploceidæ* are divided into the two Sub-Families of *Viduinæ* and *Ploceinæ*, in the latter are placed some of the Weavers, but for want of space I will here deal only with the *Viduinæ*.

In the British Museum Catalogue, the groups which aviculturists distinguish by the names of Weaver, Waxbill, Mannikin, and Grass-finch are not recognised, and the genera of the *Ploceidæ* are arranged in an order which I think no one acquainted with the living birds will be disposed to accept as final. It must be borne in mind, that Dr. Sharpe's classification is based solely upon a study of *structure*, to the total neglect of the study of the habits of the living bird—such a classification must necessarily be one-sided. The ornithologist who shall unite a profound knowledge of anatomy with an equally thorough knowledge of living birds has yet to appear—and until he does appear we must put up with more or less imperfect systems of classification.

The following list of genera and species in the sub-family *Viduinæ* includes most of the birds familiar to aviculturists, though it does not pretend to be exhaustive.

GENERA.	SPECIES.	ENGLISH NAME OF SPECIES.
<i>Vidua</i> ..	.. <i>V. principalis</i>	.. Pin-tailed Whydah
<i>Sæganura</i>	.. <i>S. paradisea</i>	.. Paradise Whydah
<i>Chera</i> ..	.. <i>C. procne</i> ..	.. Long-tailed Whydah
<i>Penthetriopsis</i>	.. <i>P. macrura</i>	.. Yellow-backed Whydah

GENERA.	SPECIES.	ENGLISH NAME OR SPECIES.
<i>Pyromelana</i>	.. <i>P. flammiceps</i>	.. Crimson-crowned Weaver
	.. <i>P. oryx</i>	.. Grenadier Weaver
	.. <i>P. franciscana</i>	.. Orange Weaver
	.. <i>P. capensis</i>	.. Caffre Finch
<i>Quelea</i> ..	.. <i>P. afra</i> ..	.. Napoleon Weaver
	.. <i>Q. erythropis</i>	.. Red-headed Weaver
	.. <i>Q. quelea</i> ..	.. Common Weaver
<i>Spermestes</i>	.. <i>Q. russi</i> ..	.. Russ's Weaver
	.. <i>S. bicolor</i> ..	.. Cape Palmas Finch
	.. <i>S. cucullata</i>	.. Bronze Mannikin
	.. <i>S. nana</i> ..	.. Dwarf Finch
<i>Amauresthes</i>	.. <i>A. fringilloides</i>	.. Pied Grass Finch
* <i>Lagonostica</i>	.. <i>L. minima</i> ..	.. Fire Finch
	.. <i>L. Cærulescens</i>	.. Lavender Finch
* <i>Stictospiza</i>	.. <i>S. formosa</i> ..	.. Green Avadavat
<i>Amadina</i> ..	.. <i>A. fasciata</i>	.. Ribbon Finch
	.. <i>A. erythrocephala</i>	.. Red-headed Finch
<i>Staganopleura</i>	.. <i>S. guttata</i> ..	.. Diamond Sparrow
<i>Zonæginthus</i>	.. <i>Z. bellus</i> ..	.. Fire-tailed Finch
<i>Emblema</i> ..	.. <i>E. picta</i> ..	.. Painted Finch
<i>Pytelia</i> ..	.. <i>P. phænicoptera</i>	.. Aurora Finch
	.. <i>P. afra</i>	.. Wiener's Waxbill
<i>Coccopygia</i>	.. <i>C. dufresnii</i>	.. Dufresne's Waxbill
<i>Hypochæra</i>	.. <i>H. ultramarina</i>	.. Combasou
<i>Teniopygia</i>	.. <i>T. castanotis</i>	.. Zebra Finch
* <i>Stictoptera</i>	.. <i>S. bichenovii</i>	.. Double-banded Finch
* <i>Sporæginthus</i>	.. <i>S. amandava</i>	.. Avadavat
	.. <i>S. subflavus</i>	.. Zebra Waxbill
	.. <i>S. melpodus</i>	.. Orange-cheeked Waxbill
	.. <i>M. oryzivora</i>	.. Java Sparrow
<i>Munia</i> ..	.. <i>M. malacca</i>	.. Three-coloured Nun
	.. <i>M. ferruginosa</i>	.. Javar. Maja Finch
	.. <i>M. maja</i> ..	.. White-headed Nun
	.. <i>M. atricapilla</i>	.. Black-headed Nun
	.. <i>M. castaneithorax</i>	.. Chestnut Finch
	.. <i>M. punctulata</i>	.. Nutmeg Finch
	.. <i>M. pectoralis</i>	.. White-breasted Finch
<i>Uroloncha</i>	.. <i>U. acuticauda</i>	.. Sharp-tailed Finch
	.. <i>U. striata</i> ..	.. Striated Finch
<i>Aidemosyne</i>	.. <i>A. modesta</i> ..	.. Cherry Finch
	.. <i>A. malabarica</i>	.. Indian Silverbill
	.. <i>A. cantans</i> ..	.. African Silverbill
* <i>Ægitha</i> ..	.. <i>Æ. temporalis</i>	.. Sydney Waxbill
* <i>Bathilda</i> ..	.. <i>B. ruficauda</i>	.. Red-headed Waxbill
<i>Poëphila</i> ..	.. <i>P. acuticauda</i>	.. Long-tailed Grass Finch
	.. <i>P. cincta</i> ..	.. Parson Finch
	.. <i>P. gouldiæ</i>	.. { Black-headed Gouldian .. } Finch
	.. <i>P. mirabilis</i>	.. Red-headed Gouldian Finch
<i>Erythrura</i>	.. <i>E. prasina</i>	.. Pin-tailed Nonpareil
	.. <i>E. psittacea</i>	.. Parrot Finch
	.. <i>E. trichroa</i>	.. Three-coloured Parrot Finch
* <i>Neochmia</i>	.. <i>N. phaëton</i> ..	.. Crimson Finch
* <i>Estrilda</i> ..	.. <i>E. astrilda</i> ..	.. St. Helena Waxbill
	.. <i>E. cinerea</i> ..	.. Grey Waxbill
	.. <i>E. phænicothis</i>	.. Cordon Bleu
* <i>Granatina</i>	.. <i>G. granatina</i>	.. Violet-eared Waxbill

* The species forming these genera are by many writers grouped together in the genus *Estrela*, and are what are commonly known as Waxbills. But it is obviously absurd to place *Neochmia phaëton* and *Bathilda ruficauda* in the same genus as (for instance) *Sporæginthus amadava*.

The scientific names here given in most instances differ from those applied to the birds in the older works on cage-birds. It is very desirable that aviculturists should get into the habit of using those names which have received the sanction of the custodians of our National Collection at South Kensington, because those names are now generally accepted by the scientific world, and because their use renders it much more easy to identify birds by means of the elaborate description of the plumage given in the British Museum Catalogue. The Catalogue seldom gives the English names, my list of names will therefore facilitate reference to that work. It is surely time for a uniform system of nomenclature to be adopted by aviculturists. It ought no longer to be permissible for a popular writer on aviculture to re-christen a well-known foreign bird with a name which he has invented on the spur of the moment, and which he boldly announces to be "the scientific name."

OUR BIRDS.

III.

By HENRY J. FULLJAMES.

I am very pleased to see, in the May number of the *Avicultural Magazine*, a paper which I trust will be only the first of a series of chatty articles upon our pet hobby, as such experiences cannot fail to be of interest and instruction to some of us younger aviculturists. If, for instance, the article by Mr. Fillmer had been published a month ago, it would have saved me, for one, the necessity of learning by personal experience the quarrelsome disposition of the Australian Fire-finch or Crimson Finch.

About a month since, I purchased a pair of these birds, together with a pair of the rare and delicate Rufous-tailed Grass Finch (*Bathilda ruficauda*). The four birds had been kept for some days by the dealer in an open waggon cage on his counter, and no trouble had arisen, all four birds being in perfect plumage. I have since concluded that this apparent peacefulness was only in consequence of the position the birds occupied in the shop, as the many transactions taking place throughout the day over the counter, gave the birds sufficient occupation to distract their attention from fighting. When I got them home, I put all four birds into a cage for a day or two, preparatory to turning them into the small birds' aviary, and whenever I was in the bird-room the conduct of the Fire-finches was perfectly exemplary. After a couple of days, however, the cock Rufous-tail appeared to be in a violent moult, and I put him into a cage by himself. The next day, his hen was in the same plight; and I had to take her out, leaving the pair of Fire-finches to themselves. Up to this time, I had no suspicion that it was the Fire-finches that had caused the mischief; but on the following day, I happened to just catch the cock driving his hen from pillar to post, and then I knew what had nearly killed the other pair. Instead of separating the Fire-finches, however, I turned them, at once, into the aviary, where, contrary to the experience of Mr. Fillmer, their conduct has been everything that could be desired. The pair of birds are quite inseparable, and their favourite position is on a small spray of pine tree which is fixed to the bars of the aviary. From this they are scarcely ever absent, and molest neither each other nor any of the fifty or so other occupants of the aviary.

Mr. Fillmer is extremely lucky in having only one separate cage in his bird-room. For myself, I wish I could say likewise. My own room has one wall completely filled with separate cages. I have a Shama who is a perfect terror when in the aviary, although in a cage alone he is perfectly tame, and a great pet. A Crimson-throated Whydah, also, is condemned to solitary confinement from the same cause; another sinner in this respect being a White-eared Bulbul, who would, an he could, spend his whole day driving the other birds about. A cage is also occupied by a piping Bullfinch, who is a famous piper, and who would, of course, be lost in a

mixed aviary. A large cage contains three different Tanagers, who are kept out of the aviary because of the mess they make. I have also a pair of Eclectus Parrots, which have necessarily to be kept away from the smaller birds; the same applying to two Indian Parrakeets, an Alexandrine, and another of which I do not know the name, either of which would be much too mischievous to be trusted with valuable birds. Another cage is occupied by a fine pair of White Java Sparrows, who are imprisoned in consequence of their habit of biting the feet of the other birds. My Rufous-tails, alluded to above, are also separate, as they have not quite recovered from their serious mauling; and the list of separate prisoners is complete with the mention of a Mocking Bird, who is of the most terrorising disposition when in the aviary, leading the other birds a shocking life; yet in his own cage his life is a perfect misery, in consequence of his extreme nervousness. I have had him some eight months, and have not had the slightest pleasure in possessing him. In an open cage, he simply knocks himself to pieces; and in a box-cage, he sulks on the darkest corner of his perch, and only moves to snatch a mouthful of food. In contrast to him, my other Mocking Bird (V.H.C. at the recent Crystal Palace Show) is everything that could be desired. He sings continuously, mimicking every other occupant of the bird-room, and is perfectly inoffensive to the other birds in the aviary. No greater object-lesson could be given, than in the totally different dispositions of these two birds; and nothing could show more clearly the danger of implicitly trusting in the dictum of writers who condemn or applaud a whole species from their experience of a solitary specimen. This conclusion has many times been verified by my observation of other birds of which I possess duplicates; and I would enlarge further upon the argument, but that I fear I have already been too prolix, so will conclude with a few words upon gas and oil stoves.

For some years I have used oil stoves, but have now discarded them because of their incessant need of attention. When properly attended to, they answer their purpose perfectly, and neither fumes nor smoke are given off. The slightest neglect, however, gives cause for "accidents;" and if there be any danger of their not being intelligently attended to, they should not be risked in a bird-room. With a proper gas stove, on the contrary, nothing is necessary except the use of "common sense;" and I am sorry to have to admit that, through a careless moment, I had an "accident" similar to, but worse than those mentioned by Mr. Simpson. My bird-room is heated by a Clarke's Syphon Gas Stove, and one evening during the severe weather of the past winter, I went to bed earlier than usual, and turned the gas full on, forgetting that, when the shop-lights, etc., would be turned off in the neighbourhood, there would be a greater pressure. In the morning, the room was absolutely black, and ten birds were dead, on the floor. It fortunately happened that some twenty or so of my stock were at the Palace Show, or the loss might have been greater. The most curious part of the affair was that, although every bird in the room was entirely covered with soot, nothing took any harm except the ten birds found actually dead upon opening the room. The stove was not to blame: only my own carelessness. *Verb. sap.*

OWLS AS PETS.

By DR. G. C. WILLIAMSON, F.R.L.S.

I have always loved owls. I cannot exactly tell you why I have done so, but perhaps there are many reasons. I like *big* birds—birds that you can stroke and pet, and birds that are big enough to seem like companions. Then, again, owls are loving and companionable birds; at least I have always found them so, and I have had to do with a good many in my time.

Had you ever seen my Tawny Owl (*Strix stridula*) nestle up close to my face, or get under my coat below my shoulder and make a warm hiding-place for himself there, and occasionally peer out with his big, rolling

eyes under the lapel of my coat, you would have agreed with me that owls were loving birds. He used to come indoors every Sunday; and how well he knew when Sunday had arrived! He was in such a fidget at the door of his cage, hissing, and fluttering, and beating against the wire-work. He never made such a fuss upon any other day, but used to sit solemnly blinking close up to the wire door, and hardly move all day.

I said he looked solemn; but how you would have laughed if you had seen him indoors! We had a staid, serious old black and white cat, and on to Tom's back Tawny would jump, and then ride round and round the room. If Tom stopped, Tawny would peck just a little wee bit at him, and on would go Tom again; and then, when Tawny had finished his ride, he would jump on to the table, and Tom would give a sigh of relief and curl up in front of the fire.

Sometimes Tom would try to catch Tawny unawares, and slink up behind him and give him a tap with his paw; but it was all in play, for they were good friends at heart, although poor Tom certainly resented being used by Tawny as a racer.

I have sometimes given Billy, my big Eagle Owl (*Bubo maximus*) a mouse, and have been so amused to watch him eat it. He took it into his beak instantly, gave a gulp and swallowed it *all but the tail*. The body of the mouse, skin, bones, and all, remained in his throat, and the tail hung out of the corner of his beak very much as a cigarette would in my mouth. Then Billy would begin to suck at the hypnotised mouse, and to work it about in his throat, rolling the tail over from one corner of his beak to another corner, and evidently greatly enjoying the relishing morsel.

Billy, my Eagle Owl, was a great beauty. I had him for nine years, and at last he died of bronchitis. We sat up with him, and gave him beef-tea and brandy, and kept him very warm; but it was of no use. He died one night, and I lost a real friend. He became as tame as any bird can ever become who is carnivorous. He used to eat a quantity of raw meat, and of course that kept him a bit fierce, but he would let me do with him whatever I wanted to do. His claws were the most dangerous; they were so big and so sharp that, without meaning to hurt you, he could do a great deal of harm with them.

All day long he sat on his perch, just occasionally getting on to the ground and stretching his great wings out. If anyone came to him, or he was touched with a stick, he would make a sharp snapping noise with his bill which was very startling to a stranger, and which he accompanied by a hiss and a short hoot and a cry.

At night he was all on the alert, noiselessly moving about in his cage, and then suddenly hissing and hooting and snapping his beak.

