CANARIES

BY

C.A.HOUSE

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CANARIES

A BEAUTIFUL WING-MARKED CRESTED NORWICH.

This bird, which belongs to Mr. W. A. Shepherd of London, won in its first season two Bowls and Diploma for Best Bird in Show at Alexandra Palace, and Challenge Cup and two Diplomas for Best Crest at Olympia.

Frontispiece

CANARIES

A COMPLETE AND PRACTICAL GUIDE
TO THE BREEDING, EXHIBITING AND
GENERAL MANAGEMENT OF THESE
POPULAR BIRDS

Charles
Arthur HOUSE

The world-famous Expert, Judge and Journalist

WITH ILLUSTRATIONS BY H. NORMAN

The well-known "Cage Birds" Artist

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CHARLES

THE HISTORY OF THE
CITY OF LONDON
FROM THE FOUNDATION
TO THE PRESENT TIME

BY
J. G. CAMPBELL

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April 1948 C. A. H.

FOREWORD

AT the request of a number of friends I have undertaken the work of writing this book, which is the most ambitious of my works on Canaries. At the moment there is no work which covers the ground I have attempted to cover, and there is no work that is so up-to-date.

The Canary Fancy is progressive, and all the large works hitherto written are now out of date, and so far as I know are also out of print, thus "Canaries" is the only work that comes to aid the breeder when he has advanced beyond the stages when a small initiatory handbook is a help and guide.

It is only because of the encouragement given me by the manner in which my fellow fanciers have received my previous efforts as an author that I have undertaken this work. In sending it forth I am conscious of its many failings, but, in the space allotted to me, I have tried to do my best, and I can only hope that what I have done will help many young fanciers to attain success. From my many friends in the Fancy I would ask that they extend to "Canaries" the same appreciation they have given to my more humble efforts to help the Fancy forward.

C. A. HOUSE.

London, October, 1923.

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CHAPTER I

CANARY KEEPING AS A HOBBY

No one can say when the keeping of Canaries first became a hobby, but this much we do know, that for over 400 years it has been known in this country. More we know that it is a hobby which has been followed by all sorts and conditions of men and women. Royalty in the palace, and the humble labourer in his cottage have all been brought under its sway and influence.

The Canary is said to have been brought to Europe over 500 years ago by a Spanish Admiral, who brought some birds from the Canary Islands to Cadiz. From Spain to Italy, and so in succession it spread to Switzerland, Germany, France and England. So far as records can tell us it was in the Hartz Mountains of Germany that the systematic breeding and rearing of Canaries for song was first established, hence the Hartz Mountain Rollers, which have so long been held in high repute. But to-day other parts of Germany produce more than do the Hartz Mountains.

OLDEN TIME VARIETIES.

When first brought to Europe the canary was a small greenish-brown finch, and the many varieties we have now have come from sports which have been experimented with, and their individual characteristics fastened by selective breeding. When this first took place we cannot tell, but Hervieux, writing over 200 years ago, mentions no less than twenty-nine different varieties. Amongst them "white," "blonde," "agate," "isabelle," "variegated," "crested." From this it will be seen that the white canary which created such a sensation at the Crystal Palace some fifteen years ago was by no means the first of its kind.

TERRITORIAL DESIGNATIONS.

All this goes to prove that the hobby of canary-keeping can boast of being an ancient, and not at all a modern institution. It would appear that when the canary became domesticated the first sports were in the direction of the yellow colour, which to-day is the general colour. So far as our own country is concerned, territorial names have been given to most of the different varieties which are known. Thus we have Scots Fancy, London Fancy, Lancashire, Yorkshire, Norwich and Border.

Wonderful, indeed, has been the progress of the last half-century. Wonderful not only in the largely increased numbers of individuals who are engaged in the art and pastime, but also in the development of the different varieties.

In its early days the hobby seems to have been most closely associated with our industrial districts. Thus we find the crepe and shoe operatives of Norwich, the hosiery workers of Leicester, the lace spinners of Nottingham, the cotton spinners of Lancashire, the woollen weavers of Yorkshire, the silk weavers of Coventry, and the leather workers of Northampton and Kettering all keenly interested in the hobby.

CHANGES WROUGHT BY MACHINERY.

During the last fifty years machinery has wrought such great changes in our manufacturing towns that the work which used to be done in the home by hand is now turned out in factories, and the Canary Fancy of to-day is not so localised and confined as it was fifty years ago. Still, even to-day, the places I have named are strongholds of the Fancy, even if not in the preponderant manner that they were formerly.

When we look at a wild canary and then at a high-class Crested Norwich, Scots Fancy, or Yorkshire it is forced home upon us that there must have been expended by the olden breeders an infinitude of thought, time, patience, labour and expense in the selective breeding and perfecting of their strains so as to give us the exceedingly choice and beautiful specimens which grace the show benches of the twentieth century.

AN OUTSIDE AVIARY.

An Aviary built of wood and wire. Window (hinged) opens for ventilation. Food and water vessels on rustic bracket, with opening in wire for feeding and watering. House entered by large door on right, the flight by small door on left.

CHAPTER II

AVIARIES, CAGES, AND FITTINGS

It is only when one comes to get down to the practical details of canary breeding that one realises what has been done during the last forty years. When I commenced canary-keeping the majority of fanciers made their own cages or had them made by local friends who had knowledge of the art. To-day few men make their cages, because there is scarcely a town in the kingdom in which they are not easily obtained, even the specialised show cages.

FIFTY YEARS AGO.

Fifty years ago what was known as the London Breeding Cage was the cage most generally used. It was a box cage with a platform arrangement at one end which was divided off from the cage proper, and the wooden nest boxes of those days stood on the platform. It is years now since I saw one of these abominations.

In these days when cages of all descriptions may be so easily and cheaply obtained it is not necessary in a work of this description to give instruction in the art of cage-making, because not one breeder in a thousand ever thinks of making cages.

AVIARY BREEDING

By the hobbyist, or canary-breeder, who has no desire to shine upon the show bench, the delights of our hobby may be enjoyed to the highest degree by indulgence in aviary breeding, either outdoor or indoor.

In the North the former is hardly possible, although I have seen canaries kept in an outdoor aviary in Yorkshire, but in the South and West of England, in Ireland

AN AVIARY BRED YORKSHIRE.
Note the bad faults—flat skull and bad carriage.

and in Wales the breeding of canaries in outdoor aviaries may be followed with the greatest success, and yield much pleasure to the owner.

OUT-DOOR AVIARIES.

In erecting an aviary in the garden the comfort of both the owner and the birds has to be considered. Some time since a well-known writer advised that such aviaries should have a south-westerly aspect. I wondered as I read his instructions if he ever thought of the fact that the worst of our winter storms come from the south-west, and that in summer-time an aviary with a south-west aspect would be almost like an oven.

The aspect that I should advise is south-east. My reasons being that in the early mornings the birds would get the first rays of the sun and would be able to enjoy them, and that during the summer months those rays would be off the front of the house early in the afternoon, and the house would be cool and comfortable for the birds at night. Further, as an early feed is of the greatest value to the young nestlings during the breeding season, their parents would be able to feed them much earlier in a house with a south-east aspect than in one which faced south-west.

FIXING THE SITE.

In fixing on the site for the out-door aviary care should be taken to select one that is shielded either by trees, shrubs, walls or buildings from the north and east winds.

It often happens that the owner wishes to place the aviary in such a position that he, or she, may have the pleasure of sitting either in the house, or some favourite position in the garden, to watch the birds. When such is the case that the pleasure of the owner and the comfort of the birds do not just fit, then it is for the owner to say which shall prevail. I have pointed out the best aspect, the one that will conduce to the greatest comfort of the birds, and to the success of the breeding arrangements.

THE TYPE OF AVIARY.

In the majority of cases the type of the aviary will have to be decided by its site. It may be in the form of a "lean

to," it may be square or oblong with a span roof, it may be hexagonal or octagonal in shape. This, the necessity of space, or the wishes of the owner must decide.

A recess in a wall may be the guiding factor in coming

GROUND PLAN OF COMBINED BIRD HOUSE AND OPEN FLIGHT.

A Doors. *B* Windows. *C* Lobby with double doors for entrance into open flight. *D* Staging. *E* Boiler for hot water heating apparatus.

to a decision, a desire that the aviary should be in keeping with the arrangement of the garden and add to its attractiveness may determine its position and also its shape. But so far as the comfort and well-being of the

birds are concerned, I strongly advocate a "lean-to" aviary, because of the cosiness and comfort it gives the inmates.

The size of such an aviary depends upon the site, and also upon the number of birds it is proposed to keep. A "lean-to" built against a garden fence or wall is "snug and comfy." Its height may depend on the wall, but a convenient height is seven feet six inches, or eight feet sloping to six feet or six feet six inches. It should be double-boarded, built of one-inch pine, with three inch space left between the outer and inner boards to be filled with sawdust. The roof should also be double-boarded and covered with asphaltic felt, or corrugated iron, the latter for preference. The window should be in the front, covered with fine mesh wire netting from side to side of the frame, and should be fixed on the sliding principle. If the aviary is say eight feet by six the window should be three feet from the ground and one foot from the eaves, and four feet long. This means that when opened to its fullest extent there would be two feet open for the admission of fresh air. If the eaves were six feet from the ground this would mean the window was four feet by two feet six inches.

The door, which should be two feet in width, I should advise being placed in the end of the aviary which opens into the flight. The reason for its being in the end and not in the front is that should a bird escape when the door was opened it would go no farther than the flight, and could easily be captured, or driven back into the aviary if needed. The size of the flight must depend upon the number of birds kept and the space at command.

An aviary the size I have given should afford breeding accommodation for eight or nine cocks and from twenty to twenty-five hens. In aviary breeding it is not needful to keep the birds in pairs. One word of warning must however be given. Never overcrowd. You have to remember that it is not the number of birds with which you start the breeding season that you have to provide accommodation for, but the number at the end of the breeding season, and if you have just an ordinary share of luck in your breeding operations this means that your aviary will contain in the autumn at least 150 birds, and possibly 200.

THE ORIGINAL WILD CANARY.

Facing page 16

FIX FOOD VESSELS ON BRACKETS.

Smaller aviaries built on the same plan would possibly suit the needs of the majority who wish to indulge in aviary breeding. Self-supplying seed hoppers, and self-supplying drinking fountains may be fixed on brackets attached to the walls, or if preferred the latter may be

Food or Bathing Dishes may be stood on this table in the Aviary.

placed on a small platform on the floor. I do not advise the fountains being placed on the floor itself because the dust and refuse of the aviary is apt to settle on the water and contaminate it. Green food may be supplied in the small wire baskets sold for the purpose, and these should be fixed on the walls. Small tins and earthenware or glass pots may be used for the egg food, or egg food

substitutes, and these should be fixed on brackets. Swinging perches may be fixed from the ceiling, and fixed perches from the walls.

NEST BOXES AND PANS.

Nest boxes and pans may be fixed on brackets attached to the walls, or if shrubs or trees are used in the aviary they may be fixed amongst the branches. If shrubs and trees are used they should be firmly fixed in large pots or tubs. They add to the attractiveness of the aviary, but I cannot say that they assist in keeping it in a sanitary condition. As wherever they are placed there is a difficulty in keeping the place clean. Personally I consider it much the best plan to have perches in the inner compartment of the aviary, and then if you wish to have shrubs or trees plant them in the outside flight.

It must not be forgotten that canaries are very clean little creatures, and delight in the pleasures of the bath. The best form of bath for an aviary is one made of zinc. It should be about fifteen inches long, twelve wide, and two inches deep. Round the sides there should be a flange about one inch wide—it will add immensely to the pleasures of the birds. When the bath is given to the birds, it should be just a trifle more than half filled with water.

VENTILATION MUST BE EFFECTIVE.

An aviary of this character should be fitted with sliding ventilators at either end. What are known as stable ventilators are the best for the purpose. These may be kept open at night when it is necessary for the door and window to be closed. It must ever be remembered that fresh air is most essential to the welfare of canaries, but they must have ventilation without draughts. If these sliding ventilators are fixed well up towards the roof at either end of the aviary they can be open at all times without fear of draughts coming near the birds, because all perches would be below their level, and the current of air sweetening the aviary would pass over the heads of the birds. In the daytime when the window is open there is no draught because it faces the wall on the opposite side of the room. In the height of summer

window and door may both be open as well as ventilators. Canaries are hardy birds, and they do not require coddling. Give them plenty of good food, abundance of fresh air, and plenty of flying space and they will come to no harm, not in the coldest winter. But if you shut them up closely at night in the impure air of the aviary, you weaken their constitutions and they are not able to withstand the cold.

A VENTILATION TEST.

If when you enter the aviary the first thing in the morning it smells stuffy and close, you will know at once that you have not enough ventilation. If it does not smell "birdy" as I have heard it expressed, then you know things are all right, and you need not bother to give further ventilation.

An out-door aviary of the character here described should be built on brick or stone piers, and be about twelve or eighteen inches off the ground. The reason for this is to keep it dry, and also free from vermin. If the floor is near the ground, rats or mice, sometimes both, find their way into the interior, fouling the food, destroying it, and also interfering with the birds. The space underneath the aviary should be kept open, so that the family dog and cat may roam there and assist in keeping vermin at bay. The end entering into the flight may be built up with brick, concrete, old railway sleepers, or heavy timber.

IN-DOOR AVIARIES.

River sand is the best covering for the floor of the aviary. If this cannot be obtained the next best thing is pit sand. The bottom of the outside flight should be dug out for about two feet, and then filled up to within three inches with engine clinker, the top three inches being fine river or pit sand. This covering like that of the aviary should be renewed at intervals. That on the floor of the aviary, which need not be more than sufficient to cover the boards and prevent the excreta from soiling them, should be renewed every week or fortnight.

All that I have written on the general arrangement, apart from the construction, of out-door aviaries applies

to in-door aviaries. An in-door aviary is generally fixed up in the odd room of the house, one which either by reason of its size or shape is not adapted for the use of members of the household. In towns the great difficulty in fitting up such a room is the trouble from mice. This means fixing tin all round the wainscot, and the fire place, should there be one in the room. A room such as this should have a frame of fine meshed wire netting to fix over the window when it is open, which should be practically always and another to fix over the doorway, so that in the summer months the room may be kept cool, further, that the song of the birds may delight the ears of the owner when he or she is engaged about the house.

For safety's sake it is advisable with an in-door aviary to have a small lobby fixed with an inner door, so as to prevent the escape of any of the inmates when the owner enters the room.

Some lovers of birds use the small cages in which the German songsters are imported into this country as breeding places. They cut out the door portion and place a nest pan in the cage, and then hang the cage on the wall. Personally, I prefer to fix a small platform to the wall and then fix the nest pan to the bracket in such a way that it may be easily removed for cleaning. These small cages are not easy to clean, therefore I do not favour their use.

BREEDING IN CAGES.

When one is breeding high-class exhibition canaries, it is quite impossible to breed them on the aviary system, and they should be bred in pairs and in single cages. There are quite a number of breeders who use double-breeding cages, and run each cock with two hens. Myself, I do not favour this system. One gets much finer birds when polygamy is not practised. However, I shall describe the different kind of cages used, and my readers may then use that type which suits their circumstances the best, but personally I recommend single breeding cages, and if one visits the rooms of our leading breeders, it will generally be found that the majority use such, even those who run two hens to one cock. The single breeder has many advantages over the double or treble, or quartet breeding cages. It is easier dealt with when cleaning is

AN OUTDOOR BIRD ROOM WITH WIRE FLIGHT.

required, and should one have the misfortune for the bird room to be visited by some infectious disease the single cages are easily carried away for disinfection, or destruction, if such is needed.

THE SINGLE BREEDER.

Briefly described, the single breeding cage is a box with a wire front, the sides, top, and back being of wood.

SINGLE COMPARTMENT BREEDING CAGE.

The length is twenty to twenty-two inches, the height sixteen to eighteen inches, and the depth from the wires to the back of the cage eleven to twelve inches. In each case I recommend the larger measurements. Nothing is gained, except economy of space in the bird room by using cages of the smaller dimensions, but much is lost in the health of the birds. Exercise is far more important in keeping the birds fit and well than some breeders are inclined to think. In small cages it is impossible for them to get the amount of exercise which is essential to their well-being.

THE FOOD AND WATER VESSELS.

Drinking glass and seed hopper are fixed at each end of the cage, and the egg drawer in the middle. Inside the

White Earthenware Nest Pans, one with bracket for hanging on nail, the other without bracket to be used with wire frame.

LARGE EGG-FOOD PAN

cage from end to end a perch is fixed to enable the birds to reach easily their food and water, and two perches are fixed on the centre cross-bar on either side of the door,

the far end of the perches being fitted with metal pins which fit into small holes made in the back of the cage. Two screws are fixed in the back of the cage on the side of each perch nearest the end of the cage. These are to hang the nest pans on. Two are needed, because the hen often goes to nest again before her youngsters of the previous nest are fit to be removed. Thus whilst they use the old

THE BEST FORM OF SEED HOPPER.

nest the hen can use the second one, and she is not disturbed by the youngsters wanting to crowd in the same nest as their mothers.

DRAW-BOARDS AND TURN-RAILS.

Some breeding cages are fitted with a turn-rail in front, others with a draw-board. The turn-rail works on a pin at one end of the cage and pulls out when the cage bottom is cleaned, but as it necessitates the hand being put in the cage to sweep and scrape out the refuse, I do not recommend it. The birds are apt to be frightened, and when this happens eggs or young are often pulled out of the nest on

to the floor of the cage, In the former case they are smashed, and in the latter they are killed or maimed. Turn-rails I do not like. With the draw-board, or false bottom, one pulls it right out from the cage, cleans off all the refuse, covers the board with clean sand, and returns it to the cage. An operation that is performed with ease, affords opportunity for more thorough cleaning and avoids disturbance of the birds. Draw-boards are much to be preferred, especially so when one is troubled with

DRAWBOARD FITTING FOR BOTTOM OF BREEDING CAGE.

hens afflicted with that disagreeable complaint known as nesting diarrhoea.

A single breeder such as here described is simple in construction, easily cleaned, and most admirably adapted for the purpose for which it is used.

TWO, THREE AND FOUR COMPARTMENT CAGES.

Two compartment cages differ from single breeding cages in that they are double the length, and are divided in the centre by a wooden division, or by one that is partly wood and partly wire. There is much to be said in favour of the double breeder, and not much against it, except its unwieldy size. For those breeders who run two hens with one cock it is very useful, as after the cock has sent one hen to nest he can be driven through into the other compartment to make love to his second sweetheart. It is useful for separating the cock from the hen if he should happen to be one of the interfering, meddlesome kind, and will not let his hen carry out the process of incubation without constantly worrying her and driving her off the nest. It also is useful when the hen is inclined to pluck her young, as some hens will

when they are going to nest the second time. Then it has its uses in the early part of the season when the birds are being paired up. The cock can be placed on one side of the partition and the hen the other. Being able to see each other they become acquainted and are able to start courting through the wires. If the hen is of the "new woman" fraternity and objects to being "courted" the slide prevents her from doing any damage to the cock, as such hens sometimes will if placed in a cage with a strange mate, but it often happens that a veritable "husband beater" will soften her heart, and set up a

HINGED WIRE FRAME FOR BIRDROOM WINDOW.

most intense courtship when she finds her mate on the other side of the bars.

The treble, or three-compartment breeder is three times the length of the single breeding cage, and is divided into the three compartments by two slides. Three compartment cages are more generally used by mule breeders than by canary breeders, the centre division being the home of the finch, whilst on either side live the two hen canaries with which he is generally mated. Four-compartment cages are really double-decked, two-compartment cages. Their use I do not recommend. Large cages are bad to deal with in case of epidemics, they are

awkward to clean, and if one gets an invasion of red mite into one compartment the whole four are invested before the fact is discovered, and even when it is not so the whole four compartments are thrown out of action, and to lose four cages in the middle of the breeding season may easily be a very serious matter, of necessity it is bound to be if one's supply of cages is limited.

ALL WIRE BREEDING CAGES.

In their efforts to combat the red mite some fanciers' appliance makers have put an all-wire breeding cage on the market. Such a cage may answer for an odd pair of birds kept in a living room, but it would never do in a breeding room where a number of birds were breeding, because none of the birds would have the privacy which birds desire and enjoy during the breeding season. Thus as a practical proposition the all-wire breeder is of no service to the man who breeds large quantities of canaries for exhibition.

NURSERY CAGES.

A dozen or so of small open wire cages about ten inches square are very serviceable at times when the hens are

NURSERY CAGE TO BE USED WHEN YOUNG BIRDS ARE FIRST TAKEN FROM PARENTS.

cannibals, and it is not possible to put the youngsters with their sire in another cage.

SHOW CAGES.

Any old cage must not be used at a show cage. That is a cage in which the bird is sent to be exhibited. There are open wire cages for Belgians, Scots Fancies, Border Fancies, Dutch Frills, and Lancashires, whilst Norwich, Cinnamons, Crests, and Lizards are all shown in box cages, that is cages with wooden sides, back, and top, and a wire front. Some of these box cages have tops which are a combination of wire and wood, the front half of the top being wire and the back portion only of wood, such cages are mostly used by exhibitors of Lizards and Crests, the half wire top allowing the judges to examine the spangle of the Lizards, and the crest of the Crested Canaries with greater care and thoroughness.

In my early days fanciers used generally to make their own show cages, and a very mixed lot did one use to see on the show benches. Some Norwich cages were made with slanting tops, some with level tops, some with half-round tops, some had square sides, some slanting sides, and some had open doors for the front, fastened with wire hinges on one side, and on the other with wire hook and eye; some had brass hinges, and a brass hook and eye; some had frames, which were screwed to each side and top and bottom of the cage with screws; some had false bottoms, some had not; some had wire doors in front, and some had wooden doors at end.

The Cinnamon Club was the first of our specialist Clubs to adopt a standard cage, and the other clubs have since followed its lead. Thus now we have both with the breeds that are shown in box cages, and those shown in open wire cages, uniform patterns, which may be easily purchased from firms advertising in *Cage Birds*, and from those who deal in birds, cages, and other appliances in most of our large towns.

BOX CAGES FOR CRESTS AND NORWICH

The box cages which are generally in use now-a-days are 12 or 13 inches wide, 5 inches deep, and 12 or 13 inches high. Some have two cross-bars of strong wire, which divide the front into three equal portions. The bottom bar, which is about 3 inches from the bottom wooden mainstay, is used for fixing the perches, the other end

of the perch being fixed to the back of the cage with a wire pin. For Crests and Lizards the bottom bar is fixed lower in the cage, about $1\frac{1}{2}$ or 2 inches from the mainstay. This is to enable the judge to look down upon the birds, in the one case to see the centre and radiation of the crest, and in the other the regularity or otherwise of the spangle. The perches should be fixed at equal distances from each end of the cages, just far enough from the ends to allow the birds to turn nicely within, rubbing their tails against the ends of the cage. The door in these cages is usually at the right-hand side of the cage as it faces you.

SCOTS FANCY CAGES.

Scots Fancy cages are of open wire work, about 14 inches long, 12 inches high, and 5 inches deep from back to front, the door is a sliding attachment at one end, and the perches are fixed to a cross-bar that runs round the middle of the cage. In some cases these bars are stout wire, in others they are wood. The floor and the mainstay round the bottom of the cage is also wood. The top is almost a half circle.

THE YORKSHIRE SHOW CAGE.

Yorkshire show cages, like the Scots, are given a wooden bottom with open wire sides and oval wire top, with sliding wire door at one end, and the drinking hole at the other. The perches are fixed to the centre cross-bar of stout wire which runs round the sides, back and front; there is also a top and bottom cross-bar. In some makes the wire top is fixed to the wooden bottom by wire clips, in others with screws. Yorkshire show cages are about 9 inches long, 15 inches high, 6 or $6\frac{1}{2}$ inches wide. Two perches are fixed at the ends on the bottom of the wire portion, and one in the centre of the cage on the cross-bar.

BORDER, BELGIAN AND LANCASHIRE CAGES.

Border Fancy cages are of similar pattern to the Scots Fancy cages, but are not quite so large, being a trifle less in length, height, and depth from back to front, being generally 12 inches long, 12 inches high, and $4\frac{1}{2}$ inches wide.

MEDICINE CUPBOARD FOR USE IN BIRD ROOM OR AVIARY.

Lancashires and Belgians are shown in open, flat-topped, wire cages. They are about 16 inches high, 8 to 9 inches wide and long. The tops are fixed to wooden bottoms like unto the Yorkshire cages, and have the addition of four legs. With the Belgian the legs are useful when one is striving to get a bird into position,

SINGLE CAGE FOR USE IN MOULTING OR SHOW SEASON.

but I could never understand why they should be fixed to the Lancashire cages. The door and water-hole are fixed at opposite ends as in the Yorkshire cages.

FLIGHT CAGES.

Flight cages should be found in every bird room, although many breeders try to do without them. The great value of the flight cage is in the manner in which it affords opportunity for the young stock to get abundance of exercise, and thus develop their frames and strengthen their

constitutions, and in the same manner their use for the breeding hens of the stud has enormous advantage. Many fanciers use large wooden flight cages, only the front being wire, others have them constructed of wire entirely, excepting the bottom portion, whilst many simply wire off the recess near the fireplace in the bird room, and in such cases the wire work extends from the floor to the ceiling of the bird room. It is useless to talk about the sizes of flight cages, because they must be adapted to the space at command, but this much I will say, the larger they are the better for the birds' health and comfort, and the success of their owner.

SHOW HAMPERS AND CASES.

Opinions are divided as to the merits of hampers, boxes, and cases for the conveyance of the show cages and their occupants to and from the shows. In Lancashire and Yorkshire, where fanciers are very numerous and a more homogeneous lot than in most other places, canvas cases are mostly used. The frames are of wood over which is stretched canvas or American cloth, the top being fastened down with straps. This style of case is generally used by breeders of Yorkshires the country through, but there is not the same unanimity with breeders of Norwich, Cinnamons, Crests and other breeds which are shown in box cages. Some use strong hampers lined with baize, some canvas cases, and some wooden boxes. Scots Fancy and Border Fancy breeders invariably use wooden boxes with oval tops, and some of them are really fine pieces of workmanship. Belgian breeders generally use cases like those used by the Yorkshiremen.

Years ago birds used to be sent to the shows packed in paper, or canvas, very few breeders used to use cases, and I have, in the olden days, seen some very weird packages in the show rooms and *en route*. In those days many a cage was smashed on its way to or from the shows. It is quite possible that the 50 per cent. excess charge by the railway people had its origin in the flimsy wrappers which the old-time fanciers used. To-day, when practically everyone uses proper cases for the carriage of their birds to and from the shows, that 50 per cent. excess charge is an imposition which only one word adequately describes—Robbery.

CAGE FOR CRESTS AND LIZARDS.

BORDER AND SCOTS FANCY CAGE.

BELGIAN AND LANCASHIRE CAGE.

CAGE FOR NORWICH, CINNAMONS
AND LONDON FANCY

YORKSHIRE CAGE.

SHOW CAGES FOR DIFFERENT BREEDS.

CAGE FITTINGS AND APPLIANCES.

Seed boxes are made of metal, wood, wood and glass, and glass. Myself, I prefer the wooden seed-box or hopper with the sloping glass top. When these are used the owner can easily see how the seed supply stands in the box. They are also easily removed to be re-filled, or for the husks to be blown off the top.

Water glasses for breeding cages are of various shapes and sizes. The best are the open rimmed glasses, which can be affixed to the cage by a wire attachment. These are also generally used on Scots and Border Fancy show cages. They are easily removed for cleansing, are equally easy to clean, and can be refilled quickly. Hang-on metal tins are generally used with box show cages.

Egg food is served in glass, earthenware, and tin drawers. Some are long and narrow and are usually fixed between a couple of wires ; these are known as finger drawers, others of larger size are fixed in the front of the wooden mainstay of the front of the cage, and are fastened with a wire clip.

NEST BOXES AND PANS.

Nest boxes are made in a number of forms. In the olden days we had nothing but wooden boxes or rush baskets, these were followed by the terra-cotta ware pans, pressed leather nests carried in a wire frame, white ware pans, some lined and some unlined, some with pan and back complete for hanging in the cage, others with the bowl or pan so made as to be dropped into a wire frame suspended from the back of the cage. To-day the white ware pans are the most generally used. My personal choice is for the unlined ones. My objection to the lining is that it affords harbour and breeding ground for red mite. A plain pan induces the hens to become house builders when the medicated nesting material is given to them, and there is nothing about them to induce inquisitive interfering cock birds to pull the nest about. I have frequently noticed that when a lined nest pan was put in a breeding cage the cock bird has immediately inspected it, and started tugging at the lining.

HAPPINESS AND CONTENTMENT IN THE AVIARY.

Facing page 32

PERCHES ARE IMPORTANT.

Perches are an important item in cage fittings, yet few give the thought to them that they should. Perches should not all be of one size. The perch for Lancashires should be larger than that for Border Fancies. Then again not every bird of the same breed has the same sized foot, and it is wise to fit the perches to the feet. For such birds as Norwich, Cinnamons, Belgians, Scots Fancies, and Yorkshires the perches should be about three-eighths of an inch to half-an-inch wide at the top, and a shade less in depth or thickness, the raw edges of the corners should be rubbed down so that the top portion of the perch is almost oval. Lancashires and Crested Norwich

THREE TYPES OF PERCHES.

- No. 1, oval without corners, fails to afford grip for the bird's claws.
 No. 2, oval with squared corners, and larger than No. 1, gives the needed grip, and is the type of perch recommended.
 No. 3, small, round perch, positively cruel to use.

having rather larger feet, generally should, if necessary, be given a larger perch. Many breeders of Scots Fancies and Belgians use round perches with corrugated surfaces. I cannot say I admire them. They are not so easily cleansed as the plain ones. It must be remembered that simplicity and ease of cleanliness usually go together not only in perches, but also in other fittings and appliances of the bird room. Simplicity and plainness of structure invariably give the best results.

CLEANLINESS MOST ESSENTIAL.

Cleanliness is most essential to success in the bird-room. The cages should be cleaned out at least once every week, more often, if needed. The perches should be taken out, washed, and the ends dipped in turpentine or paraffin. The

nest should be renewed when the young are a week old, and again at a fortnight and three weeks. It will not want much making. Just put a little nesting material in the bottom, sprinkle it with insect powder, and return the young. A better way is to have a clean nest pan ready and transfer the young to it. Then take the old nest away and burn it, and thoroughly cleanse the pan in hot water ready for the next turn. When cleaning out the cages do not forget to give plenty of clean sand. It pays.

THINGS USEFUL AND NEEDFUL.

Diamond-shaped scrapers are useful for removing refuse from the cages as they enable one to reach the corners. A bucket or two, a couple of brushes, one long handled and the other with a short handle, and a short handled metal shovel should be found in every bird room.

Two seed sieves, one of fine wire mesh for canary, hemp, rape, millet and linseed, and one of fine hair for maw and other small seeds.

A pestle and mortar for bruising seed or mixing foods, a fine meshed potato squeezer for hard-boiled eggs, and a broad bladed knife will all be found of use and service.

Egg boxes, or cabinets, are useful for keeping the eggs from day to day as they are laid. These are made of wood with divisions about three inches square, which are numbered according to the cage numbers from which come the eggs. They are made from two to two-and-a-half inches deep and are filled with sawdust or bran upon which the eggs are placed.

Two or three big jam pots, the 3lb size, will be found very serviceable in the bird room. They can be used for the soaking of seed, and the keeping fresh of some kinds of green foods.

It is wise to have a reserve supply of water glasses, egg drawers, nest pans, and perches in the room. It means the saving of a lot of labour, time, and temper.

In large bird rooms the food should be kept in galvanized iron bins. In smaller rooms the large biscuit tins or grocers' tea tins answer the purpose. The seed should always be kept in receptacles of this character.

CHAPTER III

BREEDING AND GENERAL MANAGEMENT

It is in the springtime, the early springtime, that the thoughts of canary lovers turn towards the mating of their stocks. That is the majority. There are some who think about it months before, and these are the ones who make a success of it.

Preparation for the breeding season should really begin in the autumn shortly after the moult is finished. That is the time to select the breeding stock for the next year. Then the birds are in full plumage and grand body condition. All their points are to be seen at their best, and weaknesses are also easily discovered at this period. More than that, the history of the birds is fresh in the mind of the owner. He can easily remember how they have progressed during the rearing and moulting, and thus is guided to more satisfactory decisions than if he leaves his selections to the following spring.

STUDYING THE FAMILY HISTORY.

Another point, having selected his potential breeders, he can match them up on paper, and during the winter he can un-match them should any of them develop faults not seen at the time of selection. Thus when the spring comes he will have so thoroughly grounded himself in the pedigrees, family and personal history of each bird that he proposes mating that the final pairing up will be as near perfection as is possible.

Amongst those selected for breeding will certainly be some that will have to be shown during the winter; these will be given single cages, but the others, those that come under that designation of stock birds, should be placed in large flights, so that they may secure plenty

of exercise, and thus increase their bodily strength and muscular development. The show birds should be put in the flights as soon as the show is finished.

WHEN WINTER HAS PASSED.

When winter has passed and February draws near, the active work of preparing for the breeding season takes place. The room and all the breeding cages and appliances must be thoroughly cleansed. The breeding cages should be removed to the yard or garden and thoroughly washed and scrubbed with soap and water. Carbolic soap should be used, or else some disinfectant mixed with the water. All the dirt having been removed the cages should be well rinsed with clean hot water, rubbed dry, and if the weather is favourable, allowed to hang in the open air for a day or two. They should be finally dried off by being placed in the kitchen, or some other room with a fire, for a few hours or a night. Some may need repainting, that should be done before they are returned to the bird-room.

CLEANSE THE WALLS AND CEILING.

In cleansing the room, the ceiling and walls should be swept and rubbed down and white-washed, distempered, or painted, as the case may be. A white lime-washed ceiling, and walls painted or distempered a nice warm, bright blue makes a bird-room look clean and cool. Here also it may be said that blue is the best colour for the insides of the cages, the outsides being black. The floor of the room should be covered with linoleum. This properly fitted permits of no cracks for seed to fall through into the intervening space between the floor and the ceiling of the room underneath, and thus attract mice.

WHEN SHOULD THE BIRDS BE MATED ?

This is a much discussed question. There are those who mate up their birds round about St. Valentine's Day. This is a bit too early. Nothing is gained by too early breeding, and the man who waits till the second week in March will invariably meet with better success than he who starts too early. If the birds are put together about the 10th or 12th of March, they will settle down,

go to nest, and hatch about the first week in April. This gives plenty of time for three nests during the season, and more should never be taken. Quality, not quantity, should be the breeder's motto, and three nests of strong, healthy, well-reared young are better than four nests of weakly, delicate youngsters.

A prolonged breeding season means that the energy and vigour of the parent birds is used up, and that the moult often intervenes to further sap their vitality. When breeding is prolonged it only means a few seasons for the stamina of the stock to be broken down, and then for a succession of failures to be encountered. Late breeding means badly-developed youngsters and a slow, unhealthy moult for both parents and the late bred young birds. There is nothing to be said in favour of late breeding, but much can be said against it.

TEMPERAMENT MUST BE CONSIDERED.

Very important is it that the temperament of birds to be used for breeding should be considered. If it is not the best results cannot be attained. Some cocks are ardent, fiery, passionate. This sort sometimes fight with their mates and even kill their own offspring. At times so ardent and nervous are they in their love-making that they woo and annoy the hen when she is sitting, and often smash the eggs. Then you have the moody, melancholy, phlegmatic bird that takes little notice of his mate, and does little to help in the rearing of his family. The hens, too, have varied temperaments: some are flighty and impatient, they forsake their nests and young, and make advances to their mates before they should, often neglecting their babes in their ardent love-making; some are clumsy and awkward, and break the eggs and smother their young, some are "cannibals" and bite the toes of their young, also pluck their feathers, some are fat and lazy and lay badly. All these things must be watched for, and birds known to be abnormal in any respect should not be bred with.

SELECTING THE INDIVIDUAL PAIRS.

I have mentioned about the birds being matched upon paper. It is a wise proceeding, because in the long winter

evenings the owner is able to study them carefully, and select according to the outward beauty of the individual specimens combined with pedigree. There are those who

METHOD OF HOLDING BIRD WHEN TOE NAILS REQUIRE CUTTING.

Toe nails should always be cut before the birds are mated up.

say : " Give me the bird, others may have the pedigree." This is a mistake. To ensure success both are needed, but should it be that one had to choose between looks and

pedigree, the vote should go to the latter. Happy is the man that is able to blend the two.

In selecting stock for breeding, many go upon the principle of balancing weakness and strength. Thus a bird weak in head properties is mated with one strong in those points. One excelling in colour is given as a mate one that fails in that respect. This is wrong. It is not the way to make advance. It is the way to keep up an average of mediocrity. The system I advocate is to take the two best birds in the room and pair them, then the second best pair, to be followed by the third best. This is doubling up the good properties and should make for the general up-lifting of the quality of the birds in the stud.

After the three best pairs are selected, we come to what may be styled the second raters. These are birds with marked deficiencies, these we must of necessity pair with birds that are strong in the points where they are weak. The reason for so doing is because if we pair together two birds possessing the same fault we are doing our best to increase and develop that fault in our stud. As an example, the reason why we have so many bad headed birds in such breeds as Norwich, Cinnamons and Yorkshires is because fanciers have mated up year after year birds that failed in this particular point, and so it has become stamped upon the majority of our birds.

BLOOD WILL TELL.

Mention has been made of beauty and pedigree. The former is apparent to the eye, the latter we must take from the records. This is the reason why every breeder should use a properly prepared Stud Book. Years ago every individual breeder used to make his own. Not so now. *Cage Birds* supplies at a very nominal price this aid to successful breeding. In such a register is duly recorded each year all the happenings of the stud, and every bird has its failings and excellencies duly written therein. The value of such for future reference and guidance is invaluable. When mating birds one should know not only all about the individual birds themselves, but their parents, grand parents, and great-grand parents, and, if possible, several generations beyond. This enables one to come to a right understanding and judgment as

to the quality of young likely to be produced from any particular mating.

As example, a certain bird may be in every respect bar colour the very mate that we should select for another member of the stud, but its bad colour makes us hesitate to use it. If we have its pedigree in our *Stud Book* we can study it, and if that study reveals the fact that this particular poor-coloured bird comes from a long line of ancestors of extra good colour we know we may risk using it. But should the *Stud Book* tell us that a generation or two back the ancestors of this bird were of poor colour, then we should decide not to use it, as it would be almost certain to throw back, and we should lose ground in our breeding. Blood will tell. It is impossible to breed prize-winners from birds of poor parentage.

WHAT OF THE ORIGINAL STOCK ?

In commencing a breeding stock one has to depend upon other people. My advice to the beginner is to go to some well-known fancier, one with a reputation as a breeder of show birds. I say a breeder, because every exhibitor does not breed his winners. If possible, visit the man from whom you decide to purchase your stock. Tell him as clearly as you can your requirements, and also how much money you have to spend. Tell him you are trusting to his judgment and honour, that you leave the selection of the birds entirely to him, and hope he will treat you liberally and well. There are few men of repute who will not in such circumstances do their best for a young fancier. Not only will they mate the birds properly, but they will give much valuable advice as to their management, and subsequent matings.

THE ACTUAL PAIRING, OR MATING.

Having decided which birds are to be paired, the next step is to set about doing it. If double breeding cages are used, all that needs doing is for one bird to be placed in one compartment and one in the other, with the wired slide separating them. If they are fit and ready they will

soon become friendly, and in a couple of days or so the slide may be removed and they may be allowed to run together. When single breeding cages are used, and the majority of breeders do use such, the cock bird should be placed in the breeding cage and the hen selected as his mate should be placed in a nursery cage, or some other open wire cage, which should be attached to the front of the breeding cage with a wire hook. When the courtship is satisfactory, and the birds begin feeding each other through the wires and generally show a disposition for each other's society, the hen should be run into the breeding cage. The best time to do this is the evening, just before dusk.

The reason for this is that sometimes when birds are in separate cages they show much affection for each other, but if introduced fully they begin to quarrel; should the introduction take place in the morning they may go on squabbling all day, and the more they squabble the worse friends they become, and sometimes from squabbling they get to fighting and doing each other harm. When the introduction is effected at night there is less chance of trouble. They seem pleased to be with each other, and when they awake in the morning and find they have slept together they seldom quarrel, but proceed to become better sweethearts and more and more enamoured of each other.

INTRODUCING THE NEST PAN.

When it is seen that the birds have become sweethearts and have become matrimonially intent, the nest pan should be introduced, and a little nesting material placed between the wires of the cage. For a few days they will possibly play about with the material, carrying it to the nest pan and out again. When you see the hen sitting about in the nest pan, trying to fashion a nest, you can supply more nesting material sufficient for the proper building of the nest, and it will only be a day or two before you will find a very nicely constructed nest in the pan.

Here it may be said that the nest pan should be hung on a screw fixed in the back of the cage so as to allow the old birds to reach the nest easily from the perch.

FOOD FOR NEWLY-MATED BIRDS.

The feeding of canaries is not a difficult matter, but simple as it is, it requires a certain amount of thought. Many failures are caused because birds are not in proper

WIRE RACK FOR HOLDING NESTING MATERIAL.

AN ALL-WIRE NEST.

condition. In the early months of the year many birds show a disposition to lay on fat, and if they are given a lot of stimulating food such as boiled egg and biscuit. inga seed, and hemp seed with the idea of getting them into breeding condition they soon become too fat, and the special feeding has quite the opposite effect to that which was intended.

The preparatory feeding for breeding stock should be of a character calculated to make muscle and not fat. Canary seed and rape, together with plenty of green food, and very occasionally a little egg-food, and the same feeding should be continued when they are mated until the young make their appearance, except that the hens may be given a little inga seed for the last week or ten days before mating, and that after mating a little of the same seed may be given the birds twice or thrice a week, but very little, not more than half-a-teaspoonful for each pair. If more is given it will tend to fatten the birds, whereas when only a little is given it has a good effect upon the egg passage.

THE TIME OF EGGS.

Although generally practised, the removal of the eggs day by day as laid is by no means the uniform practise. There are those who say it is wrong to remove the eggs. The argument of those who do remove them is that all the batch hatch at once. Those who do not remove the eggs dispute this, and assert that the hen does not brood her eggs until she has finished laying the clutch, she only stands over them in a protective manner, and in such circumstances all hatch out together.

When the eggs are removed each day as laid, this should be done about breakfast time in the morning, the eggs being placed in the compartment of the egg box bearing the number of the cage. On the morning when the fourth egg is laid, the trio laid on the three previous days should be returned to the nest, and fourteen days from thence the young may be expected. That is when all has gone as it should go ; unfortunately things do not always work smoothly, and one of the greatest difficulties breeders have to meet with comes at the time of the first egg of the season. I refer to egg-binding.

EGG BINDING : ITS PREVENTION AND CURE.

Egg-binding is looked upon by some men as a complaint that must come. That is not so. Egg-binding in nine times out of ten the fault lies with the owner. In some cases over-feeding with too generous food is the cause,

in fact some writers have gone so far as to say that alone is the cause, but I cannot agree with them. There is no doubt whatever that over-fed hens that are fat are very

THE EGG-PRODUCING ORGANS.

From a sketch kindly supplied by Dr. T. A. Bowes.

This shows the egg-producing organs of a canary about eight hours before the second egg of a clutch is due.

1. Egg due in eight hours.
 2. Ovule to form egg due in thirty-two hours.
 3. Ovule to form egg due in fifty-six hours.
 4. Ovule to form egg due in eighty hours.
- A Aperture in Oviduct to receive Ovule.
 B Oviduct.
 C Vent.

liable to egg-binding, so also are those that are weak and delicate, either from constitutional causes or under-feeding. When I say under-feeding I do not mean in quantity but in quality. It is most important that the food given

to birds should be sound and sweet. Badly harvested seed is responsible for many cases of weakness in birds.

To prevent egg-binding, the hens all through the winter should be given plenty of exercise by being kept in large flights, their food should be good plain seed, as before mentioned, a little egg food occasionally by way of a change, and a regular supply of green food. I believe strongly in green food as a natural conditioner. Birds cannot be kept healthy and well without it, or some substitute such as sweet apple or boiled carrot. Both of the latter may be given in slices, which may be fixed in the wires of the cages, or the carrot may be mixed up in a mortar with some soaked bread and given in the form of soft food, when so given a pinch of salt may be added to it, the birds will then eat it with added relish and it will further have a good effect upon their blood.

The giving of a little inga seed occasionally for a month or so before the birds are mated, and after they are mated is held by many to prevent egg-binding. The giving of a teaspoonful of scalded rape seed given for two or three days before the eggs are expected is said by some to be the best of all preventives of egg-binding. But in the way of food the liberal use of green food is, I am persuaded, one of the best safeguards against egg-binding.

Another preventive is the placing of a few drops of glycerine in the drinking water two or three times a week for a month before the birds are mated and after, until such time as the eggs make their appearance. So much for preventive measures. This brings us to the treatment of the complaint.

NO NEED TO BE ALARMED.

When the birds have finished nesting, the hen will gradually develop rotundity of the abdomen. This is due to changes in the reproductive organs necessary to successful parentage, and as the time approaches when the eggs may be expected she will become quieter in her movements, and will sit about in the nest, or on the edge thereof. You need not be alarmed at this. It is only natural. If she appears in good health and hops out of the nest when you approach the cage, or is

seen feeding whilst you are in the room things are going on all right.

But should she be dull about the cage, and sit with her feathers ruffled up, does not answer when you speak to her, and remains on the nest when you come near, you may go farther in your inspection. Insert your hand gently into the cage, and with your fore finger move her from the nest. If she just moves on to the perch, or drops on the floor looking heavy, thick and miserable you may conclude she is egg-bound. Then pick her up and examine her carefully. If she is egg-bound there will be great swelling of the abdomen, and if the forefinger and thumb are applied to the vent, it will feel hard and unyielding. There will also be sign of inflammation shown by the puffed-up appearance of the body, and the intense redness of the skin.

ACT PROMPTLY.