Billy made a nest once in the cage and laid an egg, and then what a fuss there was. Two or three other owls were in the aviary, but none dare come near Billy, and for a few hours there was great commotion. Eventually Billy broke the egg and subsided, and then quiet reigned. He could puff up his feathers in a most extraordinary manner, making himself appear almost double his actual size, and then he really looked a magnificent creature. He ruled all the other owls, and did they dare to enter his box, he made no end of a stir, and so excited himself and flapped his great wings at the offender that very speedily the intruder decamped.

Once however he found his master. I put a little cheeky Irish sparrow-owl (*Strix passerina*) into the aviary. He was little bigger than a sparrow, while Billy was as big as two full-sized cats rolled into one, but he was "boss of that show." He went at once for Billy, who was solemnly blinking in his own corner, to which no other owl dared even approach. He fluttered and hissed at Billy till he slowly moved, and then at once Master Sparrow sat down in his very place, and with bill and claw challenged Billy to move him. At night Sparrow roosted in Billy's box, while Billy spent the night on his perch, but after a while finding a more comfortable place for himself he permitted Billy to return to his old home. He never, however, allowed

the owls to forget that he considered himself "boss," and he chevied them about, and drove them from place to place at his will.

Poor Sparrow! One morning he was gone, and but a few of the big feathers of his wings remained. I thought he had escaped through a hole in the wire that I discovered. I now believe Billy ate him up, and this is my reason for so believing. Billy and Tawny lived together for about eight years. They were the best of friends, nestled up to one another and seemed quite contented. I suppose however that Billy used to hold a threat over his friend *in terrorem* that failing to behave himself, he might some day get eaten. One night the tragedy ensued. There was a disturbance and a struggle. Tawny lost the day. Dead men tell no tales, and having killed his companion, the great owl, after the manner of the boa at the Zoo, proceeded to digest his friend. Nothing but the large feathers of Tawny remained, and a lot of the fluffy down on Billy and all over the cage. The following morning, Billy looked abnormally and preternaturally serious. He was distended and puffed out, and not a morsel of food did he touch for several days. It was quite clear afterwards where Tawny had gone—everything proved the truth of our conjecture; and now I understood what had been the fate of Sparrow years before, and possibly of a white owl that had also unaccountably vanished.

That White Owl (*Strix flammea*), by the way, used to have visitors. A sort of evening's "At Home" used to be held, and I could see other white, fluffy, noiseless creatures flutter up to her at the cage, and then the hissing and owl-talk that went on reminded me of the sound of a hundred pots all boiling and hissing on a great big fire.

If you were to see an owl stripped of its feathers you would be astonished to see how small a bird it is. Owls are not larger than pigeons when their feathers are taken from them, and so light in weight.

Their hearing is wondrously acute, most sensitive to every sound, and the group of ear feathers that they can erect at will to catch the sound gives them a very quaint attentive look.

My Long-eared Owl (*Strix otus*) was a most grotesque bird. He used to close his eyes all but one tiny corner, and then you could see that through that one corner he was watching everything that went on, especially other smaller birds, such as sparrows that perched near.

He sat and cogitated and looked like a student of Plato or an eminent theologian; but drop a bit of meat into his cage, and then ears erect, claws erect, head erect, and on to that meat in an instant he dropped. I have seen him lie on his back and fight the other owls with claws and bill, and not a bit of a theologian did he look then, unless perhaps "a muscular Christian." Poor Strix, he had a fit, and his head, with ears erect, hangs in front of me as I write.

I have had Scops Owl (*Strix Scops*), and I have had Tengmalms lovely little owl (*Strix funerea*), but have never secured a Snowy Owl. (*Strix nyctea*); I have always coveted him, and once saw him in Shetland. He is a most lovely white bird, and the most affectionate of all the group when tamed. He can hunt in the daytime, having quite a different arrangement of sight from other owls, and in the sunshine or on the snow his lovely greyish-white plumage prevents his being noticed. Some day I hope to have him in my aviary, and then know more about him than I do at present.

I have said enough, I think, to show that owls can be made delightful pets. They will sit on your chair and watch you at work. They delight to be rubbed on their ear feathers and underneath their bills, and the person who handles them carefully and steadily will seldom receive any harm save a good peck at first. If they are got young, and often handled and fed by the same person, they will quickly get tame.

THE REPRODUCTION OF BIRDS.

Doubtless, every fancier of the less common cage-birds has repeated the phrase: "These are very beautiful birds, but they do not breed in captivity;" which is, after all, merely an ornithological falsehood. The act of reproduction is a condition natural to all living beings; a condition always possible where animals are kept in such a condition of health as will allow free exercise of the physical organs.

When a bird does not nest in captivity, it is not a direct consequence of loss of freedom; but the effect of a morbid condition, resulting from the loss of something which he enjoyed when free. The bird is suffering: the cause of the trouble must be discovered and removed.

Here is often a difficulty. To discover the disease, to find palliatives, and to administer them, is only possible to amateurs who really know animals, their temperaments, their constitutions, and their habits. Here is a field for profound study, necessitating long research and patient observation; and not every fancier can or will take so much trouble, when it is so easy to shake the head sententiously, and say, "These animals do not breed in confinement."

Not only is this sterility the result of disease, but it is the cause also of serious organic derangements. Hence the short life to which wild animals, reputed to be unproductive, attain in captivity.

The first essential in reproducing rare birds, is to make up for the loss of liberty as far as possible, by affording space, quiet and isolation. Next, the climate to which the bird is accustomed must be reproduced. Amongst the shrubs in his aviary, should be planted those with which he is familiar. Food is, perhaps, the least important point; but, as it is easy to notice this, the breeder need not omit to satisfy both his natural tastes and his physical needs. An insectivorous bird will not die if fed solely on seeds; but his digestive organs will be impaired, the circulation and temperature of the blood will be affected, his nervous system enfeebled, and all these will prejudice the reproductive faculty.

It is therefore necessary to combine ordinary hygienic precautions with a diet conforming to the instincts and tastes of our subject. In these circumstances, birds which have not hitherto bred, will pair, and rear young in captivity. The truth of this is self-evident, but we can draw illustrations from our more domesticated animals.

The common fowl, a mere egg-producing machine, stops laying or lays only unfertile eggs, when subjected to unfavourable conditions and, surely, we need not expect better results with delicate birds, which we suddenly deprive of sunshine and liberty—the two great elements of life.

To sum up, every animal—there is not an exception—will breed in captivity if it is tended with proper care and adequate knowledge. These things may possibly make large inroads into one's leisure, but such services are not impossible, and difficulties should stimulate, rather than discourage, the amateur bird fancier.

L'Aviculteur, Paris, 18 Mai, 1895.

Dr. H.

Translated by ARTHUR J. JONES,

6, Fitzroy Street, London, W.

GO FROM HOME TO HEAR HOME NEWS.

The following cutting from an Egyptian Newspaper has been forwarded by Mr. Alexander Phillipps, of Alexandria, and may be of interest to our readers:—

Un journal d'histoire naturelle, qui se publie en Angleterre, relate l'histoire suivante, où il est prouvé que les perroquets ont la mémoire du cœur.

Un de ces oiseaux, domicilié à Mayfair, fut durant quelque temps nourri et soigné par un domestique avec lequel il entretenait les rapports

les plus affectueux, et qu'il avait coutume de saluer d'un cri tout particulier. Ce domestique quitta la maison : des années se passèrent pendant lesquelles on ne le revit plus. Un soir, tout à coup le perroquet jeta son cri d'autrefois et le répéta précipitamment avec beaucoup d'excitation. Quelqu'un eut la curiosité de regarder par la fenêtre et vit passer un carrosse derrière lequel se tenait debout l'ancien ami de l'oiseau, en livrée et cheveux poudrés. Il avait été reconnu malgré le temps écoulé et le changement de costume.

D'où il suit que les perroquets peuvent rivaliser pour la fidélité avec le chien d'Ulysse, qui devint son maître après vingt ans d'absence, sous les habits d'un mendiant.

NEW BOOKS.

Foreign Finches in Captivity, Part IV., By A. G. Butler, Ph.D., etc.
(L. Reeve & Co., Henrietta Street, Covent Garden).

In part IV., the author describes that very fascinating species the Cuba Finch; and commences his account of the so-called Ornamental Finches.

The artist has been very successful in catching the alert attitude so characteristic of the Cuba Finch, but the colouring is not altogether accurate, being too light on the under surface of the body.

The Waxbills are, of all foreign cage-birds, the most easily procured and the most popular, and this part of "Foreign Finches" will therefore prove of the greatest interest to aviculturists. The description of their habits and proper treatment in captivity is thoroughly practical, and is much in advance of anything yet published in this country on the subject.

The coloured plates vary in merit: those of the Lavender Finch and Amaduvade are charming, both as regards the drawing and colouring; the Green Amaduvade, on the other hand, looks like a badly-stuffed specimen.

According to our experience the Green Amaduvade is not at all delicate; but it is a species difficult to preserve in good plumage, and is, of all the Waxbills, the most liable to baldness.

Dr. Butler, like most aviculturists, finds the African Fire-finch most susceptible to cold. We have known a specimen, however, to live through the winter, in perfect health, in an unheated outdoor aviary; but most of the birds imported die within a short time. The Lavender Finch we have kept in a sitting-room without difficulty; but it is probable that, as Dr. Butler says, this species is more delicate than the Crimson-eared Waxbill or Cordon-bleu. Indeed, we are of opinion that the latter species is by no means difficult to preserve, if properly treated.

The last species described and figured is the Violet-eared Waxbill, which we have never seen in a private collection; a fine pair was living in the Zoological Gardens a year or two ago.

Nottingham Arboretum Aviary: A Descriptive Account of the Aviary and its Inmates, by C. L. Rothera, B.A.

Every English town, important enough to be a corporation, ought to possess a municipal aviary—but we are not aware of any provincial town, besides Nottingham, which can yet boast of one. All honour, then, to Nottingham for leading the way and setting an example to other boroughs, and all honour to the Nottingham aviculturist who initiated the scheme and brought it to a successful issue.

From this little work written by Mr. Rothera, the Honorary Curator (and chief founder) of the Arboretum Aviary, we learn that it "is the result of a Memorial, signed in a couple of days by upwards of 450 residents and ratepayers of the borough, and presented to the Town Council in February, 1889; the initial steps being taken by Mr. Charles L. Rothera, who, in forwarding the sheets to the Town Clerk for presentation, undertook to secure that the Aviary, if erected, should be suitably stocked without expense to the ratepayers. The Council referred the Memorial to the Public Parks' Committee, who recommended that its

“prayer should be complied with, and voted £100 for the erection of the structure. The building consists of three separate sections, the centre portion being 20 feet deep, 15 feet wide, 10 feet high to the eaves and 15 feet to the ridge; the side portions are not so high and have a hexagonal front, each face being 5 feet long. Each section is provided with a sheltered house-place with tiled roof, and part of the flight is also glazed, so as to afford the birds a retreat from cold rain and snow.” A still larger aviary, for water birds, was subsequently added.

About 24 species of British Birds and about 33 species of Foreign Birds are usually represented in these commodious aviaries, and the Honorary Curator seems to have been very successful in keeping the birds in good health. Even Cordon Bleus, St. Helena and Grey Waxbills, and a Whitethroat, have survived the frosts of winter in the Nottingham Aviary.

Mr. Rothera's description of the inmates of the Aviary is arranged alphabetically—it is very readable and instructive, and, in the main, exceedingly accurate; but his statement that Ribbon-finches “have no song,” needs qualification.

CORRESPONDENCE.

“HOMING” BIRDS.

SIR,—May I supplement the experiences of my fellow-member, Miss A. M. Wordsworth, in what we may call the “homing instinct” of Bullfinches, by the relation of what happened at my place some twelve months ago.

I had, at that time, a Bullfinch which was allowed to fly about the house, and which had, for quite a year, enjoyed that privilege without taking advantage of open windows to extend his knowledge of the world; but on this occasion he did, and after flying around the neighbourhood for about an hour, returned to the window from which he escaped. Unfortunately, it had been closed in the meantime, and poor Bully, stuning himself against the glass, fluttered helplessly to the ground; where a neighbour's cat was in waiting, and snatching him up under our very eyes, ran away to ruthlessly devour our little pet at its leisure.

This incident is the more interesting from the fact that the bird was not hand-reared, but was adult when caught, and had been only caged about 12 months previously.

Another incident, almost identical with the foregoing, only without the tragic ending, happened a few weeks ago. On this occasion it was a Robin. This, too, was an adult bird when caught, and had occupied the cage from which he escaped, for 15 months. How he did escape, I do not know, but he had got out somehow; and as the cage was hung outside an upper window, he was perfectly free to choose between freedom and captivity. He evidently preferred the latter, because he entered the scullery either by the door or the window, and we found him, late at night, roosting on the rail of a chair, from which we transferred him to his cage, none the worse for his adventure.

Were such incidents more widely known, we should hear less twaddle about the “cruelty” of caging birds.

T. MARSHALL.

BREEDING PARROTS.

SIR,—I wonder if any of the Avicultural Society have ever succeeded in breeding Grey Parrots. I had two, which I believe to be a pair, at the end of 1892, and early in 1893 I put them into an outdoor aviary, facing nearly South. I had to take them in for one week in January, 1894, and there they remained till January, 1895. Then they had to come indoors for longer; I could not put them out till March 14th.

But I have been entirely unsuccessful as to breeding. The cock-bird shows the greatest wish to pair; but the one I consider the hen, has never

shown any wish to make a nest. What is the reason: too cold? But the Zoological Society had several *Pæouphali Senegalensis* sent them, after the death of a gentleman, who, I understood, had bred them in the open air.

The cock-bird's desire to pair seems to me to exist chiefly in February, and that, of course, is a drawback. I am thinking of trying them in a very large cage indoors next Autumn, and see if that will make any difference. The hen-bird has been pinioned in both wings, but I don't know that that should prevent her wishing to breed. I think someone must have tried, before now, to breed these birds, and if so, I should like to know with what success.

I am hoping to have a nest of Leadbeater Cockatoos. The hen has always laid, but never, till now, shown any wish to make a nest. However, she seems to be making some sort of arrangement that way, now; and the cock is aggressively angry when any one goes to the cage. I am very anxious to succeed, because Leadbeaters are the nicest of the Cockatoos, when tame. My hen-bird is delightfully so, and flies about the village, loose; and I did once have a tame cock, for all too short a time, alas! but for long enough to make me see that a cock Leadbeater, reared by hand, would not be too noisy; would talk, and be thoroughly gentle. And most people would give them the palm of beauty amongst Cockatoos. I very much doubt if, as a rule, the hens could be taught to talk. There are so very many slips between the Parrot breeder's cup and lip, that I hardly dare to speculate on my having the chance to see.

F. G. DUTTON.

GOLDFINCHES.

SIR,—I have some Goldfinches in my aviary, and last year a pair built on the top of a log of wood placed close to the top of the aviary for Budgerigars to breed in. A piece of roofing felt being placed over the log, outside the wire, and the log being as close up to the wire as I could get it, there was just comfortable space for the nest. The hen sat very close and never left the nest, although I often went within a few inches of it, and in due time some four or five young were hatched. They all died a day or two after hatching. I presume this was for want of proper food, and I would like to know what is the best food for young Goldfinches, for I have two pairs nesting now. One is on top of a log similar to that of last year, and the other has chosen a peculiar place. I have a cock Oriole weaver, which has built many nests, one is on a perch close to the roof of the aviary, and the top of the nest touches the roof. The entrance is, of course, from the bottom, and another perch is placed about a foot below. The Goldfinches have built a nest inside this weaver's nest. It is not visible, being in the "bag" portion of the nest, but the tail of the Goldfinch can be seen by looking up through the opening. The finches fly up from the lower perch into the nest.

J. C. POOL.

The following reply was sent to Mr. Pool:—

Goldfinches, as you are probably aware, feed their young from the crop, like all other finches: the natural food in the summer consists largely of small insects and their larvæ, especially small green caterpillars and green-fly (*Aphis*), also the unripe seeds of groundsel and plantain.

As it is not always possible to get green caterpillars in quantities, some kind of soft food must be substituted; the best being a mixture of hard-boiled egg, or preserved yolk, bread-crumbs and ants' eggs, moistened (living ants' eggs would be better).

I have a Goldfinch sitting in one of my aviaries at the present time, and I constantly keep a saucer of soft food for the pair to feed from. As green food, groundsel in flower and grass in flower or seed are excellent. If you have a greenhouse and a few plants which you do not care about, abstain from watering them until they get coated with green fly and then stand the infested plants in the aviary: it will not be long before the Goldfinches are busily engaged in picking off the insects. Do not omit the usual seeds, of course.

A. G. BUTLER.

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OUR BIRDS.

IV.

BARRABAND'S PARRAKEETS (*Polytelis Barrabandi*.)

BY O. ERNEST CRESSWELL.

This Australian Parrakeet is, I believe, now placed scientifically in a genus by itself, though Gould classed it with the *Polytelis Melanura*, commonly called the Rock-Peplar. It is certainly rare in this country, for I never remember to have seen Barrabands offered in the list of any dealer, nor have I seen them in any of the living collections that I have visited on the Continent. The reason of this is said to be, that they seldom survive the voyage, from requiring a peculiar diet. This I am inclined to doubt, for my own pair keep well on very simple food, and have now been in England about 18 months.

My acquisition of those in my possession was, in any case, a piece of luck, for I find them most amusing and full of character; but specially shall I think it so if they turn out to be a pair—on which point I sometimes have misgivings. They were bought by a lady, fresh from the nest, in Sydney, in Dec. 1893, under the name of "Green-leafs," and she was assured that in 18 months time they would moult out scarlet breasts. They were brought home with much care, and for some months fed solely on boiled maize. I bought them, unknown and unseen, last Autumn, together with what was called a Crimson Lory, which I expected and found to be a singularly fine Pennant. The "Greenleafs" at once took my fancy: they were very tame, very amusing in their ways, and their whistling (or rather that of the one which I hope is a cock) very melodious. Of their race I was ignorant, but soon discovered, from Dr. Greene's "Parrots in Captivity," that Green-leeks (not leafs) is the common name in Australia of Barrabands, or young Barrabands, and such I found them to be. The adult cock alone of this breed has a yellow head and scarlet upper-breast. My pair, on a superficial view, look alike, entirely green, but differ in several points, which makes me hope they are cock and hen; but, on the other hand, they don't show the slightest affection for each other.

I am writing these notes with the double object of giving information as to the system which I have, thus far, found to succeed with my Barrabands, and also in the hope that I may possibly get some information myself as to the chances of their being cock and hen.

I will give the *pros.* and *cons.* on this point, separately. Their voices and notes are quite different: the supposed cock (which, for distinction's sake, I call "Monsieur,") whistles beautifully, which "Madame" never does. He tyrannizes considerably over her, and entirely monopolizes the swing; indeed, she dares not touch a mealworm till she sees him well provided with one. On the other hand, as I have said, they show little affection for each other, and "Madame" has an evident fancy for a male

Patagonian Coure often caged near them. Then, as to distinction in plumage: "Monsieur" has a longer tail and a bluer shade of green about the head than "Madame," who is all over of a lovely bright apple-green: he has, too, a visible, though quite faint, tinge of red on the upper part of the breast, where, in the adult male, the scarlet ring should be. Both have orange-scarlet down on the thighs, and their under-tail feathers are of a lovely shade of old rose. From this I concluded, on getting a sight of Gould's "Synopsis," that they must both be hens: for it is there stated that only the hen has orange thighs and rose-coloured under-tail feathers; and the cock depicted in Dr. Greene's book has an entirely green tail. There seems, however, to be a good deal of doubt about the characteristics of the species: for originally Vigors believed the two sexes to be two distinct races; and Gould asserts, in the "Birds of Australia," as I have since discovered, that some males have scarlet thighs, though he makes no mention of the rose-colour in the under-tail of either sex. Possibly, as in the cases of many species, young cocks are not easily, if at all, distinguishable from adult hens. At present, my pair show little signs of moulting, though I am anxiously looking out for them, in the hope of seeing "Monsieur" gradually assume his yellow forehead and scarlet upper-breast.

As to their food and treatment. To their former rather monotonous diet of boiled maize, I soon added hemp. I also give them boiled rice and brown sugar; figs (which they throw about and don't care for) and meal-worms, of which they are very fond. Their taste for these has been gradually acquired, as is the case with others of my Australian Parrakeets. They are fairly hardy, and rejoice in their large cage being put out in a verandah, or, during great heat, on a shady lawn; but I have not, by any means, found them unconscious of cold, as is sometimes asserted. In Autumn, even under the glass of a verandah, they used to ruffle their feathers when it turned cold, and ask, unmistakably, to be taken indoors. They delight in bathing, and when a shower comes on, pretend to splash, and plead to be put out; a fancy which, in warm weather, I often gratify. Through the Summer, I constantly give them, and all my other Parrots, willow twigs: they simply revel in them, and carefully suck every leaf.

Not long ago, "Monsieur" escaped during the night through an open window, and was at large for a day and a half. Strangely enough, he did not take himself to the verandah or terrace, where the Parrots spend the day, and where he could hear them all day; but to big trees, in a distant part of the grounds. Here, he enjoyed life much, quietly exploring among the branches, and continually throwing down leaves. He specially rejoiced in some very large willows which I believe he took for his native gum trees: hanging, at times, backwards, in the most elegant way, from flimsy twigs. The first day, he only took short flights, and frequently flew towards me; but by the morning of the second day, I almost gave him up in despair, for he made circles of upwards of a mile, flying with the strength and rapidity of a Hawk or a Homing Pigeon. However, after each flight, he settled where he could see me or one of the attendants of my aviaries, and evidently had a strange mental conflict between his delight in liberty and his desire to come to me. All this while he would generally answer a human imitation of his whistle; but never took the least notice of the cries of his companion, who was carried about in her cage in the vain hope of enticing him down. At last, from high in an oak tree, he darted down, and several times flew almost on to my shoulder, and then settled on a low bough, to which I could just hold up an empty cage. He climbed on to it, and I soon lowered the cage and enticed him into it with a mealworm.

I relate all this to show that Barrabands have much character and intelligence. If any of your readers have chanced to see a male bird in his first modest green plumage, I should be very glad to know if he corresponds with my description of "Monsieur."

RARE FOREIGN BIRDS.

VIII.

FRINGILLA TEYDEA. "THE TEYDEAN CHAFFINCH."

BY E. G. B. MEADE-WALDO.

An account of this beautiful Chaffinch as an aviary bird, may be of interest to some readers of the *Avicultural Magazine*, especially as owing to its rarity, and being confined in its wild state to one pine forest on one small island, it is never very likely to become general as an aviary bird.

For the benefit of those who happen to be unacquainted with the Teydean Chaffinch, I will describe it as follows: It is a true Chaffinch, about twice the size of our own Common Chaffinch, the "tarsi" and tail are both longer in proportion, and the beak more powerful and larger. The whole of the upper parts of the male are rich dark blue, the under parts paler blue, fading to almost white on the abdomen, the under tail coverts are white, as also are the eye lids. The wings and tail are very dark blue, almost black, edged with light blue. All the markings on the wings and tail that are white or yellowish in the Common Chaffinch are replaced in *F. teydea* by light blue. The female is an olive brown edition of the male, and slightly smaller in size.

Although coming from a hot dry climate, *F. teydea* is absolutely hardy. Those in my aviaries never showed that they felt the slightest inconvenience from the last cold weather, or that of any winter. The males have been in full song since the first of February, and I have seen them singing lustily, fully exposed to a N.E. gale, with the temperature at 23°, although they could retire into perfect shelter if they liked. When in their native forest they very rarely come lower than 5,000 feet above sea level.

The Teydean Chaffinch thrives in a large aviary, with moderate shelter. The males are exceedingly pugnacious, and no other small bird can exist with them, except perhaps for a short time in the autumn and early winter. The males are also very rough with their own females, except during the pairing and nesting season, and it is best to keep the females together, and each male separate, for two males in the same aviary would certainly fight until one killed the other. The female builds a beautiful nest in June, resembling the nest of our own Common Chaffinch, but, of course, much larger; also the outer work of the nest often contains a few pine needles or twigs of tree heath. The eggs are laid at the end of June, or beginning of July, and never exceed two in number. They are large for the size of the bird, and closely resemble strongly marked eggs of the Common Bullfinch in colour. The young, when first hatched, are covered with thick black down, far thicker than the down on the newly-hatched Common Chaffinch. The male takes no part whatever in nest-building, or in feeding the young, and never feeds the female; on the contrary, he always robs her whenever he gets the chance. Their behaviour, when nesting in an aviary, is precisely similar to that in a wild state, but I think it advisable to remove the male during the period of rearing the young, as he does nothing but try to take the food from the hen. The young are reared on caterpillars and various larvæ, also mealworms that have newly cast their skins, grasshoppers, crickets, moths, etc. The females are exceedingly confiding, and will take food from the hand when sitting on the nest. The wild birds are just the same, and will build their nest while you are sitting on the same branch. The song of the Teydean Chaffinch resembles that of all the Chaffinches, but is more prolonged and has more volume; the call note is a plaintive double note, but they also say, "Pink, Pink," like our own bird. Their food in confinement consists of pine seed, sunflower, hemp and monkey nuts. They do not care for canary or millet, but occasionally eat a little of the latter.

They seem to require a great deal of insect food, and mine always have as many mealworms as they want, in addition to caterpillars, moths, numerous daddy-long-legs, etc. They also eat watercress and chickweed. So pugnacious are the males that this spring I had to remove one

from an aviary in which a pair of Canarian Pigeons, *Columba laurivora*, were sitting, or he would certainly have destroyed the nest by dashing at the cock whilst he sat on the egg. These remarks to a great extent apply to the other true Chaffinches from the Atlantic Islands, The Tintillon Chaffinch, *Fringilla Canariensis*, The Paluan Chaffinch, *F. palmae*, The Madeiran Chaffinch, *F. madeirensis*, The Azorean Chaffinch, *F. moreleti*, also to the beautiful Algerian Chaffinch, *F. spodiogenys*. These are not so quarrelsome as *F. teydea*, neither are they so hardy, but they will winter out in an aviary, provided they have abundance of insect food or its nearest equivalent. The Teydean Chaffinch, and all the other true Chaffinches mentioned, convey the food to their young in their beak, and never disgorge any.

THE NESTING OF THE BLACK-TAILED HAWFINCH.

By H. R. FILLMER.

I became the owner of a pair of these birds (*Eophona melanura*) in the autumn of 1893. During the summer of 1894 they were kept in a large cage, and, about Midsummer, showed some inclination to nest; but at that time I was unable to give them proper attention, and when, a few weeks after, I supplied them with building materials, the fit had passed off. This year they have had the advantage of a small indoor aviary all to themselves. They showed no disposition to breed until nearly the end of May. They then drove one another about a good deal, and made the life of a Common or Red-billed Weaver (their only companion) a misery to him, so much so that I was compelled to remove him, although they did him no actual harm beyond pulling out a few feathers. The hen constructed a neat nest, made entirely of hay, in a strawberry basket or "punnet" which I had nailed to a shelf near the ceiling. Both cock and hen sing almost equally well, and they both sang during the building of the nest; but I did not hear the hen sing after commencing to lay. The hen commenced to sit on the 6th of June, and on the morning of the 18th I heard a young bird in the nest. The sound was precisely the same as that made by young Canaries, and, I think, not any louder. The young bird was fed by the parents upon egg and bread-crumbs—sunflower-seed and green-food were also eaten, but little or nothing else. The birds would not touch any kind of insect food. For some days a very considerable quantity of egg-food was consumed, then less was eaten and I feared the worst. On the seventh day the hen deserted the nest, and a dead nestling was found at the bottom of the aviary. The nest was then removed and found to contain two eggs. The male bird did not take any part in the work of incubation, but he fed the female from the crop—in fact, the birds behaved in almost every respect exactly as a pair of Canaries would have done. I believe that this is the first instance of this species breeding in England—if I am wrong in this supposition, I should be glad to be corrected. At present, the hen shows some inclination to build again. The eggs are of a pale sea-green colour, slightly clouded with pale brown, and dotted and splashed with dark brown; one of them measures just one inch in length, the other, which is of a very elongated shape, is fully an eighth of an inch longer.

BRITISH BIRDS WE HAVE KEPT.

VII.

THE CROSSBILL.

By ARTHUR G. BUTLER, PH. D.

This bird, whose scientific name is *Loxia curvirostra*, occurs over the entire Palearctic region, being an irregular visitor to Great Britain, but resident in some parts of Scotland. Its nest is usually placed in the forking branches of a Scotch fir and is constructed of grass or stalks of plants, felted together with moss, wool and lichens, and lined with wool or horsehair; outside, it is supported upon a platform of twigs of larch: two to three eggs are deposited.

The Crossbill feeds on insects, seeds, berries and fruits, and is said to be inordinately fond of apples; but my birds refused to eat either the flesh or pips of this fruit: possibly their delight in mischief might induce them to tear apples to pieces, without actually devouring a particle, which would give an observer a false impression as to their taste: but, on the other hand it is equally likely that my birds were peculiar in their distaste for the fruit: it is never safe to base an opinion upon the behaviour of one or two individuals of any species.

My pair of Crossbills was presented to me, in the winter of 1886-7, by my friend Mr. J. Johnston, a gentleman who at that time was much interested in aviculture, and exhibited several rare birds at the Crystal Palace: unfortunately he found them too great a responsibility, and had to give up keeping birds.

A week after *Loxia curvirostra* came into my possession, the male bird had become tame enough to take sunflower-seeds from my fingers, and I began to think that my Crossbills would be prime favourites. In their actions they much resemble Parrots: I had placed their seed in a metal hopper hanging on the back of their cage (which was a large flight), I hoped thereby to avoid waste; but in two days these intelligent birds had discovered that the top of the hopper lifted, after which the male almost always took his meals from the top, hanging head downwards on the wire netting to feed.