Promptness is of the greatest value in dealing with egg-binding, and warmth is the most certain cure, be the complaint caused by weakness, excessive fatness of the body, or by cold. Remove the hen from the cage, carry her carefully down to the kitchen and there hold her over a jug or basin of hot water, first placing a piece of butter cloth or fine muslin over the top of the jug or basin so as to prevent the steam scalding the hen. If it is not a bad case a few minutes treatment will cause the egg to drop on to the muslin. If it does not, then a small feather previously dipped in sweet oil should be inserted into the vent. Some writers speak of dropping the oil on the vent, but that is of little use. The oil is needed inside the passage to assist in the movement of the egg. Having oiled the vent, hold the hen over the basin again for a few minutes, should the egg not show itself repeat the oiling of the passage with the feather and place the hen on the floor of a small cage near the fire, first covering the floor with a piece of old soft flannel, and leave her there for one hour. If the egg has not passed in the meantime repeat the oiling and steaming, and return her to the cage. Should the egg not have made its appearance in a couple of hours it should be removed. This may be most effectually accomplished

by piercing the egg with a large darning needle, and withdrawing the shell by means of a pair of small forceps or tweezers.

THE EXPRESSION METHOD.

There is another method which I have practised—it is known as the “expression method.” When a bird is found to be suffering from egg-binding, remove it from the nest, place it on its back in the left-hand with its head towards the right hand, then place the fore finger and thumb of the right hand on the abdomen where the egg can be felt, and press gently on each side of the egg, at the same time drawing the finger and thumb backwards. The effect of this pressure is to push on one side the intestines and oviduct, which lie partially over the surface of the egg. When drawn back sufficiently to make the skin appear tight, the finger and thumb, still pressing the egg, are pushed slowly forward towards the vent.

Great gentleness and a delicate touch are necessary to the successful conclusion of the operation, as though held firmly, the egg must not be pinched hard or it will break. If this should happen, draw the shell away as before described with a pair of tweezers. If the operation is properly carried out by the backward and forward pressure, the egg, except in severe cases, will generally come away. By severe cases I mean those in which the hen is quite prostrate when found and there is much inflammation.

The movement described may have to be repeated several times ere the egg is expelled. Its expulsion will be assisted if a little sweet oil is introduced into the vent with a small feather, which if possible should be drawn over and under the egg so as to lubricate the passage.

TESTING THE EGGS FOR FERTILITY.

When the eggs have been duly laid the hen will commence brooding, or sitting close upon them, and all that remains to be done is to feed and water regularly. If you are anxious to know if the eggs are fertile, or not, you may test them on the fifth day from the time when the

hen began to sit closely. The method of testing is to take each egg between the fore finger and thumb and hold it before the gas, lamp, or some other strong light. If fertile a small red spot with very fine red lines running out from it will be seen. The advantage to be derived from testing is that, should you have two hens going to nest at the same time, and each of them have one or more eggs unfertile, you can transfer the fertile eggs to one hen, and remove the nest pan from the other hen. This means you will save much time, as the hen will go to nest again early. More than that a full nest of youngsters always thrive better than a couple.

If you are breeding pedigree stock care must be taken not to place the eggs in a nest in which it would be impossible to distinguish one bird from another. As example, it would not be wise to place eggs from two pairs of clear Norwich in one nest, as it would be impossible to distinguish the young, but the eggs of clear and marked birds could be mixed with a fair certainty that the young could be recognised.

When this cannot be done and you have say two or three hens sitting on a couple of good eggs each, you can leave them till they hatch, and then when about four or five days old remove all to one nest, marking them either with an indelible pencil under the wing, or by attaching a piece of coloured sewing silk or cotton to the legs.

FOOD DURING INCUBATION.

During the first twelve days of the incubatory period it is wise to feed the parent birds on plain seed and green food. It may be advisable twice during the period to give them a pinch of Epsom salts in the drinking water. Not much—just enough to make the water taste salty. On the thirteenth day the birds may be given just a little egg food, about a teaspoonful, and again on the fourteenth morning. Once the young have made their appearance egg food must be given every day, and the oftener it is given the better. Three times daily is better than twice, and four or five times is better than three. Little and often gives better results than much and seldom.

GREEN-MARKED BIRDS ARE THE FOUNTAIN OF COLOUR
IN ALL BREEDS.

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PREPARING THE EGG FOOD.

There are many different methods of preparing egg food, and each individual fancier thinks his own method the best. Some mix sweet biscuits with the boiled egg, and others bread crumbs, others soaked plain biscuit, and some soaked bread. Then some breeders press egg and biscuit or egg and bread through a fine sieve, others use a fine potato squeezer such as cooks use for flaking potatoes, others mix the egg and bread with pestle and mortar into a paste. Some may keep the egg food as dry as possible and others prefer that it shall be like pap, in fact they call it "pap." This pap is not so soft as bread and milk pap, but more like the consistency of putty. Many use only the yolk of the egg as they say the white is indigestible.

My own method of preparing egg food is as follows:—Take a full size 2oz. egg and boil it for thirty minutes. The reason why the egg is boiled for thirty minutes is to render it digestible. The white of an egg boiled for ten minutes is hard, tough and leathery, and very hard of digestion, but when the egg has boiled thirty minutes it will be found to be soft and flaky, and therefore more easily digested by the young birds. When cold, pass the egg through a fine sieve. Then take a good thick slice of stale bread, say one inch in thickness, soak it in water for five minutes, squeeze it as dry as possible, and then pass through the sieve, using a broad knife or flat spoon for the purpose. Next, add half a saltspoonful of salt to the egg and mix the egg and bread up together. This is not too forcing a diet, and the birds thrive well on it.

As I have said, some use bread crumbs, some sweet biscuits which are crushed dry in a mortar and then mixed with the egg, some scald the biscuits and mix them up crumbly with the egg. This is a very generous and forcing diet, and in my opinion too strong for newly-hatched canaries. Many deaths are due to too generous feeding on rich food.

In the feeding of egg food, one thing must not be lost sight of, and that is immediately boiled egg is exposed to the atmosphere it begins to decompose, and in a few hours goes sour. Thus food prepared in the morning should never be used in the evening. To secure the best

results from egg food it should be fresh made at each time of feeding.

Now-a-days many birds know not the taste of egg food, as many breeders use one or other of the prepared foods that are on the market. The best of them are very good, and nothing else in the way of soft food is required. There are some, however, that are of little worth. Therefore, in buying such always buy those manufactured by firms which have a sound reputation.

Then some fanciers prefer to make up a compound food of their own. The following is a good recipe for such:—Baked bread crusts, 1 lb; finest oatmeal, $\frac{1}{2}$ lb.; maw seed, $\frac{1}{4}$ lb.; finely ground linseed (not linseed meal) $\frac{1}{4}$ lb.; fine white sugar, $\frac{1}{2}$ lb.; salt, 1 oz. The baked bread crusts should be broken up fine with a pestle and mortar, then the other ingredients added one by one until the whole are thoroughly blended the one with the other. The maw seed may be added last. This food should be kept in a tin canister in a *dry cool* place. When being fed to the birds it should be damped with water into a crumbly state. Do not make it into a paste, the birds do not relish it so well. This food will serve as a substitute for egg food, or for any of the proprietary foods that are advertised, and old and young birds alike will thrive upon it. I have used many pounds of it, and have found it answer the purpose well. It is nourishing without being rich and forcing.

EGG CAKE.

In the North, some of the old-time fanciers, who did not like hard-boiled egg and biscuit, used to make what they called egg cake. I have myself used egg cake, and can speak well of it. The formula given to me by the late H. Trevlyn, a noted breeder of Belgian Canaries, was as follows:—

1 lb. of finest biscuit flour.

$\frac{1}{2}$ lb. of soft sugar.

$\frac{1}{2}$ lb pure home-rendered lard.

1d. packet of baking powder.

The yolks (no whites) of eight eggs.

“ Mix the sugar, lard, baking powder and flour fell together, then add the eggs, which should be beaten to a

froth. When thoroughly mixed bake in an ordinary small baking tin for one hour in a moderate oven. Be careful it does not get burned. When one day old it will be ready for use.

"This cake will keep any reasonable time without turning sour or rancid. When giving it to the birds, crush it very fine and mix a sprinkling of maw seed, and wet or damp it to about the consistency of ordinary egg-food with a little slightly diluted condensed milk. This will keep two or three days without going sour. The birds are particularly fond of this composition. Mine prefer it to all other foods. I give an adequate supply of this food, together with soaked seeds, lettuce, and watercress or other green food three times a day, morning and evening and mid-day."

SEPARATION DURING INCUBATION.

A question that is often debated when fanciers meet is : "Is it wise to leave the cock and hen together during the period of incubation? My answer is "Yes." I have never practised any other method. It has always seemed to me to be the right, reasonable, and most natural thing to do. Yet there are some breeders who, immediately the hen has gone to nest, remove the cock bird, and only return him when the young are hatched.

I have heard all kinds of stories about cock birds pulling nests out, smashing the eggs, worrying the hens, and I don't know what else, but never once have I been plagued with one of these unnatural fathers. That such exist I know from the experiences of my friends, and when such are met with provision has to be made to prevent them from committing the damage they might do. When double breeding cages are used all that needs to be done is to run him into the spare compartment and put in the slide. If single breeders are in use, then he must be placed in another cage in another part of the room.

Then there are cocks that will live comfortably and happily with their spouses until the youngsters come. They then show themselves as cannibals and destroy the young which they have helped to bring into the world. These must be removed, once their character is declared,

before the young are hatched. Others there are who set about smashing the eggs as soon as the hen begins to sit. These must be removed as well, and kept away from the hen until it is desired that she shall go to nest again. They can then, whichever of the two classes they belong to, be run in with the hen for about half-an-hour morning and night for two or three days, so that they may renew their courtship. It must, however, be done under the eye of the owner, and when they have mated two or three times, the running in may cease, and the hen left to go to nest again when she feels inclined. It is said that many hens feed and tend their young far better without the cock bird than with him.

THE VALUE OF SOAKED SEED.

Many times have I wondered why so few fanciers give their birds soaked seed. For pulling birds into condition that have run down during the show season, for promoting quick and sturdy growth in youngsters, and for inducing bad feeding hens to become attentive mothers, I have never found anything to equal it. Crushed seed is wasteful apart from the fact that once it is crushed some seed is quickly affected by the atmosphere and goes sour.

Another point is that when the seed is finely crushed the birds cannot separate it from the husk, and as the husk of hemp contains a certain amount of poison the birds often suffer from inflammation of the bowels.

Soaking the seed softens it, makes it more easily digested, and draws from it the acidity and pungency that so often upsets the bowels of young nestlings.

My method of preparing and using soaked seed is as follows :—I take equal parts of canary, rape, and hemp seed, and half-fill a 3 lb. jam jar. I fill the jar with cold water and let it stand twelve hours. I then stir it well up and strain off the water, filling the pot with fresh water, I stir the seed well with a wooden spoon and again strain off the water, then re-filling the pot with water I let it stay another twelve hours. Again I stir and strain off the water, and renew the water and stir and strain again. Then it is ready for feeding to the stock. This means that seed that has to be used one morning is put in soak

the morning before, and seed that is needed for feeding at night is put in soak the night previous.

One has only to get a whiff of the water that is strained away after the seed has been soaking twelve hours to be convinced that the soaking draws from the seed much that is not good for the young birds.

The soaked seed should be fed in a large egg pan or tray, and there are few birds that do not show their appreciation of it. When the two have been fed at the same time I have hundreds of times seen the hens give the preference to the soaked seed over egg food.

WHEN THE YOUNG ARRIVE.

On the morning when the young birds are due to hatch, most fanciers feel a bit anxious. We may be old hands at the game, and well bitten, but yet there is something about the "cheep, cheep" of the new-born youngsters that sets our nerves all a-tingle, and most anxious to have a look at them. One's anxiety can usually be satisfied. Feed the breeding birds, giving them their soft food, seed, soaked seed, and green food, and walk away from the cage, and nine times out of ten off will come the hen from the nest, either of her own accord to feed the young, or at the call of her mate, who is anxious she should share in the newly-provided food. Now is the time to take a peep. But it must be just a peep only, just sufficient to satisfy your curiosity and to let you know "All's Well."

KEEPING AN EYE ON THE NESTS.

Every time a fancier enters his room during the breeding season he should have a look at the nests containing young birds, especially the first thing in the morning, and the last thing at night, only by so doing can he know if things are going on well or not. The time to take the look is when the hen is down at the egg or seed trough. When this is done regularly many a young bird's life will be saved, because the owner will be able to detect the first symptoms of neglect on the part of the parents, or of any illness or accidents from any other cause.

For example, if a hen is feeding badly and her young have empty crops, he will be able to remove the nest

and resort to a little hand feeding. Many young hens are rather backward at feeding for the first few days, and some old ones too, and if the young are helped over this initial stage by the owner the hens will take up the feeding and go on well. Again, sometimes there is a "weakling" amongst the young, and when feeding time comes round

When kept together in the nest young birds seldom meet with accidents. Therefore never be over-anxious in getting them to leave it too early.

its more vigorous brothers and sisters thrust it on one side, until eventually it dies absolutely of starvation. Therefore if a single youngster is found with little or no food in its crop it should be hand-fed, and thus enabled to hold its own with its more vigorous brethren. A little assistance in such cases saves many a good bird.

It sometimes happens that a young bird is pulled out of the nest by the mother if she is startled, and jumps off her nest quickly, or it may be pushed over by the other birds, if the nest is a full one. Should such happen and the bird, when found on the floor of the cage, appear to be cold and dead, do not take such for granted. Take the bird and hold it between both hands whilst you breathe upon it for a few moments. In many cases signs

of life will begin to show themselves. Continue your efforts in restoring animation, and when you find the bird moving in your hand restore it to the nest with its

FRESHLY WEANED BIRDS.

When weaned, young birds must be carefully watched to see that they feed properly.

mates, and in a short time the hen will complete the work you began, and the bird will be quite all right again.

HAND FEEDING AND HOW TO DO IT.

When the parents are bad feeders the wisest thing to do is to take the young and place them under other birds which are feeding well, first taking the precaution to mark them so that they may be distinguished. Rearing by hand is a troublesome and wearisome matter, and it is scarcely worth the trouble trying to bring birds up by hand, as success so seldom attends the performance. If, however, you have one or more valuable youngsters that the parents have done well to, up to within a few days of their being able to do for themselves, or if, as before mentioned, temporary assistance is needed, then an attempt may be made to supplement the work of the parents. Let it be well understood, however, that I

am no advocate of hand feeding. It is seldom a success. If, however, it must be resorted to, then the following is the most suitable method : Take a small quantity of the

HAND-FEEDING YOUNG CANARIES BY MEANS OF A GLASS SYRINGE.

egg food, mix it up in the palm of your left hand with a little of your own saliva to about the consistency of fresh, thick cream. Then take a quill and with it feed the young with the mixture. A small glass syringe may

be used for the purpose, but in such case the food must be mixed very thin so that the syringe will suck it up easily. Young birds will require to be fed every two hours from sunrise to sun-set. It will thus be seen what a tremendous job hand feeding is. If the birds are less than seven or eight days old, it is almost useless attempting to hand feed. In fact, my honest opinion is that "the game is never worth the candle." Hand-fed youngsters seldom thrive. They are starved in body, and badly feathered.

OPEN GLASS DRINKING VESSELS.

This is the best form of drinking vessel for use in breeding, moulting, or stock cages. Spare Drinkers may be suspended on a board fixed on the wall of the birdroom. The wire in the centre shows mode of attachment.

WHY YOUNG BIRDS ARE NEGLECTED.

Speaking generally, it may be said that nine times out of ten when young birds are neglected and badly fed, it happens with young hens, and I am inclined to think that nervousness is the cause. They are anxious about their young, and they think that by covering them closely they will protect them from harm. Anxiety and not carelessness is the cause of the neglect to feed. In any case, and from whatever cause, it is most annoying and also very difficult to deal with.

In mating birds it is always wise to pair an old cock to a young hen, and let the young cocks be with the old hens. In this manner the new hands are taught their parental duties. They learn by example, and not by instinct alone. When the cock is an old and tried breeder, one to be relied on, he will teach his mate how to feed, but if she is too nervous to rise from the nest, or too jealous, there is only one thing to be done, and that is

to remove the cock and let the hen bring the young up herself. It often happens that when the hen finds all the responsibility of the family thrown on to herself she rises to the occasion and sets about feeding them. Once she starts, the trouble is at an end. If she still refuses to feed them the matter is hopeless. It does sometimes happen that a hen will feed all right for the first fortnight, and will then throw up her job. In such a case take her away and leave the up-bringing of the family to the cock.

This trouble does not often occur, and when it does it is usually with young inexperienced birds. For this reason I always like one bird of a pair to be at least two or three seasons old. Apart altogether from this question of feeding, it is my firm opinion that when one of the parents is two or three or even four years old, the young are stronger and more vigorous than those which are the progeny of two first-season birds. Therefore I strongly advise my readers never to pair together two yearling birds, unless absolutely obliged to do so.

HENS WHICH SWEAT THEIR YOUNG.

Nothing is more disheartening to a fancier than to see a fine healthy nest of youngsters which have made great progress for say twelve or fourteen days suddenly begin to fade away, as they do when the hen takes to sweating. This sweating arises from several causes. In some instances weakness, in others excessive maternal anxiousness, or nervousness, and in some cases by feeding too liberally on dandelion. It also arises because the hens are not in proper breeding condition when mated. Hens that are fat, and soft in flesh can hardly be expected to attend properly to their maternal duties, and such hens are generally the ones that sweat their babes. It is most essential to successful breeding that the birds when mated should be hard and firm in both flesh and muscle.

Excessive feeding of the hens during the winter and spring months has much to do with this sweating. It overheats the hens, and induces a state of super-broodiness. Thus when the hen should be feeding she is brooding, sitting persistently and neglecting to feed her nestlings.

Many a hen condemned as "a sweater" is really not to blame for her natural conduct. The individual to blame is the owner, who by his forceful, stimulating feeding, has induced in the hen this unnatural broodiness. I strongly advise that all breeding stock should be fed on good hard food during the winter, and soft food given very seldom.

DO NOT NEGLECT THE BATH.

Hens with young should have the opportunity of taking a bath every day. This is a good preventive of sweating. Should hens show any inclination to sit too close and sweat their young, stop feeding with dandelion

When young birds begin to sing, the cocks may be told by the extra fullness seen in the throat, the pea-like enlargement is not seen in the hens.

and give a moderate allowance of any kind of green food, the best for the purpose is seeding groundsel gathered from a roadside or hedgerow.

In such cases the nest should be re-made, and in re-making use as little nesting material as possible, so as to allow the air from the outside of the nest to reach the young. A couple or three thin strips of wood may be fixed across the nest, just above the heads of the young fledglings so as to prevent the hen settling down close upon them is a device that is sometimes attended with success, although I have known cases in which the remedy

was equally as bad as the disease, as the hen has refused to either cover her young or feed them. If, therefore, you do adopt this plan, you must watch the hen for a little time to see if she does forsake her young or not.

There are those who believe that if a little salt is dissolved in the bath water during the time of incubation, and subsequently after hatching that sweating will be avoided.

Another preventive, and one which at one time had many asserting its virtues, is the giving of a pinch of Epsom Salts in the drinking water during incubation and after hatching. This certainly has a tendency to disperse any abnormal heat in the hen's body as it will tend to cool and purify her blood, and also give it tone.

Again, many breeders have found that if the old birds are given nothing but seed and water during the incubatory period that there is not so much likelihood of the hens sweating.

Then the removal of the cock as soon as the hens go to nest, and keeping him away until the hen is ready to go to nest again has been found to turn a sweating hen into a non-sweater.

It must, however, be said that sweating hens are an awful nuisance, and some, no matter what is done, will persist in sweating their young.

YOUNG DEAD IN SHELL.

The two chief contributory causes to this trouble are lack of vitality in one or other, or both, of the parents, and a very dry atmosphere. Another cause is said to be the failure of the hen to turn her eggs during incubation. This, however, is difficult of proof, because one is not always in the room, and the hen may turn her eggs at any time when no one is about. But even when this is the cause it may be put down to lack of vitality. A hen that is strong and robust invariably turns her eggs every time she returns to the nest after feeding or drinking.

In fixing the nest pans care should be taken to place them in such a position that the full flood of light from the window does not fall on the hen whilst she is sitting. If the nest pan catches the full glare of the light the hen

will be constrained to sit in one position, but when it is not so, she frequently reverses her position, and each time she does so the eggs will be turned. For this reason many fanciers tack a sheet of strong brown paper or a piece of cardboard on the end of the cage facing the nest pan so as to shelter the hen, not only from the light, but from the observation of everyone who may enter the room.

A lack of moisture in the atmosphere may be countered by giving the hen a bath every day, and also by sprinkling the nest with a little warm water morning and evening for the last three or four days of the incubatory period. Some fanciers dip the eggs in the warm water as well.

It is an established fact that in a season when dry easterly or north-easterly winds are prevalent, that there are many more cases of young dead in shell than in a season when the atmosphere is damp and humid. Hence the reason for sprinkling the nest and dipping the eggs. In dry seasons the inner skin or membrane covering the chick in the shell becomes hard, dry, and tough and the young are not able to break through, when chipping time comes. Again, when this membrane becomes shrivelled and tough it often adheres to the head of the chick, and so closely does it stick that the chick is unable to turn its head to perform the operation of chipping the shell. I have frequently found the head and shoulders of the chick fastened together in this manner not only with canaries but also with poultry and with pigeons. At times one finds head, neck and wings all fastened up together so that the youngster is absolutely prevented from turning in the shell. Prevention being at all times better than cure, I strongly advise all breeders to sprinkle the eggs in the manner described.

EGGS BROKEN IN THE NEST.

When eggs are broken in the nest, the owner is generally more to blame than the birds. Long claws, and dirty claws are usually the causes of broken eggs. All breeding birds should have their claws cut when they are paired up, and also at any time during the season when they show signs of needing it. Some birds' claws grow much

more quickly than others, therefore they need watching. The free use of the bath, and frequent changing of the perches will prevent dirty feet. When birds have fed they frequently wipe their beaks on the perches, this causes the perches to be sticky and bits of dirt and sand adhere to them, and also to the feet of the birds in consequence.

Should it happen that an egg should be slightly cracked or chipped, a very small piece of gold beaters skin or stamp edging may be stuck over the chip or crack. Painting with collodion will sometimes answer as well. Whatever is done care should be taken to remove it on the thirteenth day by soaking the egg in warm water. When an egg is badly cracked so that the inner membrane is broken, then the case is hopeless, and the best plan is to remove the egg at once, or it will break and its contents foul the nest and the other eggs.

Thin shelled eggs are usually the ones that get damaged in this manner. It is therefore wise at all times to have a piece of cuttle fish hanging in the breeding cage. Lack of shell-forming matter is the cause of thin-shelled eggs.

MALFORMED FEET.

Young canaries are often hatched with that malformation known as "slip claw." That is, the hind claw doubles forward under the ball of the foot instead of standing

DEFORMED CLAWS AND METHODS OF DEALING WITH THEM.

Fig. 1. Back claw which comes forward put back into place with a piece of rubber tubing.

Fig. II. Crooked Toe, tied into position with fine wool or silk and a piece of quill.

HOLDING A BIRD TO CUT THE OVERGROWN BEAK.

out at the back as it should. It is impossible for birds so afflicted to grasp the perch properly. The treatment is very simple, and generally as efficacious as it is simple. A narrow piece of tubing, such as is used for babies' feeding bottles, should be used to fasten the claw back. Press the claw back to the leg and then slip the narrow piece of tubing over the foot on to the leg so that it may hold the claw back. If this is done as soon as the bird tries to perch a cure is effected in a week or two, and sometimes in a few days. It must, however, be done early before the bones of the foot get set. It cannot be cured once the foot is hard and set.

CLEAR EGGS.

Lack of vitality due to improper feeding or to inherited weakness is the cause of many clear eggs. This trouble is one for which there is no cure. Once an egg is "bright" or clear, it cannot be made good. Prevention therefore is the only thing to which we may address ourselves. During the winter season the birds should be given an abundant supply of shell gravel, sea sand, or cuttle fish. Twice a week a tonic should be given them—sulphate of iron, or citrate of iron and quinine. A piece of the former about the size of a pea to the ordinary glass of water used on the cages, or a few grains of the latter. A regular supply of green food is also of much assistance in promoting vim and vigour in the breeding stock during the winter months.

When a hen is found to have clear eggs it is wise to remove them and give her the fertile eggs of another hen, let her hatch them, bring them up, and then go to nest again in the ordinary way, and she will often have a good strong nest of young all on her own the next round.

When birds are heavily feathered, clear eggs are often caused by the mass of feathers round the vent, especially is this so with such birds as Crested Norwich, Lancashires, and Scots Fancies, and in these latter days Plainhead Norwich as well. When birds which are thus heavily feathered are put up to breed the feathers round the vent should be clipped away with a small sharp pair of scissors. Both cocks and hens should be clipped. If this is not done it is almost impossible for the eggs to be properly fertilised.

GREEN CRESTED NORWICH.
The perfection of formation, radiation, and droop.

Facing page 64

RED MITE.

With the advent of warm weather this scourge of the canary breeding room usually makes its appearance. I know not why but red mite is far more prevalent now than it was thirty or forty years ago. In those days most breeding cages were home-made, and roughly made at that, to-day they are nearly all made by professional cage-makers, are well put together and nicely finished. In the olden days, most of us used to lime wash our cages, now-a-days the majority are painted or enamelled. This, together with their superior finish, ensures fewer hiding places for the red mite, yet in spite of all there is no gainsaying the fact that red mite is far more in evidence than ever.

It is a well-known fact in the horticultural world that weakly plants are the ones that are infected with vermin, and the same applies to sections of the live stock fancy other than canaries. Can it be that the reason why red mite thrive so strongly in these days is because our birds are not so strong as were their ancestors of thirty to forty years ago?

In the olden days it used to be considered a disgrace to have to acknowledge the presence of red mite in the bird room, because it was generally accepted that when red mite were present the sanitary conditions of the room and cages were not what they should be. In fact, red mite were held to be synonymous with dirt and neglect.

Certain it is that if one has a sickly bird in the room it is soon infected with red mite. Whenever a bird is ailing in the warm weather it should be placed in a cage by itself and removed from the bird room altogether, for once red mite get a footing in a room they increase with wonderful rapidity, especially in the summer time.

The best way to fight the red mite is to always be on the defence. Keep your birds, their cages, nest pans, all appliances, and the breeding room itself perfectly clean. Paint all the crevices of the cages with carbolic acid, turpentine, or paraffin every time the cages are cleaned out, and dip the perch ends in turpentine at the same time. Every time you put a new nest pan into the cage, dust it with insect powder, when you replace the eggs in the nest on the fourth morning dust them with insect powder, and the day before they are due to hatch repeat

the operation. This done, you should not be troubled much with red mite.

If camphor is hung about the bird room and in the cages in small muslin bags, this is said to keep red mite away. Another preventive is to dissolve a pinch of powdered alum in the bathing water.

The only effective method I have discovered of ridding an infested bird is to give it a thoroughly good washing as you would if you were going to show it, but in the washing water sprinkle a tea-spoonful of Jeyes' Fluid.

PLUCKING THE YOUNG.

It is most peculiar that a canary will prove herself a model mother, sit her eggs, hatch her young, and rear them most tenderly and assiduously, and then the moment she begins to think about going to nest again she will commence to pluck her babes so as to line the nest which is to be the home of her second family.

Most annoying is this to the owner, because it spoils his birds if he wants them for his club First Feather Show, and if he is going to colour feed them it means that those feathers have to be plucked again shortly after the birds begin their natural moult.

Prevention here is the only thing to be thought of, and one should never wait to give a hen the chance to pluck her young, but when the young are nearing three weeks of age, and the fresh nest pan is put in, the parent birds should be given some clean nesting material so that there is no need for plucking. When this is done, there are few hens that will pluck their young, but should a hen start this horrible practice her babes must be removed at once to a small nursery cage which should be hung on the front of the breeding cage, the door of the latter being fixed open so that the parents may be able to feed the young through the wires of the nursery cage, the wires of which should be sufficiently wide apart for the young to put their heads through to receive the food. If the young are left in the breeding cage the hen will pluck every feather from their bodies once she has started the practice.

It is wise to tie a piece of rough string to the front of the cage, and renew it from time to time during the breeding season, this gives the hen something to play with and often prevents plucking.

Birds with markings such as here shown should not be used in the breeding of Even-marked Canaries.

FEEDERS, OR FOSTER MOTHERS.

Breeders of such birds as Lizards, Lancashires and Crests invariably keep a number of "feeders," or foster mothers, and these, which are ordinary common birds, are given the eggs of the champions of the room. Breeders of other varieties too use "feeders," but the practice is not so general as it is in the breeds I have named. Some men transfer the young after they are hatched, but this, I think, is a mistake. Get your hens to go to nest about the same time, and then transfer the eggs of your best birds to the common hens after they have sat a few days. You can then let the best hens take their chance with the young of the common hens, or, if you so wish, you can let them sit say twelve days, then destroy the common eggs, and your best birds will have a rest before going to nest again.

RINGING THE YOUNG BIRDS.

Now-a-days there exists a very foolish custom—that of ringing the young birds in the nest. Many birds are lamed and killed each season in the process of ringing, or by the mother bird pecking at the shining metal. Still whilst Clubs insist upon it, breeders must do it. These numbered rings are known as "closed rings," and are intended as a mark of identification of birds entered for prizes open only to the breeder, and the rings act as a check against fraud. The rings should be put on about the fifth day of the young bird's life, and in the evening, as there is less risk of the hen bird's attempting to remove them at night, and in the morning, after being in the nest all night, they are not quite so bright, and do not attract so much attention. In putting on the rings the three front claws are drawn together, whilst the back claw is pressed to the leg, and in this manner the rings slip on easily, if they are a bit tight a spot of vaseline rubbed into the ball of the foot of the bird will facilitate the operation.

SOMETHING ABOUT THE RINGS.

Although I disapprove of ringing, I give a full description of the process, altogether with an illustration taken from *Cage Birds*, which shows how it should be done.

CLEAR YELLOW BORDER FANCY COCK.

The practice of ringing the young in Canarydom is almost universal. Some use the open and others the closed rings, the rings being either coloured or engraved with numbers as a means of distinction.

Ringling, like everything else, has both its adherents and those who are not favourable to the custom. The principal object of the rings is to indicate clearly the parentage of the different birds, and fanciers with a number of breeding pairs know how very essential it is to have correct particulars of pedigree, especially if the birds are exhibition or high-class stock. It is admitted that ringling, especially close-ringling, has its disadvantages, but I think I am correct in saying that many of the accidents are due to the lack of experience of the owner rather than the practice.

The three rings illustrated are those most commonly used. All are made from aluminium, a metal noted for its lightness and cleanliness. The case for each might be summed up as follows:—

Fig. A.—Common pattern open ring. Coloured rings are invariably made to this pattern. The rings are placed on the legs of the

young a few days prior to their leaving the nest. Care must be taken to see that the ring is closed in such a manner that it retains its circular shape, and also that the two ends meet *accurately*. Otherwise the bird may be caused extreme pain and annoyance.

Fig. B.—Gib pattern open ring. The remarks made regarding Fig. A apply here also. The gibs, however, are a decided improvement, and greatly simplify the operation of either fixing or removing. With care this kind of ring may be used time and again.

Fig. C.—The closed ring. This type of ring is a general favourite. It is the accepted "hall mark" in Canarydom, and thousands are issued annually by clubs and societies; these rings bear year, number and an indication of the Society issuing them.

The putting on of the closed ring is one of the little jobs that the beginner baulks at. His first attempt leaves him with the impression that his hands are too big, *and also too few*. The feat, however, is not so difficult as the impressions of first ventures would lead one to believe.

Close rings must be put on before the foot of the bird is anything like full grown. In different varieties the day is different. Norwich, Crests and Yorkshires are ready about the sixth or seventh day, while Rollers, Borders, etc., may be left a couple of days longer. A difference in the size of the rings may also make a difference of a day or so in the time of ringing. Allowances must also be made for birds that have not been properly grown through lack of nourishment. Don't lose any sleep over the size of the feet of youngsters that are coming on exceptionally well, for, strange to say, the foot of the well-developed bird is seldom larger than that of the everyday one.

HOW TO FIX THE RINGS.

Provided the day has arrived, place a well-dried and disinfected nest on the birdroom table, and lay at hand the number of rings required. Bring out the nest of youngsters. Take up one of the birds in the left hand, holding it with its leg outwards, between the forefinger and thumb.

Place the three front toes together, as shown in Fig. E, and slip the ring over them. Gently press back the rear toe against the back of the leg (Fig. F), and without force slip the ring over. The back toe as it comes back into position ensures the ring being kept on.

Should the three toes of the young be a tight fit for the ring, dip the ring into soapy water ; if this is ineffectual don't force. Better an unringed bird than a crippled one.

If the young birds are rung towards evening, the hen will seldom interfere with the rings. Some hens, however, have a decided objection to them ; the bright glitter is irresistible, and the mutilation of the young follows. For this reason it is well to cover the rings with flesh-coloured valve rubber, a preventive I have never known to fail.

Fig. D depicts a tool for rubbering the rings made from a hackle-pin and handled with an ordinary awl handle. The pin is cut at the place where the taper of it is slightly less than the internal size of the ring. The ring is slipped over the point of the tool and slightly wetted, the valve rubber being then pressed over the ring. Withdrawing the ring and cutting the surplus rubber away completes the operation.

Fig. G represents a holder for rings ; it is made from a short piece of brass wire with a small washer or roove riveted on the end. The rings are put on backwards, *i.e.*, the largest number to the bottom, which ensures the rings being used in correct order of sequence.

WEANING THE YOUNG.

When the young birds are removed from their parents which generally speaking is when they are a month old, they must continue with the same food as they have been receiving in the breeding cage, until they are seven weeks old. If they are strong and hearty they will be able to crack hard seed when they are six weeks old, and as soon as they can do this the quantity of egg food given them should be gradually decreased. Do not change the food too suddenly. Sudden changes of food are bad, and apt to upset birds, both old and young at any time in their existence.

When young birds are being weaned, they may be given

the egg food that comes from the tins in the breeding cages, providing the same is fresh and clean, but if it is at all stale or dirty throw it away. But when fresh egg food is given the breeding stock, three or four times a day, any that is in the pans at feeding time may with safety be given to the youngsters that are being weaned.

The soaked seeds should be continued after the birds are weaned right on through the moulting season. It helps the development of the young birds wonderfully and its effect on their health and strength is far superior to that effected by the giving of crushed hemp. The giving of crushed hemp seed, which has such vogue amongst fanciers of to-day, is most harmful. Thousands of birds die every year from inflammation of the liver and bowels brought on by the use of crushed hemp. Soaked hemp in conjunction with the other seeds is far to be preferred. The soaking draws from the hemp its objectionable and deleterious qualities. In India the natives make infusions of hemp which have even worse effects on the bodies of those who drink it than the drinking of too much alcohol has on that of the Britisher.

CHAPTER IV

MOULTING AND COLOUR FEEDING

THE MOULT is a natural process ordained by Nature, and when birds are properly cared for it should not be the cause of any special anxiety to the owner. The process of throwing the feathers in a bird is very like the shedding of its leaves by a tree. There is much in the two processes that is alike, and yet they are really very different. They are similar in so far as the shedding process is concerned, but altogether different in the taking on of a new coat. In both cases the old garb is thrown off, but whereas the bird at the same time grows a new coat the trees leave that part of the business till the following spring.

The leaves on a tree grow and grow till such time as their veins are filled with the matter from which they obtain their life. This is followed by a suspension of the growing process, but, owing to the fact that in leaves, as in other things, there can be no life without movement or circulation, the leaves after a time droop and fall away. In somewhat the same way does a feather receive sustenance, grow, then gradually lose its strength, wither and is cast off.

THE STRUCTURE AND COMPOSITION OF FEATHERS.

Before we can properly understand the process of moulting in the canary, it is essential that we should have some elementary knowledge of the structure and composition of feathers. For this purpose let us take a feather and examine it carefully. What do we find? Speaking generally of its structure we find it composed of three parts—the quill, the shaft, and the vein. By the former the feather is held in its socket in the skin of the

canary. The shaft grows out of the quill running up the centre of the feather, and to the shaft is the web attached. The feather derives the nourishment from which it grows directly from the blood through a small opening at the bottom of the quill, and through this opening it draws sustenance during the whole time of its growth. This small tube or opening, in time, becomes choked or blocked with chemical secretions, and no longer nourishes and strengthens the feather, which like the leaf then falls away, because its veins no longer have life.

The moulting process at one time used always to be spoken, and written, of as the moulting sickness, but such was a misnomer. How can a natural periodical function making for the well-being of the canary be called a sickness? I grant that the moult is a season of anxiety to most canary breeders, but that anxiety is in many cases brought about entirely by themselves, by their own neglect, foolishness, or ignorance. During the moult the future of many a promising bird is made or marred. The moult it is which finds out the weak spots in a bird's constitution, and the moult it is which causes it to develop faults not seen in its first feather. On the other hand it must also be stated that during the moult many a Canary improves out of all knowledge, and every season a number of birds that were little thought of in their first feather blossom out into winners of cups and specials, due in great measure to the care bestowed upon them by their owners, and by the fact that during the moult nothing occurred to mar its regular and satisfactory development.

A MARVELLOUS PROCESS IS THE MOULT.

When one comes to think seriously about the moult it is borne upon one's mind what a really marvellous process it is. During the moult the Canary, in common with all other feathered birds, produces from its own body the forces which cast off the old coat, and at the same time bring forth in all its glory and living beauty a new one. We are so used to this wonderful act of Nature that we never stop to think about it, or of its miraculousness, for miraculous it really is. Did we see a bird cast its old feathers, and the new ones taking the place of the old without any previous knowledge we should look on the

NORWICH PLAINHEAD,
showing slackness of feathering round thighs and vent.

process with feeling akin to wonder and awe. But because we grow up from childhood with our eye and mind trained to the knowledge we fail to stop and think of this wonderful ordinance and all it is and means.

FROM DEATH COMES LIFE.

From death comes life in many spheres of life. It is so in the moulting of our canaries. The old is replaced by the new, and from the decay of life new life springs. The moult commences with the desiccation of the old feathers. The quills become dry and sapless, they lose their strength and firmness, the web loses its lustre and depth of colour, it becomes harsh and brittle, and ere the feather is shed it presents a very soiled and broken appearance, the quills shrink within their sockets, the surrounding skin becomes dry and shrivelled, and the feathers, like the leaves on the trees, droop and fall away. The falling away of the old feather is assisted by the new growth which is following hard on its heels, and the new feather which is bursting up in the socket helps in the displacement of the old in similar manner as does a child's second teeth assist in the expulsion of its predecessors.

It must be obvious to every breeder of canaries, be his experience great or small, that the season of the moult must of necessity be a time of great strain on the constitution of the birds. Not only have they to keep up the ordinary functioning of their bodies, but they have also at the same time to provide from the source of the same forces the material or food to grow another crop of feathers. This must, naturally, have a most exhausting and enervating effect upon the internal economy of birds going through the process. When we think of all that it means need we wonder that our fathers styled it the "moulting sickness"? Knowing how great the strain must be it becomes our duty to see that our pets go through the moult assisted by everything that our thought and care is capable of devising and carrying out.

WARMTH ESSENTIAL TO A SUCCESSFUL MOULT.

In the accomplishment of a quick, healthy and successful moult warmth is a most desirable and necessary

TICKED YELLOW YORKSHIRE CANARY.

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factor. A quick moult is a healthy moult, and generally speaking it is also a most successful moult viewed from the standpoint of the exhibitor. Nature herself has chosen the most fitting time of the whole year—the end of summer. The earth at that time is full of the heat which has been poured upon it by the sun during the months just past, and which keeps the nights almost as warm as the days, as when the sun is not shining the earth is giving off some of its stored heat, thus equalising the temperature of day and night. Further, at this time of the year there is more humidity in the atmosphere

TYPE OF MOULTING CAGE USED BY LIZARD BREEDERS.

than there is in the earlier summer months, and as moisture assists the growth of new feathers, this is Nature's plan of supplying it.

Nature being so bountiful we should make sure of taking the greatest advantage of her bounty. To secure the full measure of her provision we should see to it that the time of the moult is not delayed in our stock. An early moult is a quick moult. Contrariwise, a late moult is a slow one. If our birds do not moult till late in the autumn the process is naturally slow due to the fact that the atmospherical surroundings are not so favourable, and as a consequence the throwing of the old feathers and the growth of the new is retarded, and generally many undesirable complications ensue.

LATE BREEDING MEANS LATE MOULTING.

The chief cause of late moulting is late breeding. Birds that are bred in July do not begin to moult till September, and when the cold damp raw days of November come they are still moulting. The same remark applies to the old birds, although with them the chances against a successful moult are greater, because their bodies have been weakened by the long continued strain of breeding and rearing young birds late in the season. The effects of the late breeding may not be seen at once, but they are both seen and felt in the following spring. Birds that moult late and slowly are never good breeders. The strain of the breeding season causes the late moult, they come through it badly, and they have not recovered their full strength and vigour when the breeding season of the following year comes round. What is the result? It is seen in several ways—egg-bound hens, young dead in shell, infertile eggs, barren hens, sweating hens, and bad feeders. The catalogue of ills might be extended, but I have said enough to show what folly it is to breed late and moult late.

MOULT THE BIRDS EARLY.

With all the fervour of which I am capable would I impress upon my readers the great value of an early moult if they wish to breed strong, healthy birds, and to be known as successful exhibitors. Years ago the show season used to start in September, and breeders had birds ready. Now, when one talks about holding a show in the first or second week of October one is met with the cry, "It's much too early; the birds are not through." Late moulting acts disadvantageously in another way. It leads to the bulk of our shows being crammed into November and December; thus is the show season shortened and the opportunities of the cracks of the different districts meeting each other retarded, even if it is not rendered impossible.

FRESH AIR MOST ESSENTIAL.

Warmth being such an essential and important factor in a successful moult, breeders should see that their

birds are enabled to get the full benefit of all the warmth which the sun gives, and that they are, at the same time, protected from all draughts. Give them plenty of fresh air, but avoid draughts. These are not conducive to the well-being of canaries at any time, but during the moult they are absolutely fatal. Birds very easily take cold during the moult, and when they do the moult is checked, sometimes completely, and when this happens it is generally followed by illness and often death. Even if death does not supervene on an illness contracted from

ORDINARY MOULTING CAGE USEFUL FOR ALL BREEDS.

a chill during the moulting season, the birds are never really fit for the show bench, or for the breeding cage in the following spring. It must never be forgotten that during the moult the birds are not fully clothed, and are therefore most susceptible to chills. Thus any utter neglect or oversight at this time is apt to be paid for by serious consequences later. Yet with proper care and management no breeder need fear the moulting season.

GENEROUS FEEDING NEEDFUL.

Owing to the extra strain which the bird's constitutions have to bear during the period of the moult, it naturally follows that their food during that time should be of a particularly generous character. When one speaks of generous feeding, canary men are apt to think immediately

that one means unlimited quantities of egg food. That does not necessarily follow. Egg food is generous it is true. It is also rich, in many cases too rich, yet the majority of fanciers feed regularly upon egg food, although in recent years there has been a growing disposition to use one of the many proprietary foods, and from the use of these many have discovered that they have had better results than with egg food.

WHY BIRDS COME PATCHY IN COLOUR.

The egg food which I gave in the chapter on breeding as being my own particular composition, whilst it is generous is not too rich, but egg and biscuit is, in my opinion, both rich and generous, so rich that many birds cannot assimilate it, and as a consequence digestive troubles arise, and the moult is interfered with. This is a serious matter, because it means that the birds come out patchy in colour. Many breeders wonder why their birds are patchy. It is because the liver becomes overcharged, does not function properly, and therefore the colour is not abstracted from the food given them, and the deposition of colour is not regular. In the chapter on breeding I gave a recipe for a compound food. This may be used most successfully during the moulting season. It is a food which builds up the body, also the bone and feather.

SPECIAL MOULTING CAGES.

When one is moulting Lizards it is necessary for each bird to be moulted in a separate cage if the very best results are to be obtained. This need not be done with every bird in the stud, but only those that promise to make winners. The loss of a flight or a tail feather is such a serious handicap to a Lizard when it comes to be shown that the risk of moulting more than one bird in a cage is too great to venture upon. Indeed, in the old days, Lizard breeders were so particular that they not only used to moult each bird separately, but they used to cover the perches with cloth and the front of the cages with a glass shutter. Few of them go to this trouble nowadays but they do let each prospective winner

A CLEAR YELLOW NORWICH HEN.

have a cage to itself. In some cases they fasten a sloping shutter to the front, so that the bird may be kept quiet, and that the light may not reach it. These cages vary in size, but generally speaking are about 13 in. or 14 in. long, the same in height, and 8 in. deep.

My own opinion is that it pays to moult prospective winners of every breed in a separate cage. It means the expenditure of more labour and time than when several are moulted together in a larger cage, but it gives better results and therefore pays.

Many breeders put their best birds in couples to moult, and give each pair, or couple, the run of a single breeding cage. This saves work, also the provision of special moulting cages. But there is always the risk of two birds, caged by themselves, quarrelling and damaging each other's plumage. Personally I have found three or four do better than two. There does not seem to be so much fighting. When only two birds occupy a cage, one of the pair usually wants to boss his mate and this causes trouble. There is one rule that must always be observed, be it two, three or four birds that you moult together, they must all be put in the cage at the same time. If this is not done they seldom settle down together, and quarrels are frequent.

STACK MOULTING CAGES TOGETHER.

When a number of birds are being moulted in a room it is advisable to have all the cages containing the best birds stacked together. The reason for this is that a rod or rope may be fixed from end to end of the stack, and a sheet running on small curtain rings attached thereto, so as to shield the birds from the light and keep them clean and quiet. This only applies to the show birds. The ordinary stock birds may be moulted together in batches, according to the size of the flight cages.

With such varieties as Belgians, Borders, Dutch Frills, Crests and Crest Breds, Lancashires, and Scots Fancies, more liberty of individual thought may be given. In these colour is not of great importance on the show bench, and excepting with valuable Crests and Coppies they do not need to be caged separately, but it is always advisable

to give the two last named separate cages. That is those which are to be sent out to the shows.

COLOUR FEEDING : WHEN TO START.