No sooner did the Crossbills become accustomed to their cage, than they set to work to do all the mischief they could. First of all they were content to tear to pieces every perch; as fast as I renewed them, they were converted into imitations of the little wooden trees sold to children in boxes of toys. Presently they wearied of this comparatively innocent amusement and started upon the woodwork of their cage, encouraging one another in the work of destruction by incessantly repeating the advice:—"Chip, chip, chip!"

At length the chip of beak and tongue became too much for me; the cage was one mass of shavings almost up to the wire; and, apart from the fact that it was a wicked waste of money, I feared to lose the birds themselves: therefore, on the 6th February, I removed the Crossbills from their flight to a metal cage and hung it up in my little greenhouse; but, on the 8th, the male bird had succeeded in opening the door, and having carefully closed it behind him, he was discovered making a tour of inspection about the roof of the greenhouse. When captured he bit savagely, but was nevertheless restored to the cage and the door wired up. This was too much for the poor old fellow; he came to the conclusion that life without mischief was not worth living, and on the next day he was found dead: the day after his inconsolable widow followed him to the land of shadows.

One interesting point which I observed, was, that the mandibles of male and female crossed in opposite directions, thus enabling the cock to feed the hen.

NEW BOOKS.

Life at the Zoo: Notes and Traditions of the Regent Park Gardens,
by C. F. Cornish, (Seeley and Co., Limited).

This is a most delightful book, admirably illustrated with reproductions of photographs by Gaubier Bolton and Japanese drawings. It contains much more about Mammals and Reptiles than about Birds, but the chapters on "The Zoo in a Frost," "Diving Birds at the Zoo," "Tame Divers," "The Animal Sense of Beauty," "Talking Birds," "Expression in the Animal Eye" and "Animal Colouring," will be found specially interesting by our readers. The various modes of swimming under water practised by the different species of diving birds are graphically described.

We extract the following from the chapter on "Possible Pets." "The bird of all others suited for the aviary, but neglected as a rule in England, is the Bulbul. The Persian variety has the finest song, but the Indian is an

even prettier bird, and sings exquisitely. In appearance, the Bulbul is not unlike the Bohemian Waxwing, with a black conical top-knot, cinnamon-coloured backs, red-and-white or yellow-and-white cheeks, and white breasts, with some bright colour near the tail. The note is most liquid and beautiful, and the bird has a pretty habit of varying the volume of the sound, singing loudly in the open, and almost whispering its song to its master or mistress if confined in a room. We might do worse than follow the example of the Persians, and make the Bulbul our favourite cage bird, instead of the canary."

Mr. Cornish has a high opinion of the talking powers of the Mynah.

Our readers will be interested in the following account of a young Razorbill, found "swimming by itself in a small lagoon left by the tide off the Norfolk coast. Razorbills are not common near this low shore, and this young bird had probably come in pursuit of a shoal of fish, and had been unable to find its companions again. In any case, it was quite alone, and in the absence of any of its own kind, made itself one of a bathing party of young people who frequented the part of the beach where it was first seen. It allowed itself to be caught and taken up to the house, where, on the arrival of the elders from a drive, it was found in the stable-yard, sitting in the middle of a large preserving-pan which had been turned into a temporary stew-pond for a number of small eels, which the children had amused themselves with catching when paddling in the stream the day before. 'It has eaten *all* the fish!' was the first intelligence of the ways of the new arrival; as a fact, there were one or two eels left, at which the Razorbill, looking like one who had greatly dined, now and then aimed an apathetic peck. To be carried inland by children, and then, surrounded by a whole family of humans, to catch and eat about twenty live eels in a stew-pan, is good evidence of the confidence which those birds have in man. From that day, until its lamented death, the bird was as much a member of the family as the fox-terrier or the cats. Next day, it was carried down to the beach, and placed on the wet sand by the breakers. It waddled down to the water, took a swim round, and came back to the shore. This happened twice or thrice, and as it showed no disposition to return to the sea, it was carried back once more to the house. Every day the bird was taken down to the beach and set free, while the whole party bathed from tents set on the shore." For the further history of this strangely tame bird, and its unhappy fate, we must refer our readers to Mr. Cornish's entertaining pages.

CORRESPONDENCE.

THE REPRODUCTION OF BIRDS.

SIR,—I have been much interested in the July issue of the *Avicultural Magazine*: it seems to me to be one of our best numbers.

I don't think that Mr. Savage, or any one else, will ever rear Virginian Cardinals on mealworms—they stimulate the old birds too much, and cause the massacre of the nestlings.

Dr. Williamson's article upon Owls is most entertaining. Did his cat really let the Owl ride on his back? If so, he was a very uncommon cat.

The translation from *L'Aviculteur* contains a greater number of questionable statements than have ever before appeared upon a single page of our Magazine. So far from sterility being the "cause of serious organic derangements" in captive birds, it is well known that many species, which seldom or never breed in confinement, are particularly healthy and long-lived. For example, the Combasou and the Weavers. Food is certainly *not* "the least important point" in breeding. It is true that some insectivorous birds, such as the Hedge Accentor and the Japanese Robin, can support existence upon seed alone; but the unqualified statement that "an insectivorous bird will not die if fed solely on seeds," is too absurd to require contradiction. Will a Nightingale live for even a week on

seed? Of course, all birds will breed if allowed the undisturbed enjoyment of a sufficiently spacious aviary, provided the food, the temperature, and the general surroundings, sufficiently approximate to those to which they have been accustomed in their natural state. We didn't need "Dr. H." to teach us that.

SEPTIMUS PERKINS.

The article on the reproduction of birds, translated from *L'Aviculteur* by Mr. A. J. Jones, which appeared in the July number of our magazine, does little to solve the very interesting question of the cause of sterility in certain species of animals and birds in captivity.

Dr. H. states dogmatically that "this sterility is the result of disease;" but he does not state what disease, nor does he advance any argument in favour of his theory. On the other hand, every amateur knows that many species of birds which do not breed in captivity are healthy and long-lived; and, in fact, it is not too much to say that the length of life of a given individual or a given species varies inversely with its breeding capacity. For instance, Zebra Finches, which breed very freely in captivity, are, as a rule, short lived; whereas the Weavers, which seldom shew any disposition to reproduce their species, are particularly easy to maintain in health, and frequently attain a great age. Dr. H.'s statement that wild animals, reputed to be unproductive, attain a short life in captivity, is directly contradicted by experience. The common Canary is a good instance of this: the male bird kept as a pet in solitary confinement frequently lives from 10 to 15 years, or even longer, while the average duration of life in Canaries used for breeding is much less.

Dr. H. tells us that in reproducing rare birds, food is the least important point. Has Dr. H. ever tried the effect of adding ants' eggs or other animal food to the diet of a pair of seed-eating birds?

The truth is, that the effect of captivity upon the function of reproduction is a subject but little understood. That some species reproduce their kind freely, while in other nearly allied species the function remains absolutely in abeyance is a fact of which, so far as I am aware, no satisfactory explanation has as yet been given. The illustrious naturalist Darwin discusses the question, if I recollect rightly, in the "Origin of Species," but without affording any satisfactory solution.

C. S. SIMPSON.

A HAND-REARED BLACKBIRD.

SIR,—The account of the tame Starling in the June *Avicultural Magazine* is very interesting, and I find that Blackbirds reared from the nest get equally tame.

I reared one that would follow me all over the house. He learnt to whistle "Home, sweet home," and imitated any sounds I made, and would shriek with delight when I came in from a walk. Once, when I went to stay near Windermere, I offered him his liberty by letting him loose in a wood near the house; but in the evening, he fluttered at one of the windows until admitted, and after that, I allowed him to fly out every day, as he always returned when I called him. Blackbirds have a large amount of fun and mischief in them. He would fight with my fingers, and pretend to bite; and loved to tear up paper and make his cage untidy as soon as it was cleaned. He used to take the water-glass and purposely upset it on the sand or food-pot. I fed him on "Capelle's Food" and worms, and he liked cooked vegetables and bread, etc., also every kind of fruit.

Later on, I will tell you of my wonderful little Swallows, and a young Robin, and others I have kept.

A. M. WORDSWORTH.

PARRAKEETS AND PAINT.

SIR,—I have a good out-door aviary into which I should like to put Australian and other Parrakeets. It was intended for foreign Doves, and the boards and some perches are painted white. Is there danger of the Parrakeets eating this paint?

O. E. CRESSWELL.

 THE CANARY AS A SONG-BIRD.

SIR,—By one of the rules of our Society, Canaries are excluded from subjects of discussion, and I quite approve of it so far as fancy Canaries are concerned. How some people can admire a deformity like a Belgian Canary I cannot understand! My sympathies with the Canary are in his character of a song-bird. His advantages being (1) tameness, (2) singing more continuously than most birds during the year, (3) capacity for education. With the exception of Mocking-birds, I think all song-birds are best with their natural wild song; but the song of the domesticated Canary can hardly be called its natural song. It is certainly totally different from the song of a wild Canary I once possessed, and I think most people with an ear for music will allow that the song of an ordinary Canary is not always altogether pleasing. The Hartz Mountain Canaries are an example of what can be done in educating the Canary to sing as desired. The song of the Hartz Mountain bird has nothing harsh or disagreeable about it, but it is too artificial to please me.

Now, I think if Canaries were taught to sing the song of some of our best songsters, such as the Nightingale or Woodlark, a distinct advantage would be gained for lovers of bird song, as we could then have the song of these birds throughout the year, and without the care and trouble necessary to keep such insectivorous birds in health. The Woodlark, for instance, is very difficult to keep alive during its moult; and unless one has a good chance of keeping such a bird alive, it is cruel to keep it caged, doomed to almost certain death. Ever since reading Bechstein's "Natural History of Cage-birds," it has been my desire to possess a Canary with the Nightingale's song. I tried the experiment once, of teaching a Canary the song of a Nightingale, in India; but my English Nightingale sang from November to March or April, and so the young Canary, hatched about March, did not get enough tuition, and only retained one or two of the harsher notes of the Nightingale, which spoiled his song, and eventually all my Canaries spoiled their songs, by picking up these same notes. I believe, with two or three months tuition, satisfactory results would probably be obtained.

According to advertisements, Hartz Mountain Rollers are described as having Nightingale notes; but in those I have heard I have not been able to detect any such notes; and I believe the Germans prefer the birds that can give an artificial musical performance. My idea is that, if you want artificial music, you can have it much better on an instrument; whereas, the natural notes of birds cannot be obtained from instruments. I should like to hear of the experience of other aviculturists, who may have experimented in teaching the Canary the songs of other birds.

I once kept a Canary and a Goldfinch; and the Canary, although an adult bird, learned the song of the Goldfinch, which it sang quite separately from its own, sometimes singing like a Canary and sometimes like a Goldfinch.

As the idea of admitting Canaries as song-birds may not have occurred to the framers of the rules of our Society, I think you might publish this letter, to see if other members of the Society would be in favour of the present rule being altered, so as to admit "Canaries as song-birds" as one of the subjects allowed for discussion.

C. HARRISON.

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OUR BIRDS.

V.

AN AVIARY IDYLL.

By C. S. SIMPSON.

There was discord in the hitherto peaceful aviary: a pair of Green Conures had just been introduced, and the new comers flew violently hither and thither, furiously attacking the original inhabitants and shrieking at the top of their peculiarly discordant voices. The other birds, terrified by the sudden onset of the attack, fluttered helplessly against the wires or crouched upon the floor uttering piteous cries for help. But aid was at hand, a net was brought, and the Conures were captured and confined afresh in their old cage.

The frightened birds emerged from the holes and corners to which they had fled, they smoothed their ruffled feathers, and peace reigned once more.

The Ornate Lorikeet had hitherto been master in the aviary: true, he allowed the Pennant, the Crimson-wing and the other Parrakeets to occupy the less eligible perches and to approach the food vessels after he had satisfied himself, but his supremacy had never before been disputed, and his self-importance, which was great, had received a rude shock.

The cage containing the Green Conures was left in the aviary, and the new birds at once became objects of the deepest interest to the Lorikeet. With his head on one side he would sit for hours on a branch close to the cage watching them attentively, and only leaving his perch from time to time to chase some impertinent bird from the food vessels. Finally, he fell deeply in love with the hen. What could he see in her to admire? The Green Conure is an obtrusively vulgar bird, noisy beyond all other Parrakeets, greedy and quarrelsome. Nevertheless, Ornatus loved her and fed her with bread and milk through the wires, regardless of many a spiteful nip from her irate husband.

When the cage was taken from the aviary he darted out after it, and at night he roosted on the ring at the top.

But the Green Conures were unpopular with the household in which they resided, their screams were unendurable, and before very long they were given away, and the bird-room once more became comparatively quiet. The Ornate Lorikeet was not distracted with grief, his appetite remained extremely good, and to all appearances he forgot his love the instant she was out of sight.

Now *Trichoglossus ornatus* is the mountebank of parrakeets: his tightly fitting many-coloured raiment, and his quaint and rapid antics among the boughs of the aviary, irresistibly call to mind the gentleman in tights and spangles who thrills the circus with his performance on the tight rope or the trapeze. Moreover, his disposition is very amorous, but being a rare bird it is not always easy to provide him with a mate of his own species.

The place of the Conures knew them no more, and the Lorikeet looked around him for an object upon which to lavish his superabundant affection.

A pair of Tovi Parrakeets had taken up their abode in the aviary, and, taking advantage of the temporary absence of Ornatus from his favourite perch, had quietly annexed it. These were a very matter of fact little couple, devoted to one another, occupied with their own interests, and taking but little notice of the other birds, though quite capable of defending themselves against attack when necessary.

The hen happened to be the only lady at this time in the aviary, and Ornatus deliberately set himself to win her affection and to destroy the domestic happiness of her husband.

Flying to the perch on which they were sitting he commenced to sidle up to her, puffing out his feathers, making a curious hissing sound and holding down his head so as to display to advantage his beautiful violet crown. The Tovi Parrakeets took but little notice of him, but the cock bird shifted his position so as to get between his wife and her admirer, and opened his beak in a very suggestive manner when the Lorikeet came too near. Ornatus flew away and approached the object of his affections from the other side: the cock Tovi again changed his position and the little comedy was repeated.

Evening was coming on and at last Ornatus settled himself for the night on a bough about a foot from the Tovi Parrakeets.

The next morning the performance recommenced: Ornatus followed the Tovis from bough to bough, keeping just out of reach of the beak of the cock bird. As soon as the little pair settled themselves comfortably for a rest, he perched as close to them as was safe, and endeavoured by all the arts at his disposal to render himself attractive to the hen. His curious antics, his attempts to feed her, his love dance, and his way of turning himself about to display in succession the varied hues of his head, his breast and his wings were intensely diverting, and the quiet tact with which the husband always managed to place himself between his wife and her too ardent admirer was no less amusing.

The hen Tovi, to do her justice, in no way responded to the Lorikeet's advances, but he was not discouraged in the least, and the comedy went on all day, and from day to day for several months, being occasionally varied by a sharp scuffle between the indignant husband and the too forward lover.