Colour plays a very great and important part in the judging of such breeds as Cinnamons, Lizards, Norwich, and Yorkshires. In my opinion far more than it ought to do. Type and quality of feather in all breeds are the great essentials, and I much regret that all our judges do not agree with me on this matter. The fact is, however, that some of them will have colour. Give them a big bouncing bird full of colour and it fills their eyes at once, whilst type and quality and style play a very secondary part in their awards. This being so it is necessary that however good one's birds may be unless they have colour they had far better be kept at home, that is when these colour-mad judges are officiating.

This craze for colour on the part of our judges has caused many fanciers to be so foolish as to start colour feeding whilst their young birds are still in the nest. A very foolish practice, and one that I cannot too strongly condemn. Colour feeding never does the birds any good at any time, and when it is practised upon nestlings it does real harm, because such wee mortals cannot digest it.

AGE THE MOULT COMMENCES.

The first nests of young canaries do not break into moult at so early an age as the second and third nests, and with them one need not give any colour feed until they are at least eight weeks old. With the second and third nests one should start when the birds are seven weeks. These dates are full early in each case, but it is needful to be feeding colour when the feather first breaks. Should it happen that you find a few loose leathers about the cages before you start the colour food you need not worry, but start colour feeding at once. In fact, if you ignore time and dates and watch for the feathers to drop you will be all right, as the colour is conveyed through the blood into the feather in about twelve hours from the first feed of colour food, and no harm would result unless you waited until the new feathers had broken

well through the skin of the chest. Another sign of the approach of the moult is the dull listless appearance that comes over the birds and the rough open look of the plumage, this state is accompanied by an aimless pecking about the floor of the cage, and a desire to sleep in the daytime. When these things are seen you may know it is time to commence colour feeding, and until you see them you should follow the advice of those well-known soap advertisements—Don't Worry.

KEEP THE MOULT GOING.

Once the moult has started you must keep it going. If you want your birds to come out of the moult one even colour you must not only feed regularly, but you must see to it that nothing is allowed to interrupt the free run of the process from start to finish. Any exposure to a draught, or neglect to feed at the proper time, or to mix the colour food properly may have disastrous results so far as the result is concerned, but most to be feared is the first named, because, whilst the others may only affect the evenness of colour that means a derangement of the health of the birds. A chill at this time very often means death or impaired health generally, and both of these are serious matters.

A check to the moult comes sometimes because the liver is upset, and the bird goes off its feed, in such cases it is wise to put ten drops each of whisky and glycerine in the drinking water. The one acts as a stimulant and the other as an aperient, and between them often sets the machine working smoothly again. In the case of a bird going wrong through a chill the whisky and glycerine may be given, and instead of the egg food a little milk sop sprinkled with salt.

LIGHT—ITS INFLUENCE ON COLOUR.

I have mentioned the fixing up of a curtain in front of the cages whilst the birds are moulting. This is absolutely needful if you wish to secure the very best results. The new feather growth is very sensitive to light, and if the sun is allowed to pour its rays upon the birds it will be little use to colour-feed them. The effect of the sun's

rays may be neutralised in great measure if the window of the bird-room is coloured with red distemper, or if a red cloth instead of white is used to hang before the cages.

COLOUR-FEEDING IN BYGONE DAYS.

In the days of long ago one could not write about colour feeding without saying a lot about the ingredients needed to be used. Nowadays we have colour feed supplied by merchants in a state ready to be used, but when I was exhibiting the only thing that we knew for a certainty was the hot cayenne pepper which was used, I am old enough to remember the introduction of K.N.-fed and Non-K.N.-fed, and Natural Colour classes, and the only honest birds were those which were shown in the K.N.-fed classes. Fanciers experimented with all kinds of colouring agents to obtain colour to enable them to win in the Non-K.N.-fed and Natural Colour classes.

NON-K.N.-FED CLASSES.

For a long time the chief ingredient used to colour-feed birds for the Non-K.N.-fed classes was the yellow Natal pepper, and something of a sensation was produced when thirty-five years ago the writer gave away the secret. It is just about that number of years ago that I published three recipes for colour-feeding birds for the Non-K.N.-fed classes and these were the first composite colour-feeding recipes ever given to the canary fancy. Up till the time when I published those recipes Colour Foods were not advertised, but within a few weeks the cage bird papers of the time were flooded with advertisements of colour foods. From these came great and increasing demand, and in due course was evolved a substance known as "cool" or "tasteless" pepper, and which in later years has been known as "Red Feed."

NOTHING INJURIOUS IN PRESENT-DAY FEED.

There is nothing injurious to birds in the "Red Feed," as now sold, and if properly used it gives the birds a beautiful rich colour without in any way affecting their health. But when used to excess it does not give the best

A GOOD FRONTED CREST, SPOILT BY A COMMON FAULT—
A SPLIT AT THE SIDE.

results and injures the health of the birds because it deranges the liver, causes digestive and stomach troubles, and in many cases death follows. The one thing to be remembered in connection with colour feeding is this. It is not the quantity that a bird eats that does the trick, but the quantity that is assimilated and taken up into the blood.

Birds that are given too much colour food come out patchy in colour, and in some cases pale in colour. Why? Because the liver does not function properly, and the colour is not deposited in the blood. In some cases serious injury is done the birds and they die.

VALUE OF GREEN FOOD DURING MOULT.

To obtain the very best results from colour feeding the birds must be given a regular supply of green food twice or thrice a day. The reason for this is that when the birds have plenty of green food the liver is not likely to become clogged and the colour food that is given does the work for which it is intended.

The writer was one of the first to advocate the throwing open of the colour question. We all knew that the men who were feeding on hot Nepaul pepper were so doing, and these men were honest. Birds so fed were shown as K.N.-fed. But the birds shown in the non-K.N.-fed classes were fed in many cases upon a very small quantity of Nepaul pepper, and in others were given the yellow Natal pepper, which undoubtedly injured them quite as much as the red Nepaul pepper, whilst the exhibiting of such birds as non-K.N.-fed was a distinct fraud. Again, the so-called Natural Colour birds were fed upon nasturtiums, marigolds, clove carnations, mustard seed, beetroot, saffron, madder, cochineal, dragon's blood, infusion of red rose leaves, port wine and other things. These things added considerably to the natural colour of the birds, and those who knew best how to use them had a big pull over other fanciers. Eventually common sense prevailed, the question of colour was thrown open, and fanciers allowed to feed as they liked. The result was seen very quickly, and instead of all birds being fed upon hot K.N. pepper, as many prophesied they would be, the

pendulum swung the other way, and the great majority of fanciers adopted the more moderate line, and from then till now our birds have been no richer in colour than were the so-called non-K.N.-fed.

THINGS OF IMPORTANCE.

During the moult the birds must never be moved from a hot room to a cold one, or from a cold to a hot one. They should have plenty of fresh air. The cages must be kept scrupulously clean, and liberally supplied with clean, gritty sand. Baths should be given regularly every morning, except when birds are moulting in the late autumn, and then they should only be given when the weather is fine and bright. Never give baths on cold, dull days. Twice or thrice a week a few grains of citrate of iron and quinine may be placed in the drinking water, or a piece of sulphate of iron about as large as a pea to each wine-glassful of water. A piece of beef suet will be relished by the birds if fixed in the wires of the cage once or twice a week, and it will help to keep them healthy ; the same may be said of a piece of raw fat bacon. Boiled carrot is also good for them, and a little may be mixed with the soft food, or a piece may be placed in the wires of the cage occasionally. It will be found that the birds will eat it greedily, and it will help in keeping their blood cool, and make the feathers lie close and tight.

COLOUR FEEDS OF TO-DAY.

It is just over fifty years ago that canary breeders discovered the wonderful colouring properties of cayenne pepper, and the first birds so coloured came from the hot-bed of the fancy, Sutton-in-Ashfield, Notts, but it was not till the closing month of 1873 that the late Edward Bemrose, of Derby, gave the secret to the fancy. To-day the article known as tasteless sweet pepper, and which is the basis of all colour feeds, is the fruit of a well known salad plant, *Capsicum annuum possum*, which is largely cultivated in Spain. The pods of this plant are dried and pounded. This is the pure thing itself. Some vendors sell it pure, others adulterate it with flour, sugar, oil and other things, and thereby made a greater profit than those who sell the pure article. Many fanciers

imagine that because the colour of a sample of feed stains the paper package it is of extra value. Such a sample should be cast on one side. That stain is, generally speaking, the result of added oil, added to make the colour richer, and also add to the weight. It is no certificate of purity. Quite the reverse. The pure article seldom stains the package. It is dry and contains little free oil. Samples which are heavy and sticky have generally been adulterated with sugar. Therefore buyers should only purchase from those vendors who guarantee the feed to be pure sweet tasteless pepper.

The vendors of the colour feeds which are advertised in *Cage Birds* all give directions as to how their preparations should be used, and therefore I need only say that breeders should follow these, because some feeds are prepared somewhat different to others. One thing I would say, however, whatever be the colour food you may be using, when you mix it with the egg food, or the egg food substitute, mix half a salt-spoonful of salt with each two table-spoonfuls of the egg food mixture. It helps the birds greatly.

The Trevlyn cake mentioned in the chapter on breeding is particularly useful for feeding during the moult. One ounce of colour feed incorporated with the other ingredients in the making of the cake and baked with them is very effective in colour feeding. It is also a remarkably simple and easy method of administering colour feeds.

FORCING A MOULT.

It sometimes happens that a bird does not go into the moult when it should do so. It is not wise to interfere with Nature, but yet when the moulting season is well advanced and a bird that one particularly wishes to moult out in time for the shows does not break it is most annoying. In such cases the bird may be placed in a small cage by itself, covered over with a dark cloth, and placed in a warm corner of the kitchen or living-room. This treatment will often cause a backward bird to break into the moult. As soon as it does, take it back into the bird-room and let the moult follow the usual course. Another thing that will often make a backward bird break into moult is to pull the centre half of its tail. It is seldom, however, that a healthy bird does not moult at the proper time.

CRESTED NORWICH CANARY.

This bird needs just a trifle more front and side feather to make it a champion.

CHAPTER V

DISEASES AND THEIR TREATMENT.

LITTLE KNOWLEDGE CONCERNING AILMENTS.

As one who has devoted considerable attention to the diseases which afflict our canaries, I must confess that our ignorance of the subject is great. There has been no deep scientific research into the diseases to which canaries are subject, and so far as I can see there is not likely to be. I have made hundreds of experiments, but my knowledge is not of a scientific character, and although it is something more than theory it is only the deductions that a practical breeder with a keen brain has been able to draw from watching the course of disease in his own stud and the studs of his many friends throughout the country. My knowledge and experience of dogs, poultry, pigeons, rabbits, and other animals has helped me, as my experiments with canaries has also helped me in connection with the other kinds of stock which I have handled. Still when all is said and done I must admit that my knowledge is not great, but it is the result of practical experience, and as such is given for the benefit of my fellows.

Medical men who have given some attention to this question naturally approach it with minds trained to the symptoms of disease which occur in the human race. Veterinary surgeons, as some of the leading men in the profession have acknowledged to me, know little about the diseases of canaries or any of the small household pets. In the course of their training they have to read up these subjects, but they get very little practical experience. Their knowledge is theory so far as their training is concerned. When in practice some have gained knowledge from *post mortem* work, but as in this they are influenced by their college teaching concerning

the more important animals they are quite as ignorant, if not more so than the experienced practical fancier. They have no actual practical knowledge of the diseases of canaries and other cage birds gained from life study. Yet some of these men have the impudence, I use the word advisedly, to denounce the efforts of practical canary breeders to help their fellows. These men with their theoretical knowledge are really more at sea concerning the treatment of disease in canaries than are old fanciers. More than this, they disagree to an alarming extent not only as to the diseases of canaries, but even so far as the anatomy of our pets is concerned. When veterinary surgeons of wide experience in their profession, and possessing high scholarly attainments and degrees differ on such simple matters as they do, what confidence can be placed in their diagnosis, or their treatment of the ailments of canaries ?

FROM WHENCE KNOWLEDGE DERIVED.

One well-known medical man, who is also a lover and breeder of canaries, Dr. Boulton, of New York, some years ago passed a very high eulogium on the chapter on Diseases in my little book "House's Canary Manual," which in those days was known as the British Canary; since then, however, a well-known London veterinary surgeon who has done considerable *post mortem* work, but has never been a practical breeder of canaries, has said the writer knows very little about the subject. My readers have the two views before them, they can choose which judgment they like.

I have said little is known about the diseases of canaries or their cause, except this, that we do know certain errors in feeding and management are followed by certain diseases, and that when certain remedies are applied those diseases are considerably alleviated, even if not cured. Practical experience has given us that knowledge and, though we may not be able to name all the different parts of a bird's body and organs scientifically, we do know them by their everyday names, and by such will they be styled in this work, and the treatment described for the various ailments will be such as the practical experience of ourselves and friends has found to be

CLEAR CAPPED GOLD LIZARD.
Showing great development of spangle.

the most effective when applied to stocks of high-class exhibition birds.

Disease, as I have said elsewhere, is a departure from the normal state of health, and something which has the power of limiting both the enjoyment and duration of life. There are diseases which are organic, that is affecting some particular organ of the body, there are also functional diseases which disturb the regular functioning of the body even though all the organs are sound. Even in the human being there are diseases which thus far have completely baffled our cleverest physicians and surgeons, men who have devoted years and years to study and research. Even now the nomenclature of disease is not clear and well defined. Some diseases are named after their symptoms, as instance, cramp and cough. Diseases which cause change in particular organs are defined, in this connection all which end in "itis" mean that there is inflammation in some particular organ, whilst those ending in "æmia" mean that the fault lies in the blood.

From the names of diseases we pass on to their cause, or, as the scientist would put it, their etiology. A very common cause of disease is food. Dirty, musty, kiln-dried seed, badly mixed soft foods, stale egg food, decayed green food and irregular feeding are frequent causes of disease so far as feeding is concerned. Badly ventilated and ill-lighted bird-rooms, to say nothing of uncleanness, and the non-observance of ordinary hygienic rules in the bird room, all cause disease.

MEDICINE AND ITS ADMINISTRATION.

Canaries are such tiny little creatures that it is important to exercise the greatest care in the administration of medicine. When harmless remedies are being administered a little latitude in the doses either one way or the other would have no effect, but, when one is dealing with drugs which are most potent in action, a drop or two in excess of the proper dose may mean death instead of relief. One speaks of table-spoonful, tea-spoonful, or wine-glassful in a rough and ready way. Let us see what they really mean. Roughly speaking, sixty drops make one drachm, or tea-spoonful, two drachms one

dessert-spoonful, whilst four drachms make one table spoonful. The system of measuring medicine by drops and spoonfuls is very handy, but it is wise not to trust to dropping medicine from a bottle, or to ordinary spoons. The latter vary in size, as do the drops which fall from the mouth of the bottle. Accuracy is needed, and the only accurate method of measuring medicine is by the use of a properly marked medicine glass.

THE CLASSIFICATION OF DISEASES.

If I were a scientist I should classify the diseases to which canary flesh is heir according to the organs with which they are connected, but, as I am a plain practical fancier writing for his fellows who are not versed in the language of the laboratory and surgery, I am adopting the alphabetical classification.

ABSCCESS.

An abscess is formed by the collection of unhealthy matter known as pus in the cavities of the connective tissues that occupy the small spaces between the different parts of the body. In some cases they are the result of an injury, in others they arise from an hereditary scrofulous tendency in the blood. Young birds often have abscesses on their feet and wings. In the one case caused by the harshness of the perches on a sensitive skin, or by something sharp in the sand, and in the other by a blow when flying. When a bird is observed standing on one foot and pecking at the other, putting a foot down on the perch and picking it up again quickly and appearing generally restless, it should be caught, placed on its back in the left hand, and held securely by the thumb being placed across the neck. Held in such position it may easily be subjected to a thorough examination. This will reveal the fact that the feet are inflamed ; in the ball of the foot or between one of the joints a small swelling will be observed. In the earlier stages this swelling will present a red appearance, but if it is of any standing it will be of a greenish-yellow colour, or if very malignant it may be black. In a well-managed aviary the latter stage will not be reached before it attracts the owner's notice.

The treatment should in the first place be that of improving and restoring the vital forces. A good nourishing diet is an important element in the successful treatment of an abscess. The soft food should have two or three drops of Scott's Emulsion sprinkled upon it, and in the place of water milk might be given, it being both soothing and nourishing. The abscess should be lanced with the point of a darning needle, bathed with warm water, dried with a soft cloth, and then have a little zinc ointment applied to it. With such treatment it will soon be healed.

It is advisable, after the abscess has been lanced, to soak the affected part twice a day in a little lukewarm water (this is to remove any dirt that may adhere to it), carefully dry it, and apply the zinc ointment, or, if preferred, vaseline will answer the same purpose.

An abscess should, whilst in the earlier stages, be painted with tincture of iodine, so as to dry it up. A little aperient medicine should be given at the same time.

If, however, in an advanced stage when discovered, it should be lanced, then bathed and dressed as directed.

APHONIA.

Aphonia, or loss of voice, is an ailment that generally arises from a bad moult. If the moult is slow, or if a cold is caught during its progress, the result is usually an attack of aphonia. When birds are kept in a badly ventilated or overheated room they are also subject to it. Birds afflicted by this complaint are not only robbed of their power of song, but are unable to strike a single note. It is a sort of paralysis of the muscles of the throat. If the bird afflicted be a song-bird, it is quite possible that he may go through all the usual movements of song, such as opening the mouth and throwing the head back, but not a single sound can he produce.

Birds affected should have a liberal supply of lettuce seed and linseed. To each ounce of drinking water ten drops each of glycerine and paregoric may be added. A piece of raw fat bacon should be placed between the wires of the cage, and especial care should be used in seeing that the seed supplied is sound and free from dust.

APHTHÆ.

This complaint is one which any good fancier would be ashamed to admit was troubling his birds, because it is generally produced by the carelessness of the aviary attendant. Some fanciers allow the drinking vessels used in the aviary to become very foul. The sides then become covered with foreign substances, which cause ulceration of the throats and tongues of the birds compelled to drink therefrom. When a bird is suffering from this complaint the sides of its throat will be covered with small ulcers, and unless speedily attended to will die of starvation, owing to its being unable to swallow its food.

The best treatment for this complaint is the following : Ten grains each of chlorate of potassium and borax should be mixed in each ounce of drinking water. The same quantity should be mixed with one drachm of glycerine, and the bird's mouth wiped out with this three or four times a day, a very fine camel-hair brush being used for the purpose. The food should be of a soft nature, and not harsh or irritating. All seed given should first be soaked for twenty-four hours.

APOPLEXY.

This is one of the most distressing and fatal diseases that cage birds are subject to. The cause is usually the rupture of one of the blood-vessels of the brain, and the consequent flow of blood which follows therefrom. There are some who say canaries are not subject to apoplexy. They may be correct, but, from the symptoms before illness, during its progress and after, I conclude that apoplexy is a disease from which canaries suffer. Birds that are fed on a highly stimulating diet and allowed little exercise are most liable to attacks of this complaint, proceeding, as it generally does, from fatty degeneration of the heart, disease of the liver and kidneys, also from sudden or violent excitement.

The symptoms of an attack are a kind of drowsiness caused by the congested state of the blood in the head, whilst the bowels are generally constipated. A little attention at this time will often ward off an attack. A couple of drops of castor oil should be administered from the point of a knitting needle. A little carbonate

TYPICAL YORKSHIRE CANARY.

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of magnesia should be placed in the drinking water, about as much as will lie on a sixpence, to a wine-glassful of water ; or, if preferred, thirty drops of fluid magnesia may be given in the same quantity of water.

At the actual moment of a seizure the bird falls suddenly off its perch, its limbs become convulsed, its whole body is agitated, the head is thrown back, and it will, after the convulsive movements have subsided, lie on the bottom of the cage in a state of insensibility. Now is the moment for proper action on the part of the owner of the little sufferer. It should be taken out of the cage, placed in the palm of the left hand, and its head dipped in cold water, which will often bring it round. A small piece of sponge should be immersed in spirit of ammonia and applied to the head so that the bird may inhale the vapour therefrom. This must only be done at intervals, and the sponge must only be held near the bird for a few seconds at a time ; just long enough for it to get a whiff of the ammonia.

On recovering consciousness the bird must be kept very quiet. It should be placed in a cage by itself, and a light covering should be laid over the cage. Its diet should consist of bread and milk ; this may be continued for a week or ten days after the bird has resumed its normal state of health. A little magnesia should be placed in the drinking water. When the bread and milk is discontinued the diet should consist for some time of canary and red, or summer, rape seed, soaked in water for twenty-four hours previous to its being given to the bird.

Should the bird at the time of the attack be suffering from any other form of disease, the attack will generally end fatally.

In cases where the attack is accompanied by partial paralysis, the bird will be incapable to a certain extent of walking or flying ; all perches should therefore be removed from the cage, or the bird may injure its plumage, or possibly break a wing or leg, in its attempt to reach the perch.

Apoplexy is most prevalent during the breeding season, especially at the commencement. The birds most liable to it are unmated cocks. All unmated cock birds should be fed sparingly during the breeding season. They should be allowed frequent use of

the bath, and about once a week a little magnesia should be placed in the drinking water. Some fanciers of my acquaintance prefer Epsom salts to magnesia ; if they are used, the quantity must be about as much as will lie on a threepenny piece.

ASTHMA.

This disease is one of the most prevalent amongst cage birds ; in fact, did one say that no disease was more prevalent they would not be far from the truth. The tendency of highly bred stock to contract this disease is much more noticeable now than it was a few years back. This is doubtless due to breeding from affected stock. I have seen birds paired up that have been suffering from this disease in its most acute and chronic form. Is it expected that such birds will breed healthy stock ? Common sense answers " No ! " I am quite aware that if a man is the fortunate possessor of, say, a grand crested bird, one that can lick creation, it is very hard to put that bird by and say, " I will not breed with it." Yet it is only by some such drastic remedy that a man can stay the hand of the destroyer. I have heard breeders say, upon being remonstrated with for pairing birds suffering from this complaint, " Well, I want to get one nest from them, just to keep the strain." Better, far better, refrain from such conduct.

This disease is often mistaken for bronchitis, but the symptoms are very different in each of these diseases. In asthma there is much tightness at the chest, shown by the gasping for breath during the continuance of the periodical fits of coughing to which the bird is subject. Asthma is easily cured if taken in hand at once. Some say it is impossible to cure it once it reaches the chronic stage. I cannot agree with this, having cured several cases in which the disease had been of long standing.

When a bird becomes affected it will be seized with periodical attacks of coughing, accompanied by expectoration. These attacks are more frequent and severe at night than at any other time. When the attack is past the poor little sufferer looks miserably weak and helpless.

In the treatment of asthma much attention should be

HEAD TICKED BORDER FANCY.

paid to the diet. A light nutritive diet should at all times be provided. Bread and milk, ground rice boiled in milk, and sponge cake are very suitable. All hard seed should be avoided. If any seed is given the sufferer, it should be soaked for twenty-four hours.

The remedies given should be administered through the medium of the drinking water. To one wine-glassful of water add ten drops of tincture of lobelia and the same quantity of paregoric. A few drops of Hoffman's anodyne may also be added. A few drops of tincture of conium and glycerine, say ten of each, will often effect a cure in the earlier stages of the disease. White blotting paper saturated in a strong solution of nitre, and dried, will, if burnt on a plate near the patient, so that it may inhale the fumes, afford much relief.

Should there be a wasting of flesh, as there often is when the attack is the result of nervous debility, cod liver oil and hypophosphites will be of much service. I have found Fellows' compound syrup of hypophosphites to be of the greatest service, especially when used in combination with tasteless cod liver oil—a few drops of the latter on the soft food, and thirty drops of Fellows' syrup mixed with one wine-glassful of drinking water.

Warmth is most essential to the successful treatment of this disease. By warmth I don't mean that the room must be very hot. A temperature of about sixty degrees would be most suitable, and it should be kept as near this point as possible. A fluctuating temperature is most trying to the sufferer, more so than a low temperature. All draughts should be kept away from the little patient, and it should be allowed a good large cage. Exercise is most beneficial, and a great aid in the successful treatment of this disease. My opinion is that small cages are the cause of a great many birds being affected with asthma.

ATROPHY.

Atrophy is the correct medical term for the disease which is more familiarly known amongst fanciers of cage birds as "going light." It is a most insidious disease, and one that often baffles the most experienced fanciers. It is a gradual wasting away of the muscles of the body. A bird affected with it will be found to be

CLEAR YELLOW YORKSHIRE.

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in a wretchedly emaciated condition. If its feathers are blown up, it will be found that the flesh of the body is all shrivelled up, and the bird is a living skeleton—in fact, nothing more than a bunch of skin, bones and feathers.

Atrophy is a disease that is a frequent visitant of the aviary, especially during the breeding season, when young canaries are often carried off by its ravages. When atrophy attacks a healthy bird, it is seldom discovered in the early stages of its duration. A bird suffering from this complaint will oftentimes have its general health quite unimpaired, and the ordinary functions of the body will be gone through with their accustomed regularity. If it attacks a bird that is already suffering from some ailment it will make most rapid progress, and often carry the little patient off in a few days.

This disease usually follows in the course of asthma, cold, or bronchitis, and in such cases is more often the cause of death than the primary disease. It is sometimes brought on by insufficient nutriment. Thin shrunk seed and stale egg-food often produce atrophy. In such cases the food must be changed, and a liberal supply of fresh highly nutritive food must be provided. I have found Fellows' compound syrup of hypophosphites to be of much service in the treatment of atrophy. From twenty to thirty drops should be placed in half an ounce of water. Two or three drops of cod liver oil should be sprinkled on the soft food daily.

Another frequent cause of this disease is the absence of grit, as a consequence of which the bird is unable to extract the nutriment contained in its food. In such cases the food passes through the body in an undigested condition, and, as a natural consequence, diarrhœa is set up, causing much pain to the little sufferer, which is generally eased by death making a rapid appearance.

The absence of lime also is favourable to its development. Therefore cuttle-fish or some other form of lime should always be in the cages.

Atrophy attacks young canaries at about the age of six weeks or two months, just as the moult is commencing, and it is generally accompanied in such cases by a certain amount of drowsiness and diarrhœa.

BALDNESS.

This is a most curious disease, and one which often makes its appearance in the month of February, just when the birds should be coming into form for breeding. Many at that time lose the feathers about their heads and necks. This baldness is also accompanied by a certain amount of weakness. This complaint, nine times out of every ten, is caused, in my opinion, by the owner failing to supply his birds with fresh vegetable food during the winter months.

It is quite right to avoid green vegetables from November till February, if there is any danger of the supply being frosted, but it must be evident to all who have ever given the matter a moment's consideration that the withdrawal of fresh vegetable food must in some degree affect the birds in a manner prejudicial to their general well-being. When the supply of green food, such as watercress, lettuce, groundsel, etc., is discontinued in the fall of the year, its place should be supplied by apples and boiled carrot. Some fanciers grate a little raw carrot, and mix it with the egg-food two or three times a week.

It is the want of this fresh vegetable food that produces the baldness, owing to the birds becoming surfeited on their usual hard seed and egg-food. The latter food, being very stimulating and heating, causes a feverish condition of the skin in cases where no cooling vegetable matter accompanies it.

When a bird becomes affected, it should be isolated in a large cage, so that it may get plenty of exercise. The bald spot should be rubbed each day with just a touch of vaseline. Fresh vegetable food should be given daily, but not too freely at first, or an attack of diarrhœa will be brought on. It should be allowed to bathe every day. A tonic of some description should be given in its drinking water every morning; two or three grains of citrate of iron and quinine to an ounce of water would be about the right proportion. Any bird which has been affected should not be put up for breeding till several weeks after its feathers have resumed their usual appearance.

BLINDNESS.

A dreadful affliction, but one which, I am pleased to say, is only occasionally met with, except in Crested Canaries. Ophthalmia and cataract are the two forms of this disease with which canaries are troubled. The birds most liable to blindness are Lancashires, Crested Norwich, and Cinnamons. In the Lancashires and Crested Norwich it assumes the form known as cataract, and it is supposed that breeding for excess of feather is the cause. In cataract the first symptom noticed is a kind of mist covering the eye. The bird moves about in a timid fearful manner. Medicinally nothing can be done to relieve or cure cataract; the only thing that can be done in such cases is to submit the sufferer to a veterinary surgeon for examination, and be guided by his advice.

Ophthalmia is an inflammatory disease of the eye, which, if neglected, will result in total blindness. Ophthalmia may be brought on by exposure to cold, or owing to violence. The early symptoms are a flow of thin watery fluid from the eye, whilst the eyeball is red and inflamed. In the morning the secretion will assume a sticky appearance, the eyelids will be stuck together. If taken in hand at once it may be cured in three or four days.

In the first place the bowels should be acted upon by some simple aperient, such as magnesia; the eye should be bathed every two hours with a solution of alum, made by dissolving six grains of alum in an ounce of water. A little spermaceti ointment may be smeared over the eyelids the last thing at night to prevent them from sticking together. If one grain of sulphate of zinc be added to the solution of alum it will be more efficacious.

In the advanced stages of the disease warm fomentations of poppy heads and camomile flowers will prove of much service. If the attack is due to cold, aconite and belladonna may be given internally, in addition to the application of the outward remedies. Ten drops of the homœopathic tincture to a wine-glassful of drinking water. Should the attack be the result of a blow, arnica will be of much assistance for outward application—twenty drops of the tincture of arnica to an ounce of water may be used in the form of a lotion, and the eye should be bathed with it every hour.

In the treatment of ophthalmia a warm atmosphere is indispensable, especially if cold has been the origin of the attack.

BRONCHITIS.

This is a very common disease and is generally caused by exposure to damp, or draughts, or by the bird being hung in a room where gas and fires are in constant use. The symptoms are those of a severe cold. The breathing is hard, and each breath is accompanied by a rasping noise, as though the sides of the throat were being scraped. Occasionally the bird is seized with fits of coughing and sneezing. It will sit on its perch in a drowsy, listless manner, and if spoken to will take very little notice.

Birds suffering from this complaint should be fed on a nutritive diet, yet one that is light, and similar to that advised in the treatment of asthma. No dry seed should be given; all seed should be soaked. Dry seed is very harsh, and acts as an irritant to the highly inflamed membranes of the throat. The temperature most suited to birds suffering from this complaint is one of 55 to 60 degrees Fahrenheit. There should be a plentiful supply of fresh air, as a dry exhausted atmosphere acts as an irritant. Ten drops of oxymel of squills and the same of paregoric should be mixed in the drinking water, and a piece of raw fat bacon should be placed between the wires of the cage.

Birds liable to bronchitis should be carefully watched during the early months of the year, the cold, dry East and North-East winds exercising a very prejudicial effect on the bronchial tubes. A little glycerine placed in the water at this time will often ward off an attack of this distressing complaint.

CATARRH.

“ Just a little catarrh ! ”

“ Only a cold ! ” Yes, but what are its consequences ? Asthma, bronchitis, and consumption, and many other diseases have their origin in an attack of catarrh or cold. In simple catarrh there is inflammation of the mucous membrane of the air passages, attended by the discharge

A MODERN NORWICH PLAINHEAD.

Unlighted Yellow Norwich Cock, bred and exhibited by Mr. J. E. Hartup, of Accrington. In its first season it won 1st Prize at Olympia, Sheffield, Darwen and Watford.

of a thin watery fluid from the nostrils. If the attack is not allowed to get beyond this stage not much harm will have been done, but if it is neglected the health of the bird will certainly be permanently affected.

The best treatment for a cold is aconite. Ten drops to one ounce of drinking water is about the right proportion in which to administer the homeopathic tincture of aconite. If this is given directly the first symptoms of cold are detected it will prove efficacious. Another useful remedy is opium, five drops of the tincture of opium and ten of glycerine to one ounce of water. Nitre also is useful in the treatment of catarrh. Ten drops of sweet spirit of nitre to an ounce of water often cures a cold in its earlier stages. In addition to medicating the drinking water, it is advisable to sprinkle two or three drops of cod liver oil on the bird's egg food.

CONGESTION OF THE LIVER.

This is another of the complaints caused by exposure to either wet or cold. A bird suffering from congestion will be found shivering on its perch or huddled up in a corner of its cage. On being caught its feet will be found to be quite cold, its eyes will look dull and heavy, whilst the body will feel cold and clammy. If these symptoms are neglected fever sets in. Warmth is most essential either in the earlier or later stages. The cage should be placed in the warmest corner of the bird-room. If there is no heat in the bird-room the bird should be removed to a room in which a fire is burning. Warm bread and milk, sprinkled with cayenne pepper, should be given in place of its usual food, and warm water should be given it to drink. Ten drops of tincture of aconite should be mixed with the drinking water, or warm milk with ten or twelve drops of gin mixed with it may be given.

DIARRHŒA.

Diarrhœa, or Scours, as it is called by some, is generally caused by decaying or sour food. Impure water and cold are also frequent causes of this complaint; another

cause is an overflow of bile. In diarrhœa the discharge from the bowels will be frequent, and will consist of thin watery motions and half-digested food. The treatment of diarrhœa should be commenced by a couple of drops of castor oil being administered from the point of a knitting needle. A small quantity of prepared chalk might be added to the egg food (about enough to cover a sixpence) and the same quantity of powdered charcoal. Fifteen drops each of elixir of vitriol and tincture of opium should be added to the drinking water.

A very simple remedy, and one that is often effectual when all others fail, is to take an arrowroot biscuit, boil it in a little new milk, then add sufficient silver sand to make it about the consistency of ordinary egg-food, and give this to the bird instead of its egg and biscuit. This was the favourite remedy of the Lancashire pitmen who years ago used to be such keen lovers of Belgians.

GOUT.

Gout is a complaint that is only an occasional visitor to our bird rooms, and when it does come it affects birds that are of a sleepy, lazy character such as Crested Norwich and Lancashires. Birds that are affected are feverish and drink greedily of water. The feet and legs are much swollen and inflamed. The treatment I have found most effectual is to keep the bowels acting freely, and to dress the parts affected with benzoline or Friar's Balsam. The benzoline should be applied with a camel-hair brush two or three times a day, whilst a small quantity of magnesia or a few senna leaves in the drinking water will do all that is required in the way of keeping the bowels open. When Friar's Balsam is used, the legs and feet should only be painted once a day, and should be well soaked in warm water before being painted. Should the skin show signs of cracking, stop painting at once, and wait till the skin is sound before you use the Friar's Balsam again.

ENTERITIS, OR INFLAMMATION OF THE BOWELS.

Enteritis, or inflammation of the bowels, is caused by partaking too freely of stimulating food, or of sour or de-

cayed food ; cold will also produce it. Foul water or water glasses is another fruitful source of this complaint. When a bird becomes affected it will be "all of a lump," lying on the perch ; or if standing it will not be able to rest ; it will keep putting its legs up and down in a spasmodic manner. The bird refuses food, but will drink an unlimited quantity of water if allowed to do so, whilst the bowels are generally costive, although at times it is otherwise, and the inflammation is accompanied by severe diarrhœa. Another symptom is a cough, and when seized with a fit of coughing the bird will throw from its mouth dark, bilious-looking mucus.

Examination of the bird will reveal the fact that the abdomen is much swollen and discoloured, and, according to the acuteness of the attack, will be the discoloration of the stomach. In the earlier stages, or in the slight attacks, it will be red, but in the more acute stages it will be almost black, with a nasty greenish-yellow tinge.

The treatment of this complaint must be prompt and decided if it is to be effectual. The bird should be caught and a little turpentine should be applied to the abdomen with a camel-hair brush. Two or three drops of castor oil should be administered. When the bowels have acted the bird may be allowed a drink of water, to which has been added a little opium and ipecacuanha wine. To one ounce or wine-glassful of water add fifteen drops of tincture of opium, and thirty of ipecacuanha wine ; a small piece of gum arabic might also be dissolved in it.

No stimulating food should be given. Arrowroot biscuits boiled in new milk make a capital diet for a bird recovering from this complaint. On recovery the bird will require a tonic of some kind. A small quantity of citrate of iron and quinine placed in the drinking water will do all that is required. To one ounce of water add about as much of the citrate as will lie on a threepenny piece.

HEPATITIS, OR INFLAMMATION OF THE LIVER.

Inflammation of the liver, or, as it is known to medical men, hepatitis, is a very deadly disease, and one from which some hundreds of birds die annually. The chief causes

of hepatitis are a too generous diet, a high atmospheric temperature, insufficient exercise, and occasionally weakness of the nervous organisation. The symptoms of hepatitis are restlessness, nervousness, feverishness, and great longing for drink.

Some authorities recommend pulling a few of the wing and tail feathers. I have tried it, but could never see much advantage from this mode of treatment, except when it has occurred during the moulting season. The

ADMINISTERING MEDICINE FROM A QUILL OR KNITTING NEEDLE.

How Not to hold the bird.

The Correct Way in which
to hold the bird.

idea covering it is blood-letting, but except during the moult very little blood flows from the pulling of feathers.

Opium is also a favourite remedy with some, but it should at all times be avoided in derangement of the liver; its effect is such that it causes torpidity of the organ, the very thing that must be avoided. Aconite, nux vomica, bryonia, dandelion, colocynth, ipecacuanha wine, castor oil, and magnesia are all useful in disorder of the liver, and may one and all be used with much success in its treatment.

In the early stages of the disease two or three drops of

A YELLOW BORDER FANCY HEN.

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castor oil should be administered, and as much carbonate of magnesia as will lie on a sixpence should be mixed with the drinking water. *Nux vomica* is of much service at this stage, especially when the derangement is caused by excessive richness of food ; one drop of homeopathic tincture of *nux vomica* should be given in five times its quantity of water ; this will make two doses, and should be given every two hours ; it can be administered from a drop glass.

Where there is heat, pain, and constipation, *bryonia* is of much service, and should be administered in the same strength and by the same means as *nux vomica*. If cold has been the primary cause of the attack, *aconite* may be used with good results. Two hours should be allowed to elapse between each dose.

When the worst symptoms have passed, the following treatment will prove of much service : Roast a piece of dandelion root, place it in the drinking water, and with it from ten to fifteen drops of *ipecacuanha* wine to each half ounce of water.

The diet should consist of arrowroot biscuit, boiled in milk, or ground rice treated in the same manner ; or both may be used, biscuit one day and ground rice the next. All stimulating food should be kept from the bird for some time. When all symptoms of inflammation have subsided a tonic may be given. Infusion of gentian will prove as serviceable as any, or citrate of iron and quinine.

PNEUMONIA, OR INFLAMMATION OF THE LUNGS.

The disease which is known to the medical profession as pneumonia signifies acute inflammatory condition of the lung substance. It makes its appearance as a rule during the spring and fall of the year. March, April, September, and October are the months in which it is most prevalent. It is brought on by exposure to cold and damp. The bird-room window and door may be left open so as to cause a draught, or the birds may be exposed to the weather whilst on their way to or from a show.

The symptoms are feverish shiverings, loss of appetite, difficulty of breathing, great prostration, and discharge

of mucus from the mouth and nostrils. A warm but dry atmosphere is needed for the successful treatment of pneumonia. It may be distinguished from bronchitis by the suddenness of the attack, and the greater prostration and feverishness that attend it.

Aconite is of much service in the primary stages of the attack, and may be given in the drinking water, five drops of the tincture to half an ounce of water. Should the symptoms become very severe, belladonna will be of much value in arresting the malady. It should be administered as follows: Two drops each of tincture of aconite and tincture of belladonna, and eight drops of water; this will be enough for four doses and should be given every hour till the symptoms have subsided, and, as the attack loses its force, the temperature of the room may be decreased, but it must be done gradually. I refer to homeopathic tincture of the remedies mentioned.

A sudden change of temperature would intensify the symptoms, and possibly produce fatal results. The diet, as in all chest diseases, must be light yet sustaining.

PARASITES.

I hesitate as to whether parasites should be admitted under the heading of diseases. There can be no doubt that parasites, or, as they are more familiarly known to keepers of canaries, red mites, are a source of much trouble. It is not generally known, however, that the death of many a canary is also due to parasites. The late Jacob Mackley was the first to bring to my notice the fact that parasites do kill canaries. It often happens that a canary which is full of life and vivacity during the day is continually coughing during the night. Its owner imagines that it has a cold. He treats it accordingly, but still the coughing goes on. When this happens the bird should be caught, its beak opened, and by the aid of a strong magnifying glass its throat should be carefully examined. It will then be seen that adhering to the sides of its throat are a number of parasites. How do they get there? In the opinion of Mr. Mackley, like most vermin they keep in their dens during the day, but at night they sally forth seeking whom they may devour. They leave

the cracks and crevices of the cage, and make for the birds. Not content with feasting on the external portion of the body, some of them go off on a tour in the internal regions ; but they cannot get far, the mucus in the nostrils and throat causing them to stay their journey.

This, said Mr. Mackley, it is that causes the irritation and sets the bird coughing. When the bird is eating or drinking, some of them get forced into the stomach, and then local irritation of that organ is set up, which oftentimes leads to fatal results. Should a bird be found with insects in its throat, a camel-hair brush should be dipped in equal parts of spirit of turpentine and glycerine, then inserted in the throat and twirled rapidly round ; this operation should be repeated two or three times. A small feather should also be dipped in spirits of turpentine and drawn through the nostrils. The bird should be well dusted with insect powder, and placed in a clean cage. A little magnesia should be placed in its drinking water, to keep the bowels open and thus prevent any evil results that might be caused by the presence of the insects in the intestines.

Other learned men have said that Mr. Mackley was altogether wrong in his diagnosis, and that the parasites in the throat could not possibly be body parasites. Mr. Mackley, however, stuck to his guns. It may be, however, that these parasites found in the throat and mouth may have come from foul water. In any case, the treatment given is effectual.

When a cage is found to be infested with red mite, it should at once be removed from the bird room and thoroughly cleansed with hot water and soda. It should be exposed to the weather for several days, then dried, and all cracks and crevices should be well painted with fir-tree oil. All breeding cages should be subjected to this treatment both at the commencement and end of each breeding season, and occasionally during the breeding season. If a little alum is dissolved in the bird's bath it will assist in keeping this scourge of the bird room at a distance ; a small quantity of infusion of quassia placed in the bath will have the same effect. During the breeding season the nests should be kept well dusted with the insect powder.

If a cage is suspected of harbouring red mites a thin

white cloth should be hung over it at night. In the morning it will be covered with red mite, if any are about, it can then be dipped into a pan of boiling water and the nocturnal marauders killed.

“PIP.”

This is the peculiar title given to the derangement of the oil gland on the bird's rump. This oil gland, when in a healthy condition, exudes oil, with which the bird plumes and preens its feathers. Occasionally the gland gets out of order, and a swelling makes its appearance. This swelling should be pricked with a needle to let out the matter, and the gland anointed with a little vaseline or olive oil. Sterilise the needle before using. An aperient, such as a little magnesia or a few senna leaves, may be placed in the drinking water, and in a few days the little sufferer will be quite well.

RHEUMATISM, OR CRAMP.

All birds are more or less subject to this troublesome complaint. Sometimes it attacks the limbs, and at other times the stomach. It is generally brought on by exposure to cold. The treatment that I have found most effectual is the following, and in all cases I administer a couple of drops of castor oil. If the stomach is the part affected, it should be painted with a little brandy, and a few drops of weak solution of brandy and water should also be given. In the place of the usual drinking water the following should be used: Fifteen drops of antimonial wine, ten drops of laudanum, water one ounce. If the limbs are affected they should be painted with spirits of turpentine or Friar's Balsam.

RUPTURE.

One seldom meets with rupture in the bird room, yet occasionally a hen that has been egg-bound becomes ruptured. If such happens, take the hen in the hand, cleanse the parts with warm water in which some disin-

MARKED YORKSHIRES.

Birds suitably mated for their production.

Facin page 112.

fectant has been mixed. Dry carefully with a soft cloth, and then anoint with sweet oil, and gently press back into position.

SKIN DISEASE OR FEATHER ROT.

Canaries are occasionally affected with a skin disease which appears round the head and neck in the form of a scurfy eruption, causing the feathers to fall out and break off. I have failed to detect the cause of this disease in the few cases that have come under my notice, but as it mostly occurs early in the breeding season I have concluded it has some connection with the overheated state of the blood at this time. The treatment that has proved the most successful has been to anoint the parts affected with vaseline and give a tonic, with a liberal supply of watercress and soaked seed. The daily use of the bath should not be neglected.

SURFEIT.

This is practically a weaning trouble, as it is an affection to which young canaries are particularly liable. When they leave their parents and set up housekeeping on their own account they are apt to overfeed themselves with egg-food. This leads to inward irritation. The abdomen swells and assumes a dark appearance, whilst the bowels are generally constipated.

When these symptoms are observed, two drops of castor oil should be given immediately in the beak, whilst a camel-hair brush should be dipped in castor oil and then introduced into the vent, and a little magnesia should be placed in the drinking water. This will generally set matters right.

The diet for a few days after the attack should consist of bread and milk. When all symptoms of the attack have disappeared the magnesia may be discontinued, and a little citrate of iron and quinine may be given in the drinking water—say one grain to an ounce of water.

SORE FEET.

In a well-ordered aviary this affection is seldom or never met with. Neglect to provide the birds with a bath

is a fruitful source of sore feet. During the breeding season, the hens are liable to get their feet clogged with the nesting material; the sand and excreta adhere to this, and sore feet are the result. The bird affected should be caught, its feet soaked in warm water, all dirt removed, and the sores anointed with a little vaseline or spermaceti ointment.

SWOLLEN JOINTS.

These sometimes occur through the bird getting caught by the feet in the wires of the cage. The parts affected should be well bathed in warm water, and painted with Friar's Balsam.

TUMOURS.

Canaries are not often troubled with tumours yet occasionally they make their appearance. The part usually affected is the beak and head. Tumours are caused by a stoppage of the natural secretions of the skin. They differ from abscesses in that there is no inflammation attending their growth. Immediately a tumour make its appearance the bird affected should be taken to a veterinary surgeon. It is not advisable for a fancier to attempt treating it himself.

TYMPANY.

Hens are often affected with Tympany during the breeding season. The skin becomes inflated with air, but the bird does not seem inconvenienced thereby, The distended skin may be pricked with a needle previously dipped in boiling water, or held in the flame of gas, or candle, for a moment, to sterilise it. Never use a pin. The air will then escape, and the skin resume its normal appearance.

TYPHOID, OR BIRD FEVER.

Typhoid is a disease, I am thankful to say, which never visited my own aviary, but I have seen its ravages in the rooms of other fanciers. Several fanciers known to me have had their aviaries attacked, and the result in each case has been the death of nearly every bird in the place.