The Spring advanced, and, as warmer weather set in, it became evident that matters were coming to a crisis: the skirmishes became more frequent and more serious, but no great damage was done to either combatant, and matters were allowed to take their course.

At last the comedy came perilously near to a tragedy. One morning the scattered feathers in the aviary showed that the day had opened with a sharp conflict: the cock Tovi crouched in a corner defeated, humiliated and disconsolate, while enthroned upon the highest perch, beaming with pride and satisfaction sat the Ornate Lorikeet, and at his side, demure but slightly ashamed, the coveted hen.

The poor little cock was thoroughly beaten, and made no attempt to regain possession of his wife, who for two long days completely ignored him, and calmly resigned herself to the demonstrative attentions of the Lorikeet. At the end of that time it became obvious that the deserted Tovi was pining away and would speedily die unless the higher powers interfered.

Accordingly the pair of Tovi Parrakeets were removed from the aviary and placed in a cage by themselves, where the cock bird rapidly recovered his health and spirits and the hen quietly adapted herself to a less eventful life. *Trichoglossus ornatus* wasted no time in useless regrets, but promptly transferred his affections to a lady Purple-capped Lory, who accepted his suit and who assists him in ruling the aviary. It is to be hoped that in time he will be provided with a bride of his own species.

THE ETHICS OF EXHIBITING.

I.

By J. CRONKSHAW.

I am happy to say that I can advance a few arguments in justification of sending birds to shows, but from my experience in exhibiting I could fill a page in *The Times* with arguments against it as it is generally carried on. If pleasure is the motive for exhibiting our pets, and they are not sent too far away, nor left to the mercy of railway servants and *some* show committees, exhibiting is justifiable in my opinion; especially if the exhibitor goes with his birds, as I do when possible, even from the North of England to the Crystal Palace show in the south. And why is it justifiable? Mainly because it gives others the same pleasure that the owner seeks for himself, viz., the satisfaction of seeing the most beautiful of specimens and *Rara aves* in Foreign and British birds, which many persons would never see if exhibitions were not patronised. Suffering by the birds is thus reduced to a minimum, and I defy anyone to prove by argument that exhibiting under these conditions is not every whit as justifiable as the keeping birds in captivity. The purpose is the same in both cases, and the pleasure, and the study of birds' habits. But exhibiting birds is very much abused by many persons. We have only to look through the prize lists in show reports, published week by week, to find the same men winning almost all over the country with the same birds. I call those men "Professionals," most of whom seem to exhibit birds for what they can make out of them. From a commercial point of view their action is justifiable; from a humane point of view it is often gross cruelty. I have seen a man poke up his bird with a stick when the judge was going round, and exclaim—"Come, come; can you not stand the fatigue of two shows in one week?" Some of these men exhibit all over the country, and then advertise their stock for sale at very low prices, in addition to netting as much prize money as possible. And when money-making is the object, some of these men are suspected of selling not the bird that wins all round, but one out of a stock of inferior birds, bought for the purpose of being "palmed" upon confiding amateurs in place of the one advertised. Exhibiting birds week in and week out for such a purpose, would, perhaps, be thought clever by men on the Stock Exchange, but from a humane point of view, it is not justifiable. I have never lost a bird through exhibition, but they have sometimes come home completely exhausted; mainly, I presume, through neglect by railway servants, and thus missing the train connections. I have never exhibited canaries. I don't think that birds so well domesticated would suffer so much as Foreign and British birds; but in sixty cases out of a hundred I opine that canaries are exhibited from a commercial point of view—for sale, or the sale of their prospective progeny. Commercially, such exhibition is justifiable, if the committee at shows will only look after the stock. Many committees, however, fail miserably in that respect. I once went to a show and found not only my own birds, but every large seed-eating foreign bird without a grain in its cage. Moreover, there was not a grain of hemp-seed on the premises. I repeat, exhibiting for profit is not justifiable from a humane point of view; but from the other point of view it is. Exhibiting by amateurs under the conditions named at the outset, is as justifiable as the very keeping of birds in captivity.

II.

By H. R. FILLMER.

Is it permissible for the true bird-lover to send his pets to shows? There is much to be urged on both sides of the question.

There is, undoubtedly, a good deal of cruelty incidental to shows—unintentional and generally unavoidable cruelty—it cannot be pleasant for a bird to be compelled to leave his roomy comfortable quarters at home and be confined within the narrow limits of a show cage. Even a short railway journey must be a sore trial to a bird, and he often has to pass many hours

in the dark recesses of a hamper or box, without water, before he emerges into the glare of the show-room. He is exposed to serious risks from sudden changes of temperature and from vitiated atmosphere, as well as from unaccustomed, and perhaps unsuitable, food.

Exhibitors are apt to regard their birds simply as instruments for winning prizes and cease to care for the birds themselves. A too keen feeling of rivalry is often aroused, acrimonious disputes arise, and the "birdy" papers ring for weeks with the cries of disappointed competitors. Some exhibitors degenerate into mere pot-hunters, and turn what ought to be a hobby into a serious business. Worse than this, it is beyond dispute that "faking," in plain English, cheating, is widely prevalent, although there is much less of this with those species of birds which come within the province of our Society, than there is with poultry, pigeons and canaries.

These things make many aviculturists hate shows.

Yet it must be admitted that shows encourage aviculture. They enable the young student of birds to make acquaintance with many species he has never seen before, and they place before us all a certain number of rare specimens which would otherwise be hidden in private collections from all but a favoured few. Birds do not suffer so much in health from being sent to shows as would be supposed by the inexperienced in such matters. The change of air and scene often seems to brighten them up, and must be set off against the risks from draught and improper food. The successful exhibitor is pleased with his prizes, the unsuccessful at least has the barren honour of seeing his birds become a centre of attraction, and those who have the management of the show extract a great deal of pleasure from the preparations and from the excitement of the event itself.

Those who oppose shows say that it is selfish to expose one's birds to risk and discomfort for the chance of winning a trifling prize. Exhibitors may retort that it is more selfish to keep one's birds entirely to one's self in the aviary or bird-room for fear of losing them, than it is to send them to a show where they may give pleasure to others.

Fortunately we have not to decide the question, every aviculturist must settle it for himself.

Personally, I was never an enthusiastic exhibitor. I always despatched my birds to the show in fear of their lives, and rejoiced greatly over them on their return. Now I have resolved to exhibit no more, and am fully persuaded that my resolution is a right and wise one.

III.

By W. H. BETTS.

Having been asked to state my views as to the good or evil influence of Cage Bird Shows, I think it only fair to those subscribers to the *Avicultural Magazine*, whose convictions may not coincide with mine, to candidly confess, in introduction, that my knowledge of the subject is but slight, and practically limited to Crystal Palace Shows and the annual competitions of the L. & P. O. S. at the Aquarium; occasionally, I may from time to time have visited some other Shows, but still the fact should be remembered that I have never been a prominent Exhibitor, so my readers must accept this contribution as from one who gives them his opinion with the greatest diffidence.

It seems to me that were our leading Clubs to discontinue holding exhibitions, they would find their younger members deprived of that ambition which we know to be a great incentive to the intelligent and scientific treatment and breeding of birds. Deep down within the heart of every novice there should be the firm conviction that the honour of being a champion exhibitor can be obtained by skill and perseverance, and when he sees exhibited a first prize bird, in all its glory of health and perfect plumage, he should find in such a sight, not only pleasure that his comrade

in the Club has been successful, but also the ambition that in due time he too may place upon the show bench, such a bird as will excel the one he now admires, to again inspire some other novice with a similar ambition.

Another benefit I find in Shows is that they practically set the standard of perfection; moreover, they recruit the ranks of bird enthusiasts, inducing those whose interest in birds is languid to support Societies of Aviarists who cultivate the hobby, and who do their best to elevate it; again, these Shows by offering prizes open the arena to a large circle of competitors, who by their entry fees can reimburse to some extent the great expense attending exhibitions; these shows moreover provide a market for the sale and interchange of specimens, and bring together veterans and amateurs, townsmen and provincials, for their joint benefit. There cannot be a doubt that much good work is done in spreading knowledge and enlisting amateurs at Cage Bird Shows, and these considerations lead me to conclude that it would be impolitic if aviculturists did not encourage and support them.

There is, however, another aspect of the question, and that a grave one; the money prizes sometimes tempt exhibitors to practices of fraud and cruelty, and though these cases may be but rare, yet, undoubtedly, they raise among the better and more honourable aviculturists a feeling of disgust, and some disinclination to enter an arena with competitors who might disgrace them; still, allowing every weight to these objections, and greatly sympathizing with them, I am inclined to think that though there are too many shows, and that a Society like the Avicultural can do better service by the publication of its magazine, yet the good that comes from Cage Bird Shows is of the highest value, and deserves unprejudiced appreciation among those who lead opinion among the aviculturists.

IV.

By SEPTIMUS PERKINS.

I have always been unable to understand how any man who really cares for his birds can send them to Shows. I know that some true bird-lovers are to be found in the ranks of the exhibitors, and that is what puzzles me. The average exhibitor is not a bird-lover, but a mere fancier, and him I can understand, though I do not admire him. He regards his birds merely as counters with which he wins prizes; if they could compete after they were dead and stuffed he would prefer them in that state. To him success in aviculture is not the keeping in health, or the breeding, of some rare or beautiful species, but the possession of a lot of glaringly inartistic prize-cards, with which he can disfigure his bird-room. I repeat that I can understand, while I despise, such a man, but the true aviculturist who yet patronizes shows I altogether fail to understand.

The whole thing is an organized system of cruelty from beginning to end. It is cruel to confine birds in the tiny cages almost invariably used at Shows, it is cruel to send them on long railway journeys, it is cruel to expose them to the draughts and bad air of the show room, it is cruel to trust them to the tender mercies of railway porters and show secretaries.

I am not one of those who consider it wrong to keep birds in captivity, but I hold that the owner of captive birds is under a heavy responsibility towards his prisoners, and is bound to make their lives as happy as he can, and so far as possible make up for their loss of freedom. I really doubt whether the practice of keeping birds in cages can be defended, they should always be kept in an aviary. Even a small aviary is better than a very large cage.

Aviaries have one great advantage besides those which are usually urged in their favour: the owner of an aviary almost always gives up exhibiting. It is too much trouble to catch and encage the birds, and when caught they are not "steady" enough.

I have dwelt on the evils of shows from the point of view of the birds, but I believe they are at least as prejudicial to the exhibitors. Shows are

the cause of no end of rows, quarrels, avarice, cheating, and deceit. The unsuccessful exhibitor is never satisfied with the judge's decision, and instead of admiring the prize winners he spends his time in finding fault with them, trying to discover their imperfections, and making unfavourable comparisons between them and his own birds. There is probably not very much down-right faking in the case of British and Foreign birds, except with White Java Sparrows, but there are plenty of little dodges, more or less dishonest, and it is by no means always the best bird that wins.

I do not expect to live to see the day when bird shows will be a thing of the past; but I do hope to see the day when aviculture will have completely shaken off all connection with the "fancy," and that for which the "fancy" exists, namely, Shows. It is hopeless to try to elevate and reform the "fancy" the best way to treat the "fancy" is to ignore it, and perhaps in time it will die out, both the name and the thing, which are equally hateful.

BULBULS. *

As pets Bulbuls come next to parrots, but not for their intelligence. I believe their brain is small. A Bulbul has a lively and inquiring mind, and can be taught amusing tricks, but it shows all the signs of little-headedness. The secret of its popularity is its vivacious temper and cheery disposition. Bulbuls do more to keep the world lively than any other bird I know of. They do not sing outside the pages of *Lalla Rookh*, but they have sweet voices and light hearts, and they seem to bubble over with a happiness which is infectious. They are also easy pets to keep. If a bird's food in its wild state consists of insects only, then it is generally difficult to find an artificial substitute suited to its digestion; but when a bird eats both insects and fruit, as the Bulbul does, then almost anything will agree with it. You may give it meat, raw or cooked, bread crumbs, pudding, potatoes, fruit, or anything that is going, and the greater the variety the better it will thrive. It is good, however, to have some staple diet, some staff of life, and let the other things be luxuries. For Bulbuls, Mynas and all miscellaneous feeding birds, I believe there is no better regular food than parched gram made into fine flour and moistened with water. I learned this from my friend the old bird-man in Bombay, but he sometimes mixed the flour with *ghee* instead of water, to oil the bird's throat and make it sing sweetly!

Last year a young Bulbul was brought to me in a very dilapidated state. Some native boy had found it, and, after the manner of native boys, had carried it about swinging by a string tied to one leg. At least, I suppose this was how it had been treated, for one leg was dislocated. I took the poor bird in hand, not because I hoped to save its life, but because I am weak about putting birds to death in cold blood even to end their misery. I did save its life, however, and after a long while even the broken leg restored itself in some way and became as sound as the other. In course of time a new suit of clothes arrived, of Dame Nature's best make, and my dingy little cripple became a very stylish-looking bird, with a peaked, black crest on the top of his head, a little patch of crimson over each ear, and another display of red on what ornithologists euphemistically call the "under tail coverts." The only thing that marred his beauty was a scar across the bridge of his nose, which he made and kept fresh by frantic efforts to get out between the bars of his cage whenever he was frightened.

As I have said, the Bulbul has a small brain, and this bird occupied a strong cage for a year without finding out that dabbing his head against the wires would not get him out. Neither did he attain to the knowledge that a red handkerchief, a hat, and a hundred other common things, do not eat Bulbuls. So he was seized with panic many times a day, and the place where the wires caught him, just above the beak, was always bare and often raw. Yet with his equals he was a bold and pugnacious bird. He accounted me

* Reprinted from "A Naturalist on the Prowl," by E.H.A.,—by special permission kindly given to the Avicultural Society by the publishers, Messrs. W. Thacker & Co., 87, Newgate Street, E.C.

his equal and would maintain an obstinate fight with one hand until I knocked him out of breath. Nothing kindled his ire more than Baby's fingers trying to grasp him through the bars of his cage. He panted to exterminate them. Poor Billy enjoyed the two principal conditions of longevity—a good digestion and a small mind; but he got fits and died early.

Billy was a Red-Whiskered Bulbul, the species which an old naturalist in a happy moment called *Otocampus jocosa*, under which name you will find it in Jerdon. The common species of our garden is the Madras Bulbul, a bird which is only a shade less sprightly than the Red-Whiskered, and to my mind handsomer. Its whiskers are not red, but its head, crest and face are glossy black, and its mantle is a fine smoky brown, the pale-edged feathers making a pattern like the scales of a fish, and the whole effect accords with the maxim of Polonius—

“Thy dress the richest that thy purse can buy,
But not expressed in fancy.”