Bird fever is very rapid in its progress, and in a week or ten days will completely devastate a large bird-room. Birds are seized with it, and unless the treatment is immediate it is useless. The symptoms are drowsiness, high feverishness, and diarrhœa. The excreta is of a dark watery nature, smells offensively, and is sometimes tinged with blood. The most effectual treatment of this complaint has been by the use of sulphuric acid and laudanum. This was administered through the medium of the drinking water. To one ounce of water were added fifteen drops of diluted sulphuric acid, eight drops of laudanum, and ten drops of spirit of chloroform.

Each case of this terrible disease that I have seen has, in my opinion, been brought on by insufficient attention to the details of management. It is quite impossible for birds to thrive and do well in a vitiated atmosphere. Yet I have been in some houses in which the smell of the bird room pervaded the whole house.

If birds are to thrive they must have plenty of fresh air, their cages cleaned out at least once a week, a liberal supply of clean sand should be provided, the food should at all times be fresh and sweet, all stale or decayed food should be removed from the cages, the water, both for bathing and drinking, should be fresh daily, all feeding and drinking vessels should be kept scrupulously clean, and then the ailments of the bird room will be few and far between.

In cases of illness the bird affected should always be placed in a cage by itself; and where the affection is contagious, such as typhoid, it is advisable to remove all healthy specimens from the room in which the outbreak occurs; and, not only should they be removed from the room, but they should be placed in clean cages. The old cages and the room should be thoroughly cleansed and disinfected before the birds are returned to their old quarters.

CHAPTER VI

SEEDS AND THEIR USES

ALTHOUGH canary breeders use egg food and prepared foods as substitutes for egg food, and green food, seed remains the great stand-by of the canary's menu, and seed to-day plays, as it ever did, the most important part in the dietary of the canary. The success or otherwise of an aviary depends in great measure upon the care and judgment exercised in the selection of seed. Without good sound seed it is impossible to keep birds in good health. At all times avoid kiln-dried, sour, or fusty seed. Let your seed be sweet to the smell, bright to the eye, and slippery to the touch. Don't buy shrivelled-up seed, but have it plump and full of substance. Have the best that money can buy.

CANARY SEED.

This seed comes first on the list of all seeds used by the canary breeder, it being impossible for him to do without it. It is to the canary what bread is to ourselves—the staff of life. I advise that the seed hopper be at all times full of the best Spanish canary seed. Let it be the staple food of your pets. It is from canary seed that your birds will get both music and heat, it being a medium of nitrogen and carbon, and consequently it is well fitted to be the prime factor in the dietary of our little pets. The best is without doubt the Spanish, as, being thoroughly ripened in a sunny climate, it never wants kiln-drying, in which process much sulphur is used. This destroys some of the nutritious parts of the seed and makes it difficult of digestion. Young birds cannot digest highly kiln-dried seed even after it has been moistened in the crops of the

VARIEGATED BUFF BORDER FANCY COCK.

parent. There are two ways of testing it—first, by pushing the hand into a large bag of seed ; if the hand slips easily into the seed, it is all right ; but if the fingers will only go in about up to the knuckles, it has been sulphured. The second way, is to hull a few seeds, bite them in two, and try to swallow them. If they have been kiln-dried, they will stick in the throat, and take some time before they are dissolved by the saliva. How then are birds to live on such seeds and be healthy ?

RAPE SEED.

Rape is very similar to canary seed in its chief properties. but it is also possessed of others which make it desirable—nay, more, necessary—that it should be used in moderation. If a temperate hand is not used in connection with rape seed you will be often plagued with that scourge of the bird-room, diarrhoea, owing to the fact that it possesses strong acrid and purgative properties. Never use any other than the best red, or summer, German rape. There is much swindling practised in connection with rape seed, by unprincipled dealers, and it is not always easy to detect the fraud, unless one has experience. There is only one good rape seed suitable for canaries, and that is the small red summer rape, or, as it is often called, German rape, because a large proportion of the best seed is imported from Germany. Some of it, however, is grown in this country. Large, coarse, winter rape, or a *mixture of old and very inferior summer rape with winter rape* is constantly sold as summer rape. This should always be refused by the fancier. The difference is readily detected. Good, sound, summer rape is a very small, plump, red, round seed ; and when eaten has a sweet, soft, mellow flavour. Inferior summer rape has a shrivelled appearance, and has scarcely any kernel inside when bitten in two. Winter rape is a largish, black seed, nearly as large as cabbage seed ; the husk is hard and thick, and the seed has an acrid, bitter taste. This seed often causes much illness, and the owner is utterly at a loss to know what is the matter with his little pets. The symptoms are generally looseness of the bowels and pain in voiding the excrement.

LIN OR FLAX SEED.

This seed needs to be used with great care, as it is very fattening, being full of oil. It is very valuable to the canary fancier from the fact that it is such a grand demulcent, softening and mollifying any inward irritation that may be set up in the intestines; further, it is a splendid seed for keeping birds in the very pink of condition, producing, as it does, the wonderful lustre and beautiful brightness of coat that is so much coveted on the show bench. At the close of the moult it is invaluable.

HEMP SEED.

This is a seed which is much abused, and at one time I was amongst those who abused it, and that in no measured terms. Time, that unerring monitor, however, has taught me differently, and I have proved that, used at the right time, in a right manner, and in right quantities, it is a most valuable seed.

Some authorities in the fancy say it is productive of great evil, and that it operates on a bird's liver in the same manner that brandy does on that of the human being, viz., by enlarging it and gradually but surely rotting it. I can quite believe this if it is given in excess, because it is possessed of anæsthetical and stimulating properties; but if used in a moderate way it is of much service, especially during the breeding season and the cold months of January, February and March. It is also very serviceable to birds affected with asthma or consumption, containing, as it does, heating and stimulating powers. In cases of diarrhœa it is oft-times of great service. Again, it will, when soaked, often induce hens to feed their young when all other means have failed; so that, on the whole, I think there is more to be said in favour of *a moderate use of hemp* than can be said against it, providing always that restriction is laid on the hand that ladles it out. The hemp bag must not be opened too often, or too wide. The great danger in the use of hemp is when it is crushed. The husk contains properties that are very injurious, and when hemp is crushed so small that the birds cannot separate the husk from the kernel it induces much evil.

MILLET SEED.

I never use this in bulk. It contains such a small percentage of nourishment as to be absolutely useless to the canary breeder. Spray millet is useful for hanging in aviaries. It gives the birds something to amuse themselves with, and thus often acts as a preventive of cannibalism, i.e., feather plucking. Millet seed boiled in milk is sometimes given as a special pick-me-up or restorative to birds that are off song.

MAW OR POPPY SEED.

Here we have a seed that I am particularly well disposed towards. It acts in many ways for the benefit of the birds. It is very nourishing and comforting, being rich in oil. Its medicinal properties are also very great, so much so that it will often cure diarrhoea without the aid of any drug. If a bird is a bit off feed, maw seed will invariably bring it on again. I have derived so much benefit and advantage from the use of maw seed that I unhesitatingly advise all canary breeders never to be without it. In addition to its other properties it is, in my opinion, a great and valuable aid in conditioning birds.

INGA SEED.

This is a most useful and valuable seed, but it must be used sparingly and with discretion. It is sold under various titles, but by whatever name it is called, whether inga, niga, niger, or nigra, it is one and the same seed, and a grand one too. I have used during the winter and spring months immense quantities. Some fanciers only use it during the breeding season ; I use it all the year round especially amongst the show birds. Some breeders only feed their hens on it ; I let my cocks have it as well. I have had most beneficial results from its use at all times and all seasons ; also with old birds, both cocks and hens, and the youngsters as well, but, as I have said, it must be used with discretion. Birds kept in small cages, or birds with a predisposition to put on fat must not be allowed much, but strong, healthy birds that take plenty of exercise may be given a supply twice or thrice a week regularly.

Although it is so rich in oil, I have never experienced any evil effects from its use, and for keeping birds in good health and full song there is no seed to equal it. Its greatest value to the canary breeder, though, is the wonderful way in which it acts upon his breeding hens. It is a splendid preventive of egg-binding, owing to its grand lubricating properties. By its regular use the ovaries and egg passages are kept in a most healthy condition.

There are other seeds given to canaries by some fanciers, but those I have dealt with here are all that are really needful. Any others such as thistle, teasle and lettuce are given more as tit-bits, and are not of practical service. anyone wishing to give his birds a treat may buy a packet of Linnet or Goldfinch mixed seeds and this will serve his purpose.

CHAPTER VII

EXHIBITING

THE ART OF STAGING WINNERS.

EXHIBITING as we know it to-day is a fine art. Competition in all varieties is keen—very keen—and far more depends upon how a bird is staged than many seem to think. The art of properly preparing birds for exhibition is one that must be thoroughly learned before success can be attained on the show bench. There is a right and a wrong way of doing everything. Exhibiting is a source of great anxiety and perplexity to the majority of young fanciers. The novice invariably goes wrong, to the great disadvantage of his birds and his own prospects of success. Most novices fail in staging their birds in a satisfactory manner, and often when judging and reporting I have noted “dirty birds,” “dirty cages,” “dirty perches,” “cages badly painted,” and “badly washed birds.” Many things can be forgiven when ignorance can be honestly pleaded, but in the abundance of literature with which the cage-bird world is now flooded it is almost impossible for an exhibitor to plead ignorance of any of the details of aviary management.

The birds having come through the moult safely and in good trim, extreme care must be used to keep them in perfect plumage throughout the show season, which extends from October to February. If the birds have been moulted in small cages, it will be best to keep them in those cages during the show season.

If kept singly, and all exhibition stock should be thus kept, a cage 15 to 18 inches long, and about eleven deep, will be quite large enough for each bird. These cages should be made of wood, and the front of wire. In these cages the birds will be kept clean and quiet.

HEADS OF LIZARD CANARIES. FAULTS DESCRIBED.

1—Broken-cap. 2—Over-capped. 3—Under-capped. 4—Bold-faced. 5—Patch-capped.

The holland covering used during the moult should also be used during the show season. It is quite impossible to have birds in first-class exhibition form unless they are thus kept. Those fanciers who, owing to want of space or other reasons, are unable to have a large stock of cages, must work under much difficulty. The plan most suitable for any who may be thus situated, and one that is generally followed by the working men fanciers of the North, is at the end of the breeding season to subject all the breeding cages to a thorough good cleansing, and use them for moulting and keeping the show specimens in during the winter months.

OVERHAULING THE CAGES AND TRAVELLING CASES.

During the last few weeks of the moulting season, just when the birds are fining down, the fancier should turn his attention to his stock of show cages, travelling hampers or cases. The cages should be carefully overhauled to see if any wires are broken or loose. A damaged wire may mean the loss of a valuable bird, either through injury or by its escaping from its cage whilst away from home. The wires having been put in good order, the cages must be painted. The outside of all box cages should have a coat of Brunswick or Berlin black, whilst the inside should be painted light blue, as advised in the chapter on Cages. I have tried various colours for cages but have found nothing to equal a pale blue interior.

The hampers, or cases, should be overlooked to see if the locks, buckles, straps, etc., are all in perfect order. As to which is the best travelling case for birds, I strongly recommend closely made wicker hampers. These should be lined with unbleached calico, and have a good double flap at the top. This for birds in box cages. For birds in open wire cages I recommend that the lining be of green baize. My reason for preferring strong wicker hampers is that when thrown on to a railway truck or platform the jar is not quite so bad for the birds as when a non-yielding wooden case is used.

ENTERING FOR A SHOW.

When the birds are ready for exhibition, the exhibitor should select a show from the list of those published

in the columns of *Cage Birds* and send a post card to the secretary asking him to forward a schedule. Having received the schedule, enter up the particulars of his bird or birds in the columns provided for them, and return the entry form to the secretary of the show not later than the day before entries close. On no account be one of those who add so enormously to the secretarial work by sending late entries. In filling up the entry form, write clearly and distinctly, and then check your entries by the schedule. By doing this less risk will be run of making an entry in the wrong class.

A few days before the show a label will be received for the outside of the case. On this label write in the most legible manner your name and address. Then tie it securely to the lid of the hamper. In addition to this address label, some small labels will also be received on which will be written the number of the class in which each bird is entered, and also the consecutive number which will agree with the number opposite each entry in the catalogue. These class labels must be securely attached to the lower cross-bar of each cage at the right-hand corner; open wire cages, such as are used for Yorkshires, Scots, and Borders should have the label on the top cross-bar at centre of end of cage. In the bottom of the cages place a few rice or oat husks; the seed should be thrown in the bottom of the cages, and sufficient to last the time that the birds are absent from home. The cages used by the fanciers of Scots Fancies and Borders are usually fitted with a seed box.

HOW TO WASH A CANARY.

The process of washing their birds for exhibition is often a stumbling-block to young fanciers. I well remember with what feelings I approached my "first." More can be learnt from one practical illustration of canary washing than by reading a number of treatises on the subject. Those who are acquainted with a skilled exhibitor should, if possible, gain admission to his sanctum when he is putting some of his gems through the refining process. The operation of washing a canary is to the novice a most difficult undertaking, and, should he be at all nervous, it is liable to end in a most disastrous manner.

Two things are most necessary to the operator, namely, a fair share of nerve, and plenty of confidence in his ability to bring the operation to a successful issue.

Before attempting to wash high-class show specimens, the operator should practise with a few common birds. British finches are the best for the purpose, because they are strong and lusty, and, if the attempt should end in maiming, laming or killing either of these specimens, the loss will not be great. If successful with these commoners, sufficient confidence will be acquired to put more valuable specimens through the process. After a short time the necessary confidence and knack of handling the birds will have been acquired, and the washing of five or six birds will not cause more uneasiness than will be felt in performing the same operation on one's own self.

A STEADY FIRE A GREAT ASSET.

For the purpose of drying the birds the fire should be bright, yet not too fierce. In making up the fire it should be well stirred with the poker and all dust removed. The best way to make up a fire for drying birds is to use equal quantities of coal and coke; nice nobbly pieces about the size of a tea-cup should be used. A fire made up in this way will throw out a much steadier heat than one made with coal only; it also will produce less smoke.

Whilst the fire is burning up, the few articles required to successfully accomplish the task should be collected together. These are three good-sized bowls—hand-basins will do—one for washing and two for rinsing; a tablet of soap, a badger-hair shaving brush, a towel, two nice soft cloths—old silk handkerchiefs or discarded chamber towels will do—one jug of cold water, also a jug of hot water.

As to what soap is best, opinions differ. Pears', Brown Windsor, Glycerine, White Curd, and other soaps all have their devotees. One thing must be guarded against, and that is common soap. The best-made soaps are more free from alkali than the common ones. The alkali contained in common soap draws the colour from the plumage.

In addition to the articles I have named, a drying cage

of some sort is required. Some fanciers use the ordinary box show-cage, others use breeding cages. I prefer a small box made after the style of the store cages used by bird-catchers, the box being of wood, the front only wire. It should be two feet long, one foot high, and ten inches deep from back to front. The door should be on the top. A few perches should be fixed about two inches from the bottom of the cage. The bottom of the cage should be covered with a piece of loose flannel; this will soak up any excrement that may be voided, and thus prevent the birds from soiling their plumage. The two cloths that are to be used for drying the birds should be hung on the drying cage in front of the fire; this will warm them and prevent any draught getting at the birds whilst they are drying.

ALL THINGS BEING READY.

All things being in readiness, some cold water should be placed in each of the basins; to this add sufficient hot water so that you can comfortably bear your hand in it. If the water is hard a tea-spoonful of glycerine should be added to it; this will soften and assist in removing the dirt more freely. Take your soap, and with the shaving brush work up a good lather in the first basin. Place a piece of flannel under the soap in the soap dish; this will prevent it from wobbling about. You will now be quite ready to commence operations.

NEVER SOAP THE BIRD.

First of all take the bird you intend to wash in your left hand, with its head between your thumb and first finger and the tail towards your wrist. Then immerse the bird in the lather for a moment or two. This will loosen the dirt. Dip the brush in the water first, rub it on the soap, commence the process of removing the dirt by spreading the right wing over the fingers, give it a good soaping with the brush, then perform on the tail. Turn the bird round in your hand and serve the left wing in the same manner; then place the bird on its back and apply the brush to the under part of the wings, tail and body. Attention should now be given to the head and neck,

and it is here that most care will be required. The dirt seems to cling more firmly to the head than it does to any other part of the body.

Great care is needed in keeping the brush out of the eyes; a little soap will not hurt, but should the brush be used at all roughly round the head the bird's eyes may sustain serious injury. It is a good plan to soften the dirt round the head by rubbing with the finger, and then the brush need only be used very little near the eyes. Never rub soap directly on the feather, always use the brush or finger to apply it.

RINSING OUT THE SOAP.

The lathering having been properly performed, you must next proceed to get the soap out of the feathers. Hold the bird securely in the left hand, and give it a good rinsing in the second basin, then finally rinse in the third basin; a tea-spoonful of glycerine may also be mixed with the water in this basin. Don't be afraid to use plenty of water; give the bird a thorough sousing, for unless you get every particle of soap out of the feathers your labour will all be thrown away. Should any soap be left in the feathers, the bird will present a very rough appearance when it is dry.

NOW TO THE DRYING.

The rinsing being finished, draw the wings and tail smartly through the finger and thumb of the right hand; this will extract much of the water. Then take one of the cloths, roll the bird in it, and lay it on the table whilst you wipe your hands in the towel. Having done this, throw one end of the cloth over your left hand, place the bird in it with your fingers and thumb under its wings, take the other end of the cloth in your right hand, and proceed to dry the back, wings and tail, at the same time so manipulating the left hand that all the water in the under part of the body may be drawn out. Then straighten the wings and tail with the right hand, place the bird on its back in the drying box, and proceed with number two. The birds must be kept warm so the

A GRAND BODIED YORKSHIRE.

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whole of the drying operation should be performed as near the fire as possible.

If the bird is not too much exhausted by the washing process, it is best to stand it on the perch instead of laying it on its back. Some fanciers place the birds between two pieces of flannel when they put them in the drying box or cage, others roll them in silk handkerchiefs. This system dries a bird very nicely, but it would require a larger stock of silk handkerchiefs than most people keep, and also takes rather more time than the other process. Some birds stand the washing much better than others, and it takes little effect on them, but on some of their weaker brethren it has a very exhausting effect. Another reason why I like the birds to perch when put in the drying cage is that the neck feathers do not get rubbed out so quick as when birds are laid on their backs.

If a bird should look as though it is approaching its end when laid in the drying box, you need not be alarmed ; after lying like that for some little time it will get on the perch and soon pull itself together.

FATALITIES ARE FEW.

Fatal results from washing birds are few and far between. When they do occur it is generally by the bird being held too tightly. Some birds struggle very much whilst being washed, and, should you at any time feel that a bird is going to elude your grasp, it is best to let it go—you can easily pick it up again ; but, should you make an effort to tighten your hold of it, you will be almost certain to harm it.

If the bird is held firmly in the way I have described it will not be able to struggle much. If you are at all nervous, your grasp of the bird will not be firm. By some intuitive instinct birds always seem able to tell if the person handling them is nervous, and they act accordingly. But when secured in a good firm grasp they as a rule struggle little. There is a great art in handling birds ; an adept at the practice feels as much at home when handling one of his pets as a mother does in handling her baby. The birds know and appreciate the difference between the two systems.

WHEN TO REMOVE FROM THE DRYING CAGE.

The birds should not be allowed to get too dry in the drying cage. When about half dry they should be taken out and placed in clean show-cages near the fire. In half an hour they should be removed to the other side of the room, and in about a couple of hours they might be returned to the bird-room, but it is wiser to leave them all night in the room in which they have been washed. It takes five or six minutes to wash a bird, and it should be in the drying cage not more than twenty or twenty-five minutes.

All cages in which newly washed birds are placed should be scrupulously clean, or the washing will have been labour in vain. Birds with soiled plumage stand very little chance on the show bench nowadays ; competition is so very keen that the slightest difference in condition oftentimes turns the scale. During the time intervening between the birds being washed and their despatch for the show they should be closely covered to exclude all dirt.

SHOW BIRDS NEED GENEROUS FEEDING.

It must not be forgotten that exhibition stock require a liberal and generous diet during the show season. The travelling to and from shows, the washing, and the excitement of the show rooms, must all tend to exhaust the nervous energy of their little bodies. The best seed should at all times be used. Cheap, badly cleansed seed is dear at any price. Good Spanish canary seed should form their staple food ; occasionally a little inga, hemp (very little of this), maw and linseed should be given. A small quantity of fresh egg-food should be given every morning, or egg cake, or one of the prepared canary foods.

MILK INSTEAD OF WATER TO DRINK.

Milk is much liked by birds, and it is also good for them occasionally in place of their ordinary drinking water. Some fanciers give their birds a few drops of cod liver oil on their soft food twice or thrice a week during the show season, and I unhesitatingly add my testimony to its great value for keeping birds in good health and the pink of condition.

THE LAST THING TO DO.

The day before the show the birds should be run into the show cages, which should be clean and quite ready to receive them ; each cage should be wrapped in paper and placed in the travelling-case. Fasten the case securely, and despatch it so that it will reach the show in good time. Exhibits often get delayed by the railway authorities, and it is most provoking to have one's cages labelled " Too late for competition."

ATTEND THE SHOWS IF POSSIBLE.

Young fanciers should make a point of attending the shows at which they exhibit when it is at all possible to do so. They will then be able to compare their own stock with the winning specimens, and thus see in what particular point or points they fail. In addition to this, by mixing with older fanciers they will gain much information that will prove of service to them. If the judge is at all get-at-able it is a good plan to ask him to tell you how your birds fail to the winners, and also ask his advice as to your future breeding. Most of our judges will give this information to a young hand, and such information should be highly prized.

TREATMENT AFTER THE SHOW.

When birds reach home from a show they should be well cared for. Directly they are unpacked they should have some fresh-made egg-food given them ; instead of water give them warm milk to drink, with a few drops of gin in it. If a bird looks at all drooping, it should be placed near the fire, and it will, generally speaking, soon revive, after which it may be returned to the bird-room with its fellows. If the weather is very cold, and the birds have had a long journey, a little cayenne pepper may be sprinkled over the egg food. My last words on exhibiting are in the form of a caution : Don't show your birds too often. Five or six times during the season is quite often enough to show a bird.

CHAPTER VIII

THE BELGIAN

A BREED THAT HAS LOST POPULARITY.

FORTY-odd years ago, when I first entered the ranks of canary exhibitors, the Belgian was one of the most extensively kept in the counties of Lancashire, Cumberland, Northumberland, Durham, in the Midlands, and in Devonshire and Somerset. These were the strongholds of the breed, and it was no uncommon thing to see classes of twenty, or more, at such shows as Liverpool, Nottingham and Plymouth. The first special prize I ever won was won with a buff Belgian at Plymouth, and it is more than forty years ago. I loved the Belgian then, I love it still. That first special would keep its memory green in my heart, even if nothing else did, but I admire the Belgian and always have done since I first met it.

In the days of which I write it was always spoken of as the "King of the Fancy." Alas! 'tis not so now. One can visit twenty shows in a season and not see one single specimen of the breed, and it is many years since I saw a class of Belgians at an English show; and even in Scotland, where once it was very popular, one seldom comes across it now. I must say, however, that there are in Scotland to-day many birds known as Scots Fancies, which, if they were placed in a Belgian cage and trained as a Belgian, would be equal to some of the best of the good old days.