The only touch of fancy about it is the crimson seat of its trousers, and this is the badge of all Bubluls; they must have a patch of bright colour on that place. The Sind Bulbul wears it yellow. Another badge is the up-turned crest, which expresses the gleeful heart. If you watch a canary, or any other merry-souled bird, you will see that it smiles by erecting the feathers on the top of its head. Now, by a natural law, the feathers which are constantly being erected are developed and grow upwards, and what was a passing expression in the ancestor becomes a permanent feature in the descendants. So every man who cultivates a grumbling disposition is labouring to bequeath a sour face to his children. On the other hand, the merry twinkling eye with which some men are born is nothing else than the crystallized result of a thousand humorous thoughts in past generations. This is my philosophy of evolution.

These crested Bubluls are the true Bubluls, but the family ramifies into a great variety of birds more or less bulbuline in their dress and customs. There is the White-browed Bulbul, a dingy-coloured bird which comes about Bombay gardens and lets its feelings off every now and then in a spasmodic rattle of sweetish notes, in which, however, I recognise the family voice. It has attained to cheerfulness, but not to hilarity, and its head is only beginning to get crested.

Then there is the cheerily fussy Yellow Bulbul, not a garden but a forest bird. I estimate that it makes two-thirds of all the noise that is made in these jungles. There is the rarer Black Bulbul also, and the Ruby-throated Bulbul, and many others. I think good Dr. Jerdon goes too far in including *Iora* among the Bubluls. *Iora* is a bright little bird, but not a Bulbul.

There is another bird which Jerdon calls the Green Bulbul, but he admits that it is not a very near relation. By its form, its nest and its eggs the Green Bulbul is an Oriole, but there is a difference depending on its colour. Or perhaps its colour depends on the difference. Which is cause and which effect, is a question on which we have no information. Bird history does not go back far enough. The thing which is evident is that, in the world to-day, the Green Bulbul expresses quite a different idea from the Golden Oriole. The latter is designed to be seen; the former is designed to be unseen. Who does not know the Golden Oriole, or Mango Bird? It cannot escape notice and does not try. Its loud mellow voice salutes the ear, as its brilliant hues catch the eye. But how few know that there is such a bird as the Green Bulbul! Yet it is everywhere, hopping about among the green leaves, unobserved, but observing everything and mocking all the birds in turn. First there is a King Crow calling cheerily in the tree just over your head, but you look for it in vain; there is no King Crow in sight. Suddenly it stops, and the fierce scream of the Sparrow Hawk takes its place; but where is the Sparrow Hawk? In a few minutes a Sunbird is twittering just where the Sparrow Hawk must have been; then two Sunbirds are quarrelling. This is too absurd. You fling a stone into the branches and a

small green bird gets out at the back of the tree and flits across to the next, where the King Crow immediately begins to call. And all the time the blackguard is setting quietly amongst the leaves, his head bent down and his twinkling black eye enjoying the effect of his mockeries.

How is it that a bird so talented and dressed so superbly is never made captive by man and put into his dungeons to make him sport? When the Bombay birdman comes round with his Canaries and Parrots and stupid blue Java Sparrows and emaciated white mice, twirling away their weary lives in little wire wheels, he has very often some odd bird that has fallen into his hand by accident. In his cages I have found a Cuckoo, rescued from vengeful crows, a Mango Bird, a Button Quail, even a Water Hen maimed with a shot meant for duck or snipe, but never a Green Bulbul. I had long set my heart on having one for a pet, and at last found a nest with two young ones almost ready to fly. Birds meant to be reared by hand should be taken at an earlier age, for their little wills develop with their plumage. So I found mine very obstinate. They got it into their heads that the nourishment I offered them was medicine, and would not open their mouths. When a child is fractious in the same way, you can hold his nose and his mouth must open, but Bublubs have not tenable noses. However, I managed to get a good quantity of food stuffs introduced into them one way or another; but my birds pined, and I soon saw that they meant to die. The only thing to do was to replace them in their cradle, where their parents made great jubilation over them. Within two days, as I was walking in the garden, I found one of them on the ground, in robust health and trying to fly. I took him under my protection again, for I am a benevolent man and was sure the crows would find him. This time I tried a different system. I got my ingenious *chupprassie*, Yakoob Khan, to make a rough cage of bamboos, and in this I hung my little Bulbul among the convolvulus which over-grew the verandah, where his parents could visit him and bring him dainties. This they did all day. Now it was a soft green grasshopper, now a fat mantis, with the leg, and hard parts stripped off. They made an absurd amount of fuss, bo-peeping at me through the leaves and calling out to one another to beware. I knew they were trying to poison the innocent mind of their little son against me. But I foiled their designs. I fed him when they were away and treated him kindly and so completely won his confidence in a week that I had only to whistle from any part of the house and he would answer me. So all went well until one Sunday morning, when I was sitting reading and my little pet was hanging in the verandah. Suddenly I heard shrieks of agony from his cage, and rushing out found him with his back against the bars and his wings stretched out, like a butterfly pinned to a board. I looked behind, and there was the neck of a snake, stretched like a cord from the trellis to the cage. The abominable reptile had insinuated its head between the bars and caught the bird by the back, and was trying to drag it out. I lifted my foot and gave it a frantic kick, which must have sent the snake quite out of this world, for it was never seen again. Then I hastened to examine my pet. His poor little back was flayed. The double row of small sharp teeth on each side of the snake's lank jaws had raked off both feathers and skin. He revived towards evening and tried to look cheerful, but sank and died next day.

I grieved for that Green Bulbul more than I generally do for lost pets. I almost said,

“Love not, love not; the thing you love shall die.”

But no! I cannot accept that sentiment. It is moral imbecility. I believe that the words of the clear-eyed and sound-hearted poet who has gone from us are true of all bereavements, little and great—

“I hold it true, whate'er befall,
And feel it when I sorrow most,
'Tis better to have loved and lost,
Than never to have loved at all.”

BREEDING BLUE ROBINS.

By A. SAVAGE.

It is about four years ago since I purchased the first pair of these birds. They were not in the best of condition, having existed for a month or two at the bird-shop where I bought them, on "Chopped cabbage leaves, smashed hemp, and bread-crumbs!" A sumptuous concoction unknown to me as suitable food for soft-billed birds, until the dealer recommended it as all they required, and added, it was all they had had. However, I failed to see in such a mixture the animal food soft-billed birds required, and as soon as they were mine I determined to change it.

I removed the broken feathers from their wings and tails, so many were broken in the former they could scarcely fly, and placed them alone in a small aviary. The food was changed to the following: Scalded ants-eggs, a little preserved yolk of egg, chopped green-food and powdered "échaudé" * mixed. They had also a couple of mealworms a day. I offered them too a few small garden-worms, now and then, but to these they were never very partial. In a month they looked grand; the fine lustre had come on them, especially on the cock, and his blue back was lovely. We got great friends, and my approach to the aviary was always greeted with excitement and chirping, especially when there seemed to be signs of a mealworm coming.

When putting them in their small aviary, I placed a nest-box in one corner, near the roof, and put a little nesting material on the floor. I had never noticed any nesting operations going on, and one morning, when looking into the box, for curiosity, I was surprised to find a well-built nest, quite finished. A morning or two later, I missed the hen, and found the cock making a great fuss round the box—poor fellow! he was telling me, in his way, that his wife was very ill inside, and when I took the box down and looked in, I found her in a critical state, egg-bound. She received care and treatment, but could not lay the egg, and died that night. I was fortunate enough to procure another mate for him almost immediately, in good condition, and I turned the pair into a larger aviary containing a few parrakeets and hard-billed birds. They very soon nested—four blue eggs were laid, similar to those of the Hedge Accentor—and three hatched. One young bird died very early, but the remaining two grew well for about a week, when one morning I found one had fallen out of the nest during the night and was dead on the floor. The other was successfully reared and turned out to be a hen. She was a greyish looking little creature, tinged with blue, and rather spotted on the breast.

Another nest of four followed shortly after, but they all disappeared one afternoon, at a very early age, as if by magic, for I could never find a trace of any of them, or with any certainty who was the culprit; but I firmly believe they were eaten by some birds in the aviary—perhaps their parents. This ended the nesting for that year. All three birds passed the winter, a severe one, in an outdoor aviary, where the water was frozen into a solid block morning after morning; they were hardy birds and did not suffer from the cold. The following spring, the cock seemed to get on the best of terms with both the hens, and, as I could not conveniently shut one up alone, I resolved to leave all three together and experiment breeding with two hens to one cock. Each built a separate nest and the younger laid first, three eggs, of which two hatched. The other hen laid five eggs a little later, and hatched all. They disturbed each other, though, and no young were reared. Towards the end of the season the cock was found drowned in the bath-dish, and I eventually disposed of the two hens.

According to my experiences Blue Robins are hardy birds, they do not appear to suffer from the cold—mine only passed the night in the closed

* "Échaudé" is a kind of light and easily-digestible bread, eaten in France by many people who cannot digest the ordinary kind. It somewhat resembles *colifichet*, but is more carefully made for human consumption. Broken pieces and scraps can be bought at a low figure, and come very handy for bird-food.—A.S.

part of the aviary—and they nest readily; *i.e.*, they lay eggs and hatch young, but they frequently fail to rear them, even when in separate pairs. They are handsome birds, intelligent and confiding, and, as said at the commencement of these notes, soon get on friendly terms with those who attend to their wants. But they require more attention than seed-eating birds, and must have fresh food, of which ants' eggs can form the base, *at least* twice a day. They also require cleaning out frequently, as is the case with all soft-billed birds, to avoid offensive smell.

TWITES BREEDING IN CONFINEMENT.

By G. C. SWAILLES.

A pair of Twites (*Acanthis flavirostris*) have this season bred and reared young in my small aviary, and as it is, I believe, a rather uncommon occurrence, a few notes may be acceptable to the readers of the *Avicultural Magazine*. The birds are a very interesting pair, both being abnormally coloured—the cock about half white pied, and the hen pure white, (the latter may be known to some of my readers, as it has been exhibited at both the Palace and Aquarium shows.) They are kept with about half a dozen other finches in an aviary quite out in the country.

The hen commenced to build on May 14th, and laid her first egg on the 17th, laying altogether five eggs and sitting closely after the third was laid. I did not again look at the eggs, but saw the old birds busy feeding on the 2nd of June and following days. I looked in the nest on the 8th, hoping to find some fine young birds, but the nest contained only one poor starved thing which died on the following day; the weather was very stormy at the time they were hatched and I think this was the cause of their doing so badly.

On the 15th I noticed that the hen had nearly completed another nest, and she laid on the 16th and three following days; having a Redpoll nesting at the same time, I gave her two of the Twites' eggs, making up the number for each with infertile eggs; both birds hatched on the same day; the two in the Redpoll's nest perished at once, though she is a good feeder, and has reared two broods of her own this season; the Twite successfully reared hers, and they left the nest on July 19, and are now very fine birds, but quite normally coloured; this I expected, as I have reared a large number during the past few years from both white, pied, and cinnamon Lesser Redpolls, and have inbred them, but have never had one vary in the least from the normal colour. Young Twites are not nearly so precocious as Redpolls; they were a long time before they attempted to peck for themselves, and even now (August) clamour to the old ones for food, whereas I have seen young Redpolls a week after leaving the nest shell hard canary seed. My birds have no soft food given them, but as much of the flowering top of the dwarf grass, dandelion, and hardhead tops, thistle, plantain, &c., as they wish, and as many aphides off rose, apple, or plum trees as I can at the time obtain; infested branches being put in the aviary for the birds to peck them off. The latter, I consider, are very essential for the successful rearing of Finches in confinement, especially for the first few days after they are hatched.

CORRESPONDENCE.

THE ELECTION OF THE COUNCIL.

SIR,—The time for the first election of Officers of the *Avicultural Society* is now drawing near. I see that, according to our rules, all candidates for office (excepting those seeking re-election) must be duly proposed and seconded before the 14th of September.

Having had a good deal of experience of the working of Societies of various kinds (on both sides of the Atlantic), I should like to be allowed to make a few remarks upon what I conceive to be the duty of the members in

regard to this election. I can make these remarks with a better grace, because I am not prepared to take office myself, but I do not expect everyone to agree with me, and I may have the misfortune to offend some.

It should be thoroughly understood that the Council is not a merely ornamental body; it is, I am informed, consulted on many matters, and it has two very important powers: viz, that of altering the rules, and that of appointing the Executive Committee. The importance of the first power is obvious, and that of the second is nearly as great, because the Executive Committee have the whole management of the Society in their hands. It becomes therefore of the gravest moment that suitable persons, and suitable persons only, should be upon the Council. In my opinion the following are essential qualifications for a member of the Council. (1) He should be prepared to afford substantial help in the work of the Society, either by writing for the Magazine, or by proposing new members. (2) He should be able and willing always to reply to the Secretary's letters by return of post. (3) He should not be a dealer in birds—above all, he should not be an amateur dealer.

I have the greatest respect for many of the dealers who are members of the Society. I would not on any account exclude dealers from the Society, but I do not think that it is desirable that they should be members of the Council.

It seems to me very desirable that there should be a considerable infusion of new blood into the Council every year.

I should like to impress upon the members that it is most essential that every member should exercise his vote, for thus only can the election of undesirable Councilmen be prevented.

SEPTIMUS PERKINS.

PARRAKEETS AND PAINT.

SIR,—Referring to Mr. Cresswell's question at page 108, I may mention that the wooden frame-work of my garden aviary was originally painted dark Brunswick green. Some of the Parrakeets gnaw this painted wood rather freely, three varieties of Australian Broadtails (*Platyserci*) being great offenders; but they have always kept in perfect health and condition. The Many-Coloured Parrakeets are not much given to gnawing solid wood, unless it be very soft; but in wet weather they are fond of licking the rain as it trickles down the painted wood-work. I still have a male which, during the last several years, has spent most of his time in this aviary, and is in splendid health and plumage; but his upper mandible has gone wrong. I have not hitherto thought of the paint in connection with this Parrakeet, but have always attributed the mischief to the circumstance that he feeds freely on the food placed in the aviary for insectivorous birds; nevertheless it may have been caused by the paint.

Of many other Parrakeets, Love-birds, Lories, and Lorikeets, which have been placed in this aviary from time to time, not a few have been fond of licking the painted wood-work, and also some painted rain-water pipes, during rainy weather, but none have suffered so far as I know; they seldom gnawed the aviary, preferring the trees and the nesting-boxes. I must except, however, four varieties of the Brotogerys family which I still have, and which will gnaw anything; but I seldom place any of these in the garden aviary as they are so timid, and because they are the special aversion of the Chinese Blue Pie.

I rather think the point is: Has Mr. Cresswell's aviary been painted with good paint, *i.e.*, with paint made with unadulterated white lead? if it has, the paint must be injurious, the perches being specially dangerous; for several species of the Australian Parrakeets will certainly gnaw the wood unless provided with an almost unlimited supply of living trees and shrubs.

REGINALD PHILLIPPS.

BREEDING RESULTS.

SIR,—Some months since, a friend in Queensland sent me a number of Parson Finches, Gouldian Finches, and Chestnut-breasted Finches. All these were put into one of my small inside aviaries (about 3ft. square). In three months after receiving them, one pair of Parson Finches built and reared a nest of young ones, in a small German Canary cage (the only one in the aviary). I also had a nest of the Red-crested Cardinals, in an outside aviary; this nest was built in a small cigar-box; through an accident I lost these young ones just as they were fully fledged. I had a nest of the Crimson-crowned Weaver-birds: these built, and laid several eggs; but having a number of other Weavers in the same aviary, they were too much disturbed, and finally the other Weavers pulled the nest to pieces.

The greatest success I have had this year in foreign birds has been with Australian Crested Doves, Rosellas, and Golden Pheasants.

JAMES B. HOUSDEN.

THE POLYTELIS GENUS OF PARRAKEETS.

SIR,—In our Magazine for August, Mr. Cresswell gives us an interesting account of his Barraband's Parrakeets; but he seems to be in doubt as to the genus in which this bird is now classed. We have accepted the Natural History Museum Catalogue as our standard; and I may mention that, according to that authority, the Barraband is still classed in the genus *Polytelis*.

In this genus, only three varieties are included:—The Barraband's Parrakeet, *P. barrabandi*; The Alexandra Parrakeet, *P. alexandrae*; and the Rock Pepler, *P. melanura*.

Of *Polytelis alexandrae* I may add that it comes from Central and Northern Australia, and seems to be exceedingly rare even in its native country. Dr. Greene tells me that it was discovered by Gould, and named by him after our beloved Princess. I was much pleased to see a pair a few months ago, unfortunately—or perhaps fortunately—not for sale. The one was in poor condition, but the other was a nice bird. It was somewhat of the general character of the Rock Pepler, neat but not gaudy, and seemed to be much about the same size; and the shape of the bill reminded me both of *P. barrabandi* and of *P. melanura*. These are the only specimens of this variety I have ever met with.

REGINALD PHILLIPPS.

"SPRAY" MILLET AND "INDIAN" MILLET—A CORRECTION.

SIR,—In an answer to a correspondent on page 79, I made a statement from which it might reasonably be inferred that I wished it to be believed that Spray Millet and Indian Millet are the same seed. Mr. Phillipps pointed out to me, immediately, that this could not be, for the shape of the seed is different. I then planted some of each in my garden, and, although the plants did not flourish, they grew sufficiently to show that there was a distinction between them. The truth seems to be that, while from the avicultural point of view the seeds may be regarded as the same, from the botanical point of view they are different, being produced by distinct species of plant. The food-value of the two seeds seems exactly equal, and the birds appear to be unable to appreciate the difference—for while ravenously fond of spray millet when fed mainly on white millet, I find them comparatively indifferent to it when regularly supplied with Indian millet.

I wish that one of our members who understands botany would contribute an article upon bird-seeds.

HORATIO R. FILLMER.

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BEING THE JOURNAL OF THE
AVICULTURAL SOCIETY.

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OCTOBER, 1895.

REPORT OF THE COUNCIL.

With this issue of the Magazine the first year's work of the Avicultural Society comes to a conclusion. We think that the Society may heartily congratulate itself upon the progress it has made, and the position it has attained.

Beginning in November 1894 with 52 members, the Society now numbers 175. This is a very satisfactory increase of membership, and certainly exceeds our expectations, nevertheless, at least 200 members are required to place the Society beyond all fear of a deficit, that number therefore must be secured before the end of next year, and we hope that it will be largely exceeded. We would impress upon the members the fact that it rests with them to find and propose new members, and that no amount of energy on the part of the officers will make up for apathy in this respect on the part of the members.

The thanks of the Society are due to all who have proposed candidates for election during the past year. Our method of election has proved highly satisfactory, and we believe that we have added to our membership none but honourable aviculturists, who will maintain the prestige and contribute to the further success of the Avicultural Society.

It has been the aim of the Editors of the Magazine to provide each month articles upon the two subjects of British Birds and Foreign Birds in fairly equal proportions, but it must be remembered that in this matter the Society is entirely in the hands of its members: If they do not write upon the subjects which interest them, those subjects will remain insufficiently represented in the Magazine. We tender our warmest thanks to those who have written for the Magazine during the past year, and trust that we shall have much interesting matter from the same and from other pens next year. While our articles have been addressed to the practical aviculturist, rather than to the ornithologist, we believe that nothing has appeared which has been in any way opposed to the best scientific teaching: we have endeavoured to be popular without being unscientific.

The work of the Executive Committee deserves special thanks and special praise: the success attained by the Society has been largely due to their untiring efforts. The Secretary has had to bring a great variety of matters under their consideration, and the work entailed upon them in correcting proofs, in correspondence, and in other ways too numerous to mention, has been very considerable.

Advice has been given to numerous correspondents upon avicultural subjects by post, and our thanks are due to those Members of the Council who have so kindly undertaken and so promptly and efficiently fulfilled this duty. A large number of letters have been answered, and those which were of general interest have been printed in the Correspondence Columns of the Magazine.

In May, a proposal was received from the Secretary of the United Kingdom Foreign Cage Bird Society, that that Society should be amalgamated

with the Avicultural Society. The Council agreed to this proposal on condition that no alteration should take place in the *personnel* of our officers, and that all the members of the Foreign Bird Society should be elected under our rules. This was agreed to, and the proposed amalgamation accordingly took place.

A letter was received from the Secretary of the London and Provincial Ornithological Society, in August, suggesting that the Avicultural Society should hold a show of Foreign Birds at the Aquarium, in conjunction with the October Show of that Society. The Executive Committee were unanimously of opinion that it was undesirable to adopt this suggestion.

Considering the many misunderstandings which arise out of the sale and purchase of birds, we think it a matter for congratulation that no complaints of unfair dealing have been laid before us in the case of sales brought about by the Members' Sale and Exchange Column.

The accounts of the Society have not yet been audited, but the Treasurer reports that he expects there will be a balance in hand of several pounds at the end of the year.

We have great pleasure in announcing that the *Avicultural Magazine* will in future be permanently enlarged to not less than 16 pages per month, and will be printed in larger and clearer type. We believe that our readers will greatly appreciate this improvement, and that the attractiveness of the Magazine will be very greatly increased.

In conclusion, we urge upon all the importance of remembering the mutual character of the Society; we trust that each will feel it his duty to do all that lies in his power to promote the prosperity of the Society, so that its success in the future may be even greater than it has been in the past.

ARTHUR G. BUTLER,
H. T. TANSLEY CAMPS.
V. CASTELLAN.
JAS. F. DEWAR.
JOHN FROSTICK.
A. P. JACKSON.

LUCY C. D. LEWELYN.
REGINALD PHILLIPPS.
JOHN SERGEANT.
JAMES STOREY.
WALTER SWAYSLAND.
GEO. C. WILLIAMSON.

OUR BIRD ROOMS AND AVIARIES.

VI.

MY AVIARY.

By JOHN SERGEANT.

I had been hoping that among so many possible contributors to this series, our Secretary would overlook me and not call upon me for a description of my aviary. However, his summons has arrived, and as a member of the Council I am assured that I ought not to decline; so I shall have to ask you to bear with my literary short-comings for a while.

Several years ago the ground upon which my largest aviary now stands was devoted to sundry specimens of the Domestic Fowl, but after the most disastrous experience of keeping twenty head of them during a whole winter without an egg being laid, their fate was decided upon, and they were eaten.

The space thus rendered vacant in my small garden was too considerable to be wasted, so I decided to carry out the long cherished idea of having an outdoor aviary, and to utilize the poultry run for the purpose.

It was an oblong space, bounded on one side and at one end by walls 10 feet high, and at the other end by a high out-house; and was thus only open on one side, which luckily faced S.S.E. It was 36 feet long and 15 feet wide, and required only the inner aviary to be built and the top and one side of the outer aviary to be erected and covered with wire netting.

The inner aviary or house is built in one course of bricks only, as the situation is well protected. It is 6 feet wide and 10 feet long, 10 feet high at the eaves, and 12 feet at the ridge; the walls are plastered, and well finished inside, the floor is tiled, and the walls round the sides are cemented with Portland cement to the height of 6 inches from the floor, to keep out the mice. There is an inner door made of light wood covered with wire netting, with a lobby large enough to stand in while the outer door is being shut and before the inner door is opened. It is lighted by a large sky-light in the roof, (which, by the way, is slated,) and by a large folding window opening into the outer aviary, which is open all the summer. There is also a hole, a foot square, in the wall, on the floor, underneath the window, which is the only means of ingress and egress during the winter months, when the window is shut. All the seed hoppers (which are home made and self-supplying) are kept in the house, and hung on the smooth plaster walls in such a manner that the mice cannot reach them; there is also a suspended wire basket to contain the dish of soft food, which is brought indoors on frosty days. The floor is covered with fine sea sand mixed with grit, and is swept over once a week, and all seed-husks and droppings removed. The windows and skylights are covered with wire netting.

The outer aviary is constructed of standards and lengths of $3\frac{1}{2}$ in. wood, on which is stretched $\frac{1}{2}$ inch wire netting; it is 10 feet high, the height of the surrounding walls, and comes up to the eaves of the house. The front of the aviary is close boarded to the height of 4 feet from the ground, the remaining 6 feet being open wire; the two far corners are each covered in by sheets of galvanized iron, 6 feet square, arranged on supports, and the corners thus protected are filled with spruce fir branches to form a dense cover.

The walls are now being rapidly covered with ivy, and the few places which would otherwise be bare are covered by heather nailed against the wall, nestling amongst which I have placed cocoa-nut husks for the small finches to roost in.

In several places round the sides I have planted hollies and box trees, and running the whole length of the front of the aviary, and just behind the boarding, is a hedge of Japan cypress. The centre is laid down with grass which is dug up regularly in Spring and fresh seed sown.

The drinking fountain consists of a zinc dish about 18 inches square and 3 inches deep, sunk in the ground level with the grass, but surrounded by terra cotta tiles laid flat to prevent the soil getting into the water; the fountain is placed about 10 feet from the door, leading from which to it is a gravel path, bordered by box edging, and regularly renewed and raked over. The soft-food hopper is hung just at the end of this path, but not over the water, so that in wet weather it is not necessary to go on to the damp grass to replenish the water or give fresh food. The food hopper is an idea of my own, carried out by a local joiner, and is perhaps worthy of a description itself, but as my article is already becoming too long I must leave it until some other time, suffice it now to say that it protects the food from sun and rain, prevents the birds from wasting it by throwing it out, and also prevents the unsightly mess usually made by insectivorous birds round their feeding dish. My arrangement causes the droppings to fall on to a board, and this is cleaned every day.

The perches in both the inner and outer aviaries are, as far as possible, natural boughs of trees, which I always prefer to the wretched straight pole perches.

This aviary, which I have attempted to describe, generally has about 50 inmates. My Parrakeets I now keep in another and smaller aviary, which I may, perhaps, describe some other time.

In my large aviary I have had varying luck with my birds. Some years I am very successful in rearing, but other years I despair of ever rearing any more birds. The cause of disaster in breeding is almost always keeping birds of varying dispositions and habits in the same aviary, but of

course in a large aviary like mine there is much less quarrelling than there would be in a smaller one. I often think that if I had time, and sufficient space to give each pair of birds a separate aviary, I would undertake to breed any birds that have ever yet been imported. Many of my readers will think that this is rather extravagant, but the more I see of the marvellous adaptability of foreign birds to their surroundings, the more I am convinced that we do not know half their capabilities in this direction.

In this aviary I have succeeded in breeding Red and Mealy Rosellas, Turquoisines, Elegants, Budgerigars, Virginian Cardinals, Pekin Nightingales (not reared), Zebra Finches, Goldfinches, Bullfinches, and Greenfinches.

THE ETHICS OF EXHIBITING.

V.

By C. S. SIMPSON.

There appears to be no subject, in the whole range of practical aviculture, upon which more diverse opinions are held than the question whether it is justifiable or not to send birds to shows. While both sides have been fairly and moderately put forward in the September Magazine, it may possibly be expected that I, as one of the judges at the Crystal Palace Show, should express my opinion.

It seems to me that the out-and-out anti-exhibitor proves too much: he tells us that it is cruel to confine birds in small cages, cruel to send them on long railway journeys, and cruel to expose them to the heat and draughts of the show room. Exhibitors may fairly retort (1st) that it is neither necessary nor desirable to exhibit birds in very small cages, inasmuch as they show to much greater advantage in moderately large cages, (2nd) that the great majority of exhibits are not sent on *long* railway journeys, and (3rd) that it is quite practicable to maintain a sufficiently even temperature in the show room. But, waiving these points, let me admit the arguments of the anti-exhibitor, and carry them to their logical conclusion. It is cruel, we are told, to confine a bird in a small cage and to send it on a journey of (at most) a few hours! How much greater then must be the cruelty of crowding birds together by hundreds in miserable boxes, and sending them on a journey lasting weeks or months. It is cruel to expose a bird to the variations of temperature of a show room! But is there no cruelty in transporting a bird from the climate of Australasia or West Africa to the climate of the East end bird shop or the suburban drawing room? Granted, that a bird occasionally (but rarely) dies from the effects of a show: is it not a fact that hundreds die from the effects of their importation? Truly the opponent of shows strains at a gnat and swallows a camel. If it be cruel and unjustifiable to send birds to shows, it is a thousand times more cruel and more unjustifiable to import foreign birds at all.

While no practical aviculturist can doubt that birds kept in aviaries and cages become very quickly reconciled to their new surroundings and can be made perfectly happy, it is useless to shut our eyes to the fact that captivity does at first involve much unhappiness to the captive, not infrequently resulting in its death. I can understand the man who holds it wrong to keep birds in captivity, though I do not agree with him; but I cannot understand the aviculturist who encourages the capture and importation of birds, and at the same time blames the exhibitor who sends his birds a few miles to a show. Personally I have sent many birds to shows, and (with one exception) cannot recollect any bird that was in any way the worse. I believe that exhibiting, within certain limits, is perfectly justifiable, but I do not consider it right to exhibit birds too often, or to send them too far. My own rule is never to send a bird on a journey of more than a few hours, and never to exhibit the same bird more than three times in one season.

By A. G. BUTLER.

The effects of bird-shows upon aviculture are both good and bad; they undoubtedly tend to increase the number of bird-lovers by showing the uninitiated that foreign birds may be as easily kept as Canaries or Black-birds, that their songs are often far more pleasing, and their colours often infinitely more startling if not actually more beautiful.

At the same time bird-shows have much to answer for, and the mainstay of these exhibitions—the Canary—has suffered more from them than any other species, as I shall presently show.

There can be no doubt whatever that the Canary is as plastic as the Rock-pigeon; the forms already produced by careful selection sufficiently prove this: the breeders of these birds were doing well in their efforts to modify its form and feathering, until the judges of the large shows interfered with their stringent rules and limited the breeders' art: now-a-days breeders of Canaries are content to breed one or more of the few well-known types, and carefully weed out from their stock every chance modification instead of encouraging its development into something new and beautiful.

Some years ago I determined to breed a new type of Canary: I purchased a strong bird, having what breeders call "a bad cap," tilted behind, and I paired it with a strong hen: in the next generation I produced one bird which had a worse tilt than its father, and I fondly hoped to go on and produce something very different from the familiar turn-crown of our shows: unhappily bird-fever was introduced with two young hen birds which I purchased, and my entire stock was cleaned out that year. Since then, my greater interest in foreign birds has prevented my making a second attempt: nevertheless it was evident to me that the varieties of which the Canary is capable are unlimited by Nature.

The other evils of bird-shows have been clearly pointed out by Messrs. Cronkshaw and Fillmer, and with no uncertain voice (though, to my mind, with unnecessary severity) by Mr. Septimus Perkins: the good results are fairly stated by Mr. Betts. Personally, I only show at the Crystal Palace, taking my few entries to the building myself, and seeing they want for nothing before leaving them to the care of the officials.

THE YELLOW WAGTAIL AS AN AVIARY BIRD.

By SEPTIMUS PERKINS.

On page 44 Dr. Butler has given a most interesting account of *Motacilla raii*—these few stray notes are merely intended to be a supplement to his article.

There are five British species of Wagtail—two of these (the White Wagtail, and the Grey-headed Wagtail sometimes called the Blue-headed Yellow Wagtail) are very rare indeed, only a few stragglers being occasionally seen in this country. Of the remaining three species, one, the Grey Wagtail, is somewhat rare, the other two, the Pied Wagtail and the Yellow Wagtail, are common. The Pied Wagtail and the Grey Wagtail are resident birds, the Yellow Wagtail is a summer migrant. The Yellow Wagtail is considerably smaller than the other two, being only six inches in length.

The length of a bird gives one very little idea of its actual bulk, the Yellow Wagtail and the House Sparrow both measure six inches in length, but while the House Sparrow is stoutly built, the Yellow Wagtail is extremely slender, and its weight is probably not more than half that of the Sparrow. As it walks nimbly but delicately over the floor of the aviary, the Yellow Wagtail shows off its graceful proportions to the best advantage. Hudson truly describes it as "a sweet and dainty creature," and Seebohm says "Its active sylph-like movements, and its delicate form and lovely plumage, make it a general favourite."

The Wagtails *walk*, they do not hop, therefore they require a considerable space of ground on which to exercise themselves, and should never be confined in a cage. In an aviary, our bird soon makes himself at home, and will live happily for some years, if carefully fed.

Some few years ago, while living in the Midlands, I possessed a fair-sized indoor aviary, in which I kept a good many migratory British Birds. Here I kept the Yellow Wagtail along with the smallest and most delicate Warblers, and I never found that he did them the slightest injury, although he was sometimes just a little tyrannical. But two male Wagtails, whether of the same or different species, will frequently quarrel and fight.

This bird is a somewhat large eater, and takes very kindly to hard-boiled egg, though he likes Abrahams' Preserved Egg even better, because that is all yolk. He should have as much egg as he will eat, and as many soaked ants' eggs as he will eat. Also three or four mealworms a day, and as many flies and small caterpillars as you can take the trouble to catch.

The Yellow Wagtail is a tender bird, but I do not consider him nearly so delicate as the Warblers, he eats more heartily of artificial food than they do, and consequently does not require so many mealworms.

I am a strong believer in Dr. Bradburn's system of feeding insectivorous British birds—that is, I believe in making soaked ants' eggs their staple article of diet, and in giving plenty of mealworms. The ants' eggs should be prepared as Dr. Bradburn recommends, namely by soaking them for five minutes (not longer) in cold water—then strain off the water and give to the birds without admixture. Supply the hard-boiled egg in a separate vessel, and don't dilute it with bread crumbs: the stomach of an insectivorous bird was not made to digest farinaceous food, and he gets little or no nourishment from the bread.

There should always be a large shallow pan of water in a Wagtail's aviary, but it will be found that in captivity he is less fond of water than would be supposed.

The Yellow Wagtail flees from Britain in the autumn to spend the winter in warmer climes, therefore the room in which he is kept should be artificially heated in winter. This bird has, however, been known to survive the winter in a cold aviary.

NEW BOOKS.

British Birds, by W. H. Hudson, C.M.Z.S. (Longmans, Green & Co.)

The subject of British Birds has been so exhaustively treated by Yarrell, Seebohm, Howard Saunders, and others that it is not to be expected that very much that is new could be said upon it in a small book of 350 pages. Mr. Hudson is a practised and accomplished writer, and, as might have been expected, his contribution to the literature of British Birds is both readable and accurate, but the novelty of subject which gave such a charm to his works on South American ornithology is here absent. The book is rendered very attractive by the illustrations, which are of very high merit—they consist of eight coloured plates from drawings by A. Thorburn, eight plates and one hundred figures in black and white from drawings by G. E. Lodge and three illustrations from photographs from nature by R. B. Lodge. The chromos are superior to anything of the kind which we have seen before, and will bear comparison with some hand-coloured plates. The black and white illustrations are remarkably spirited, and convey a far better idea of the birds represented than black and white pictures usually do.

The following quotation from the Introduction will explain the plan of the work: "A brief account is given of the appearance, language, and life-habits of all the species that reside permanently, or for a portion of each year, within the limits of the British Islands. The accidental stragglers, with the irregular or occasional visitors, have been included, but not described, in the work. To have omitted all mention of them would,

perhaps, have been to carry the process of simplification too far. And as much may be said of the retention in this book of Latin, or 'science' names. The mass of technical matter with which ornithological works are usually weighted is scarcely wanted in a book intended for the general reader, more especially for the young. Nor was there space sufficient to make the work at the same time a technical and a popular one: the briefest description that could be given of the characters of genera would have occupied thirty or forty pages."

There is so much truth in Mr. Hudson's remarks upon the ever freshness of the study of bird life, that we venture to make a further extract from the Introduction, upon this subject. "The longest history of a bird ever written, the most abounding in facts and delightful to read, when tested in the only sure way—namely, by close observation of its subject—is found to be scarcely more complete or satisfactory than the briefest, which contains only the main facts. This is because birds are not automata, but intelligent beings. Seebohm has well said, 'the real history of a bird is its *life-history*. The deepest interest attaches to everything that reveals the little *mind*, however feebly it may be developed, which lies behind the feathers.' It has been remarked more than once that we do not rightly appreciate birds because we do not see them well. In most cases persecution has made them fearful of the human form; they fly from us, and distance obscures their delicate harmonious colouring and blurs the aerial lines on which they are formed. When we look closely at them, we are surprised at their beauty and the indescribable grace of their varied motions. An analogous effect is produced by a close observation of their habits or actions, which, seen from afar, may appear few and monotonous. Canon Atkinson, in his 'Sketches in Natural History,' (1865), has a chapter about the partridge, prefaced by Yarrell's remark, that of a bird so universally known there was little that was new to be said. While admitting the general truth of this statement, the author goes on to say: 'Still, I have from time to time observed some slight peculiarity in the partridge that I have not seen noticed in any professed description of the bird, forming certain passages, as it were, of its minute history.' It is precisely this 'minute history' that gives so great and enduring a fascination to the study of birds in a state of nature. But it cannot be written, on account of the infinity of 'passages' contained in it, or, in other words, of that element of mind which gives it endless variety."

Not the least interesting part of the book is the chapter on Structure and Classification by Frank E. Beddard, F.R.S.

Throughout the book aviculture is persistently ignored. There are one or two allusions to the depredations of bird-catchers, but no further reference to the practice of keeping birds in captivity. Perhaps this is not surprising, for Mr. Hudson is one of those inconsistent people who consider it cruel to keep even Canaries in captivity, while they do not object to the slaughter of birds for sport or "collecting."

CORRESPONDENCE.

BULBULS.

SIR,—I have re-read with great interest the chapter on Bulbuls taken from that very pleasant book "A Naturalist on the Prowl," and should like to make a remark or two on these charming birds. I cannot agree with EHA that their brain is small, though he truly says "they have a lively and inquiring mind."

I have at present three Syrian Bulbuls from Mount Lebanon, all of which are very tame, especially one, which has no fear, and which I let out every day at breakfast and luncheon. He flies at once to me to be fed, and takes from my mouth crumbs of bread and fruit, indeed, whatever he is offered. He has no fear of strangers, and will fly to them, to their great delight, and feed from their hand. He makes himself generally agreeable. My Bulbuls

have no prolonged song, but have some clear and sweet notes, pleasant to listen to. They are sober in colour, having black heads and tails, dark brown backs, their breasts being of a lighter hue, and the feathers under the tail of a beautiful primrose colour. I wonder they are not more often kept as pets, for as EHA says, they are easy to keep, and will eat almost anything. I give mine as their staple food a preparation for soft-billed birds, made by Mr. Hawkins, of Bear Street, Leicester Square, and as a treat they have a mealworm or two, of which they are very fond. A pair of Bulbuls, which I had about two years ago, paired, built in my conservatory, and brought out two young ones on two occasions, but for some reason or other the young birds died, and after a time the mother bird died also. On both occasions she laid two eggs, and showed great excitement if any one approached the nest, built in a hanging basket, and lined seemingly with her own feathers. I am hoping that the birds I have now may also pair, and I trust that their efforts at bringing up a family may be more successful.

I have looked in vain in the shops of bird-sellers for the Syrian Bulbul, though the White-checked species, and the Black Bulbul with red on its cheeks and under its tail, are commonly to be met with. I have had the three birds, but prefer to the others the Syrian Bulbul of which I write.

CHARLES D. BELL, D.D.

THE DOMINICAN CARDINAL.

SIR,—I should be glad to learn how to treat Pope birds (Crestless Cardinals) when nesting. Mine have nested frequently, but always lost their young ones. They have seed, prepared food for insectivorous birds, bread, and occasionally boiled potatoes, &c., and plenty of green food, fruits, &c.

They are in a large outdoor aviary, but are not disturbed by the other birds.

A. A. THOM.

In answer to Mr. Thom's question, I have no hesitation in saying that the cause of his failure to rear the Popes or Dominican Cardinals is that they need insects above all other things for rearing their young: if he could procure plenty of cockroaches, grasshoppers, caterpillars, spiders, or living ants' cocoons, he would certainly succeed: mealworms are too heating.

Whilst young Cardinals are in the nest, a little egg food is given in addition to insects: but when the young have left the nest, the parents seem not to give anything but insects, and if these cannot be provided, I proved this year (to my cost) that the young have to starve.

A. G. BUTLER.

MAXIMILIAN'S PARROT.

SIR,—Having a parrot that I have hitherto been unable to identify, it occurred to me that a description might be of interest to some of your readers and lead to its identification. I cannot find it described in any of my books. It was bought as a Red-vented parrot.

The head is hawk-like in appearance: the iris brownish red, the cere bare, oblong and white. The feathers of the head and neck are of a dull bronze green, edged with black, a patch of dull blue feathers forming a band under the chin. The feathers of the breast are a dull green. The under tail coverts are bright carmine. The feathers of the back are of a deep bronze green, looking almost black in some lights. The wing coverts are bronze green of a peculiar hue, appearing almost yellow in some lights, the quills are also green. The tail is bright green with the tips of the two outer feathers blue. Feet ashy grey, nails black, bill black at base, merging into light horn at the tip, the lower mandible light. The colours are all metallic in character and vary much in different lights.

W. OSBALDESTON.

[The parrot is *Pionus Maximiliani* (Maximilian's Parrot): it is a native of Brazil.—A. G. BUTLER.]

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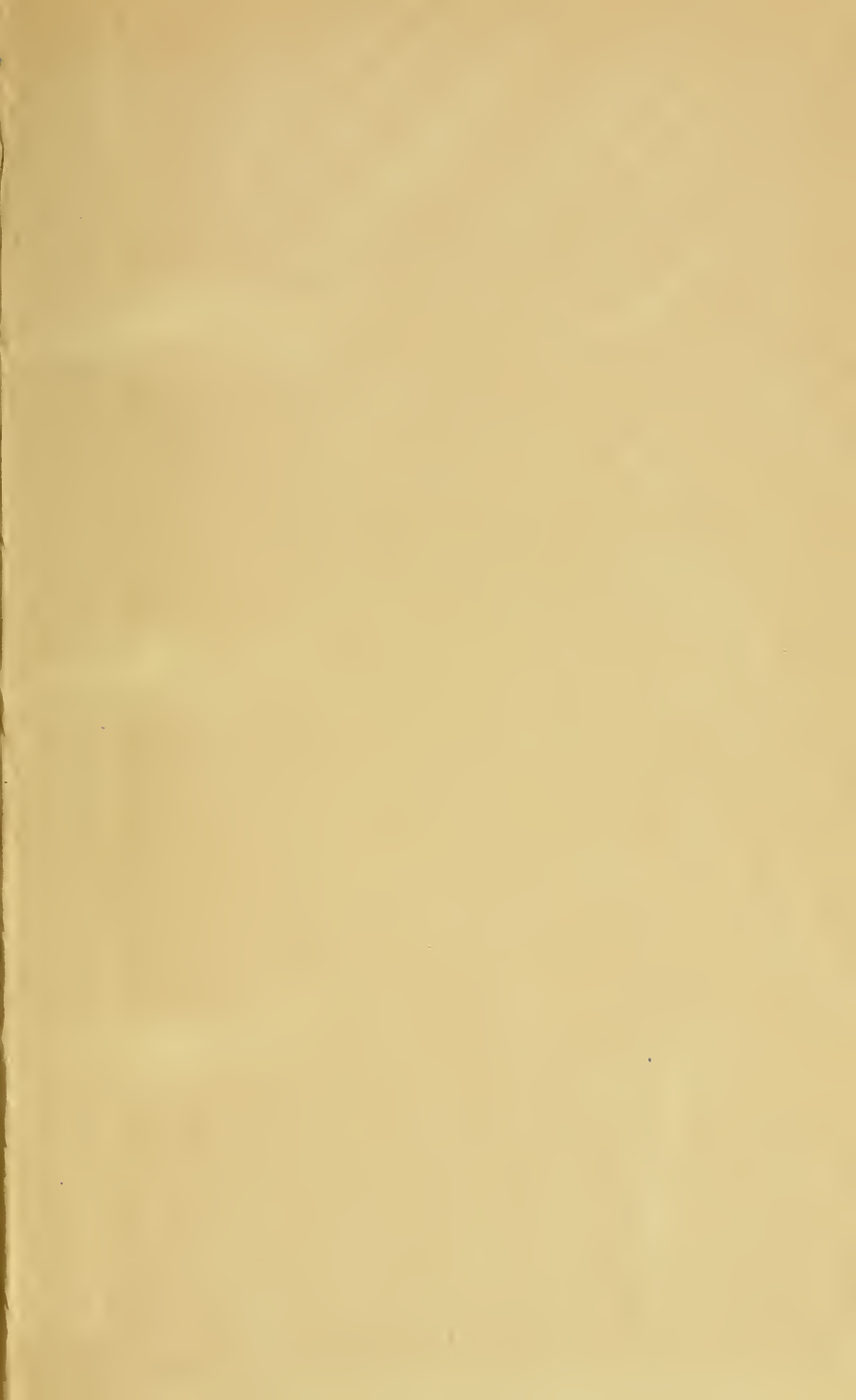
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