THE SCOTS TO BLAME.

In my opinion the passing of the Belgian is due in great measure to the Scots. Thirty to thirty-five years ago began a craze amongst breeders of Scots Fancies

BELGIAN CANARY IN SHOW POSITION.

for Belgians, not to breed as Belgians, but to cross with the Scots Fancies to secure nerve, drive and shoulder. They took all these from the Belgian, and so like did some of the Scots Fancies become to the Belgian that it was a difficult matter sometimes to tell one from t'other or t'other from which. The result of this craze was, that not only was England denuded of its best Belgians, but the Continent also. I know the time when Antwerp, Bruges, Brussels, Courtrai, Ghent, Ostend and other cities of Belgium all had flourishing canary societies and held two or three exhibitions each year. Before the Great War many of these had ceased to exist, and others only lingered on. Then came the War, and that killed the canary fancy in Belgium. Each time I have visited Belgium since the War I have asked for Belgian canaries, and the men who bred them, but none of any real value have I found. The breed, however, is not quite dead. I have seen a few, but they cannot compare with the birds of old. I have heard some of our soldiers who were in Belgium speak of having seen a number in the early days of the War, and how they called them "Humpty-Dumpties." But the breeding of Belgian canaries as a fancy in the home of the breed is a thing of the past. Should it ever revive it will have to be by the purchase of imported stock. I have met a few Belgian canaries in Holland in recent years, but not from these do I think the Belgian Fancy will be revived. It will have to come from the Scots Fancies that are too straight in back. This is the only way in which the Belgian can come again. The modern Scots Fancy was made from the Belgian. The Belgian will now have to be re-made from the Scots Fancy. The crossing of the Scot and the Belgian undoubtedly killed the latter so far as this country is concerned.

A BREED THAT STOOD ALONE.

In the old days the Belgian was, undoubtedly, a breed that stood alone. There was something about those high-class Belgians that was totally different to the champions of any other breed. The sleek, well-turned head; the long, graceful neck; that tall, commanding appearance; those massive, shoulders and the straightness

of legs, back, wings, and tail all made up an appearance that kept the beholder enthralled even when he did not admire. Yet many who did not keep the breed admired it. This makes its passing the more difficult to understand.

Amongst the most enthusiastic lovers of the Belgian that I have ever known was the late W. A. Blakston. The "King of the Fancy" held a strong fascination over that great authority. He used to say that the men and women who loved the Belgian stood head and shoulders over the breeders of all other canaries. The nobility and refinement of the bird shed its lustre on the owner. Yet in such places as Ormskirk and Wigan I have seen some roughish specimens of fanciers—men who loved the Belgian and bred some of the best, but in whom there was little of the refinement associated with the breed. Rare good fanciers, though, they were, and how they loved their Belgians!

The Scots are not the only men who have taken toll from the Belgian. The Belgian played a large part in the evolution of the Yorkshire. Thirty to forty years ago, when the idea was that the Yorkshire should be slim and fine enough to go through a wedding ring, nearly every breeder of Yorkshires had in his room a Belgian or two, or else several three-quarter or half-bred Belgians. From the Belgian the Yorkshire received its fine whip tail, its sleek head, and the nerve which used to be so characteristic of the bird named after the land of the White Rose.

WHAT IS NEEDED IN THE BELGIAN.

When in show position the Belgian is a really attractive and commanding bird. No other bird approaches it, none other can one compare with it. It is unique. Its sleek, finely chiselled head; long, delicately curved neck; stout, high, well-filled shoulders; long, level back; tightly braced and perpendicularly carried flights and tail; straight, long legs; long, well-covered thighs; prominent, deep chest; long, well-tapered waist; fine delicate feet; its delicately poised, finely feathered body, with head outstretched and full of nervous energy which seems as though it would lift it from its perch, make

up a picture that has only to be seen once to be for ever remembered. A properly trained Belgian knows what is expected of it, and as it shows its quality one can imagine that it is conscious of the admiration it creates.

POINTS IN BREEDING.

The one point above all others which gives trouble to the breeder of Belgians is the keeping of the substance of shoulder and depth through the chest with a long, fine neck and sleek head. Immediately one begins to secure increased substance of shoulder and depth "through the heart," as the old fanciers called it, the neck and head seem to thicken and shorten, and the birds seem to possess less nerve. To increase substance double buffing has been resorted to by some, but it is not to be advocated because of the thickening of the neck of which I have just spoken. If there is loss of size it should be regained by mating very stout-shouldered, long-bodied buff cocks to the largest yellow hens in the stud. By such mating size is increased, and there is no loss of length of drive or fineness of feather. Some writers have talked of mating rough-feathered birds with small, smooth ones. It is a mistake. Exhibition Belgians cannot be bred from small birds.

The greatest difficulty of the Belgian breeder is the combination of size of body with the long, fine neck. Small birds will neither give him big bodies, nor long necks. Fineness? Yes, he will get that but in a form that is useless. It must not be taken that I would never double-buff. There may be times when it is absolutely needful so to do, but I strongly advise that when such mating is imperative the birds selected for double-buffing should have plenty of neck, length of body, and length of leg.

Short legs and stout waists often go together. They are two bad faults and should be avoided when mating birds. A short-legged bird is generally short in neck and body, thus you have three faults. Long necks, long legs, and long bodies, described as "length of side," usually go together and birds possessing these properties are most valuable. True, these long birds are often a bit deficient in shoulder, but that can be made up by careful selection of breeding stock. The long-sided birds are generally

the ones that excel in nerve and action, and seldom require so much training as the shorter, stouter birds

NOT DELICATE IF PROPERLY TREATED.

It is generally thought that the Belgian is delicate. I never found it so. Mine were kept in a cold room and I have known many breeders in Cumberland, Lancashire and Yorkshire who kept their stock in cold rooms, and if they can stand the winter in cold rooms in those counties they cannot be so very delicate. I can understand that if Belgians are kept in a warm room they would be delicate, because when travelling in their open cages to shows, and when standing on the show benches in the extremes of temperature which one finds in shows they would feel the changes, and suffer accordingly. But kept in a cold room in large, roomy cages, and fed without any pampering, the Belgian does as well as any other breed.

Speaking generally, Belgians are good parents. They sit well, they feed their young in excellent style, and seldom does a Belgian hen sweat her young. In selecting birds for breeding purposes, be quite certain that they are in good health.

Another point worthy of consideration is as to whether it is wise to breed from birds of this variety till they are two years old. My own experience is such that I should advise that no bird be bred from till it reaches that age.

THE TRAINING OF A BELGIAN.

When your birds reach the age of two months you must begin to train them, that is, teach them to run from one cage to another, and also to go into position. Never handle Belgians unless you are positively obliged to; it makes them nervous and timid, and consequently spoils them for exhibition. When training the birds to run from cage to cage, you must place the cages with the doors opposite each other, that is, the cage containing the bird and an empty cage; then take a small cane introduce this into the cage, and gently drive the bird into the empty cage. In commencing the practice it is wise to put two birds in the cage, an old one and a young-

ster. The old bird will know at once what is required, and will hop into the other cage at once; the youngster will generally follow suit.

When training Belgians to go into position much patience is required. When you have resolved to train any particular specimen, you should drive it with the cane out of the flight cage into a show cage. Let it stay in the show cage two or three days before you commence operations. During this time you should talk to it for a few moments every time you enter the bird-room, and endeavour to gain its confidence by giving it little bits of water-cress, egg-food, etc.

This much accomplished, the training may commence. Lift the cage, and scratch the bottom of it with your finger nails; this will attract the bird's attention, and it will commence pulling itself together, lowering its head, raising its shoulders, etc. When the bird becomes accustomed to the scratching, a thin cane, or pencil, may be introduced between the wires from behind the bird; this will cause it to erect itself to the utmost of its power. Care is needed not to overstrain your birds. Twice a week is quite often enough to rouse them up. If they are overstrained they will appear sluggish on the show bench at the very moment when they should be alertness itself.

POINTS THAT MAKE A BELGIAN.

The points of the Belgian are as follows, and in giving these points I might say that I do not speak of the 100-point standard, as some people read it as though birds must be judged by it point for point. Such a standard for all practical purposes is useless. Birds are never judged by it, owing to the fact that different judges place different value on the various points. The great value of a standard of points is that which gives the breeders of a variety some common ground on which they may stand and argue the value of different properties and assist them in estimating the relative value of different points. But it is of no use to practical and experienced judges as in our shows the exhibits are judged by comparison one with the other.

The head should be small and sleek, the neck long and delicately curved, the shoulders broad, prominent

A GOOD EXAMPLE OF THE BELGIAN CANARY WITH THE DESIRED
MASSIVE SHOULDERS.

and well filled in. The head should be straight—in fact, from the shoulders to the end of the tail, the bird should be perfectly perpendicular. The chest should be prominent and well formed, the waist long and tapering, the legs and thighs long, straight, and well set. The wings long and well carried, not crossing at the tips ; the tail long, and compactly made—an open tail is a great blemish.

Great care is needed in exhibiting Belgians ; they cannot stand much knocking about. In sending them off to shows the cages should be covered with flannel or baize, and a supply of egg-food should at all time be sent.

Many fanciers feed their Belgians with cod liver oil and Parrish's chemical food all through the show season, and it certainly is a great help to the birds. The oil is given with the egg-food, and the chemical food is given in the water.

THE STANDARD OF PERFECTION

The standard here given is that compiled by the United Kingdom Belgian Canary Association :—

	<i>Points</i>
<i>Head</i> .—Small and neat, slightly oval in shape ..	3
<i>Neck</i> .—Long and slender, capable of extension ..	10
<i>Shoulders</i> .—High, square, broad and massive, well padded between the pinions	10
<i>Back</i> .—Long, broad, straight, and well filled ..	5
<i>Body</i> .—Long and tapering.	5
<i>Breast</i> .—Prominent and deep through from back to front	5
<i>Wings</i> .—Long and compact, carried close to the side, meeting evenly at the tips	5
<i>Tail</i> .—Long, narrow, and straight, carried stiff and compact	3
<i>Legs</i> .—Long and straight, thighs well clothed ..	4
<i>Size</i>	4
<i>Feather</i> .—For smoothness and condition ..	6
<hr/>	
<i>Total Points of Merit</i>	60

POSITION.

<i>Attitude</i> .—Erect stand, easy pose, the line of back and tail being nearly straight	..	..	10
<i>Legs</i> .—Straight and rigid	..	..	4
<i>Shoulders</i> —Elevated	..	..	10
<i>Head</i> .—Depressed	..	..	6
<i>Neck</i> .—Long of reach and arching	..	..	10
			<hr/>
<i>Total points of Position</i>	..	..	40
			<hr/>
<i>Grand Total</i>	..	..	100
			<hr/>

CHAPTER IX

THE SCOTS FANCY

A BREED OF CHANGED CHARACTERISTICS

THERE is no breed of canary that has so changed in its characteristics as the Scots Fancy. When I entered the fancy in the late 'seventies it was what was generally styled the "bird of circle." There has been very little circle about it during the last fifteen years. As I first remember it the Scots Fancy, or, as it was so often called the Glasgow Don, was in shape very like a half-moon, and in those days practically the whole of the canary Fancy in Scotland was confined to the breeding of the national bird. Show after show in those days had classes only for the bird of the country. Gradually the Belgian made an inroad upon the Scottish preserves, then the Norwich (at first in the northern districts, later the west, and then it spread over the whole country), whilst it was not until the present century was well open that the Yorkshire had any sensible recognition from the breeders of canaries in Scotland. To-day, however, the Yorkshire is probably the most popular after the bird of the country. We all know how clannish the Scots are, and, in so far as canary breeding is concerned, their conservatism completely ruled the Fancy until within the three last decades. In olden times the Scottish breeders thought little or nothing of any breed except the Scots Fancy, and it was kept closely to the old half-moon type. Really wonderful was the hold the bird had upon the canary breeders of the country and classes of fifty and sixty were of quite common occurrence.

SCOTS FANCY IN $\frac{1}{2}$ FULL POSE.

THE REIGN OF THE BELGIAN.

From 1880 to 1890 the Belgian became more popular in Scotland, and some progressive spirits realising the fact that crossing the two breeds would give to the Scots Fancy two very important properties—shoulder and nerve—the two breeds were crossed. In a short time the modern bird was generally accepted, and the old-fashioned Glasgow Don was relegated to a back seat.

In the last century the fanciers of England and Scotland were as the poles asunder. Whilst the former were keen on colour and markings, the breeders of Scotland troubled nothing about such things, but style and shape were things they did value. These they had in their own national bird, and they cared nothing for the colour and markings of the Norwich, Lizards, Yorkshires, and other breeds that the English breeders were so keen upon.

THE ORIGIN OF THE BREED.

The Scots Fancy is generally supposed to have originated in the West of Scotland some eighty years ago, but there is no reliable record as to how or when it was first produced, but so far back as 1830 it was spoken of as the Glasgow Don. In those days the birds were small semi-circular specimens, much shorter than the birds of more recent times, had little shoulder, and were much shorter in length of side and tail. Shape, style, and action were the qualities valued then, even as they are to-day. Markings and colour have never been given any prominence by the canary breeders of Scotland so far as the national bird is concerned. The nomenclature and classification, too, has been couched in totally different terms to those prevailing in the south. In England we have talked of even-marked, uneven-marked, variegated, and ticked birds. In Scotland it has been pied, or foul, and flecked.

NOT FAVOURED IN ENGLAND.

It is a most strange thing that, although the Norwich, Crested Norwich, and Yorkshire have become popular in Scotland, the Scots Fancy has never fascinated English breeders. In Northumberland and Durham it has

BUFF SCOTS FANCY

always had a fair following, but this I take it is due to the fact that on Tyneside and Wearside are to be found many fanciers, chiefly among those working in the ship-yards, who have migrated south from the Clyde. In Ireland, also, Belfast has long been noted for its Scots Fancies, but there again the breeders were Scots, or of Scottish parentage. About thirty years ago it looked as though the breed would secure a footing in England. Several enterprising Scots guaranteed classes at the Crystal Palace and other shows, and for a few years the bird of Scotland had quite a good following. It was but a spurt however. It soon died out, and now one seldom sees a Scots Fancy at a show held south of the Wear. Why this should be it is hard to say. We live in a more utilitarian age than did our fathers. The sporting element is not so strong in the fancy as it used to be, and as there is no market for the wasters of such breeds as Scots and Belgians they have no following. The fancy has become commercialised, and £ s. d. rules the roost. In Scotland it is the national bird, and patriotic sentiment ensures for it a strong following, even though the Norwich, Crests, Borders, and Yorkshires have made such inroads upon its fastnesses.

RISE IN VALUE.

Although it is not in these days the one bird beloved of the canary breeders of Scotland, it is valued far higher than ever it was in the days when it was known as the Glasgow Don. From forty to thirty years ago £5 was a big price for a show bird, and I have seen a number of birds that could win change hands at half that price, whilst thirty or forty shillings would purchase really first-class stock birds. In more recent times many birds have changed hands at prices ranging from £20 up to £50 each.

THE BIRDS OF TO-DAY.

In size, length, shape, and position, the birds of to-day are vastly different to the old-fashioned Glasgow Don, or "bird o' circle." In fact, many birds are so full of Belgian blood that given a Belgian cage and a single perch they

would be very little removed from the bad Belgians of earlier days. That is those Belgians which instead of straight legs had what were known as "sickle legs." The Scots Fancy of to-day must have a fine sleek head, with a long neck, curving gracefully up to the high shoulders on top, and into the chest underneath; the shoulders, as in the Belgian, must be high and broad; there must be no hollowness between the shoulders; the back must run with a curve right into the tail, which must look as though it is a continuation of the back, and must, when the bird is in position, be brought well under the perch; the chest must be deep through and the underpart of the body must run in a gentle curve therefrom to the tail; there must be great length of side with the wings tucked well in, and following the line of the back and tail; the waist must be slim—well cut out. The legs must be long and thighs well covered, lying close to the body. Many birds to-day are long and coarse in feather, which is quite the opposite to what they should be. The increase in size has had much to do with this.

Many breeders and judges are mad on shoulder, and if a bird owns a good top end it covers a multitude of faults. Speaking generally, the very large birds are coarse in feather, but if they have shoulder, length of side, plenty of drive, and are quick in action, these properties place them over others, which although not quite so large are yet finer and tighter in feather and show their lines of conformation more clearly.

Amongst the chief faults are coarseness of head, shortness and stoutness of neck, hollow shoulders, hollow back, stiffness of tail, straightness of legs, roughness and coarseness of feather. These are the most generally seen of the blemishes which mar an otherwise good Scots Fancy. It must not be taken that all these blemishes are to be seen in any one bird that might be styled a good one. Not at all. A bird with all these faults would be a bad one no matter how large it might be or how quick in action.

Length of neck, length of side, well-filled shoulders and back are properties that require a lot of breeding, and they also are properties hard to retain.

THOUGHTS ON BREEDING SCOTS FANCY.

Size and length being of so much importance on the show bench it is necessary that in mating birds to produce winners the cock birds used should above all things possess size. Thus we must have length of neck, length of side, length of flights and tail, and stout, well-filled shoulders in the cock birds. If they have shape, nerve, and action so much the better. Sleekness of head, and a well-curved body we must have in the hens, for the hens it is which have the biggest say in the production of shape. The hens also must be fine in feather, style also the hens must possess. No matter how good your cocks may be if the hens are heavy in head, short in neck and slow or clumsy in action you cannot expect to breed show birds from them.

One point of the greatest importance, and which must never be forgotten in the mating of Scots Fancies is this :—Never breed with a bird that is over, or across, the perch. A good Scots Fancy pulls away his body all the time it is in position. Drive, that is the fullest outstretching of the neck possible, you must have, but as the bird thrusts its head and neck forward it must throw its shoulders and back right away in the opposite direction.

When and wherever possible, mate together the very best specimens possible. Like produces like. You cannot breed large birds from small ones, neither can you breed stylish, nervy birds from sluggards.

So far as colour is concerned, the orthodox mating of yellow and buff must be followed, although many breeders to improve size do occasionally double-buff, but, although double-buffing does increase size, birds so bred are apt to be coarse in head and neck, and coarse in feather, therefore such mating must only be resorted to occasionally. When two buffs are paired together they should both possess excessive length of neck and side, if it is at all possible. It is wise when mating to use a clear or foul (ticked) bird with one that is pied (variegated). This will assist in maintaining colour and quality of feather. When two heavily variegated birds, or two greens, are paired together one is apt to get profusion of feather, not necessarily coarseness, but more length of feather. Stiffness of tail is a great fault in a Scots Fancy. No

TYPICAL YELLOW SCOTS FANCY.

matter how good a bird may be in other respects if it cannot bring its tail down nice and easy under the perch all its other good properties are heavily discounted. Therefore hens selected for breeding should have free tail action.

SCOTS FANCIES AS BREEDERS.

Scots Fancies are usually hardy, vigorous birds ; they go to nest without much trouble ; the hens sit well and are generally good mothers. Many breeders never use feeders, leaving the Scots Fancies to bring up their own young.

On the other hand, there are those who say they would never trust a Scots Fancy hen to bring up valuable youngsters. These men say that a good stock of reliable " feeders " is a necessary adjunct to the room of all who go in for breeding this variety on a large scale.

Another point to which attention should be given is the nest. The ordinary earthenware nest-pans are of no use to the Scots Fancy. The nests that are used by the Scotch breeders are large leathern cups, lined with flannel ; these cups are just about half as deep again as the ordinary nest pan. The reason why these deep nests are used is that young Scots Fancies seem to be all legs and neck when in the nest, and when stretching up to be fed reach above the level of their parents' bodies ; thus the old birds are unable to pump the food up in an effectual manner, and the result is that many a promising nest is doomed to gradual starvation. " Prevention is better than cure," so I would impress on all my readers the necessity of using deep nests when breeding Scots Fancies.

TRAINING FOR SHOW.

Action and style being of much value on the show bench it is imperative that the birds go through a course of training at an early age. If their training is left until after the moult they are apt to get into bad, slovenly habits. Therefore their education should begin when they are seven or eight weeks old. They should be run out of the flight cage into an ordinary show cage and taught

to travel from perch to perch. This must be done very carefully and gently. Having run the birds into the show cages, place them on a table, or hang them on the wall of the bird room, so that they may settle down quietly before you commence to handle them. When they have become accustomed to the cages, pick them up one after the other, and talk to them. Be careful not to fluster or frighten them in any way, because once you destroy a bird's confidence and make it fearful you have practically destroyed its chance as a show bird. The more nerve a bird possesses the more likely it is to be frightened.

Having gained the confidence of a bird move the cage from hand to hand and turn it about at the same time slightly scratching the bottom with your finger nails. The next day repeat these movements, also hold the cage in one hand, and with a pencil or thin stick endeavour to get the bird to jump from perch to perch. Some birds seem to know instinctively what is required of them, and will leap rapidly from perch to perch without any trouble; if they do not the stick must be inserted between the wires of the cage and the bird coaxed to "travel." Once a good bird has learnt its lesson properly it never seems to forget. A properly trained bird well repays the time and trouble spent in its education. Judges have not the time to waste on getting "slugs," as slow-moving birds are styled, into action, and a bird that pulls itself into position, "travels" quickly, and shows its nerve stands far more chance of securing the winning ticket than one that has to be coaxed and coaxed. A well-trained bird immediately a judge picks it up begins to pull itself together. It thrusts out its head and neck, showing "drive," it pulls away from its perch and lifts its shoulders, raising them as high as possible, brings its tail swiftly down under the perch, then looks all round in a quick nervous manner, and commences to "travel." Of such are winners made.

STANDARD OF PERFECTION.

	<i>Points</i>
<i>Head</i> .—Snaky and fine	4
<i>Neck</i> .—Long, thin, and nicely curved ..	10
<i>Shoulders</i> .—High, prominent and well arched ..	15
<i>Back</i> .—Long, round and well filled up ..	8
<i>Wings</i> .—Long, carried well up close to body ..	4
<i>Tail</i> .—Long, fine, supple, and well curved ..	4
<i>Legs</i> .—Long, with thighs well set into body ..	5
<i>Chest</i> .—Deep through to shoulders, but well curved out	10
<i>Nerve and action</i> .—Bold and free in carriage, showing plenty of life	20
<i>Size</i> .— Large and massive, without coarseness ..	10
<i>Feather</i> —Fineness of quality and condition. ..	10
<i>Total</i>	<hr/> 100 <hr/>

CHAPTER X

THE YORKSHIRE

THE MOST POPULAR OF ALL BIRDS OF POSITION.

NO ONE I presume would venture to dispute that of all canaries the Yorkshire is the most graceful, and because of this it may claim to be the most popular and most widely bred of any member of the canary family. Fifty years ago the Yorkshire canary was scarcely known outside the borders of the county after which it is named, and it is only between sixty and seventy years ago the breed was formed. The early specimens were produced by crossing the common canary with the Lancashire, and the birds were judged principally for size and feather, the three chief points aimed at by the early breeders being length, quality of feather, and colour. To improve the latter the Norwich was introduced. Then came the idea of slimness and style, and in the early 'seventies the Belgian was used to give birds of finer proportion and nerve. These properties having been secured, the Lancashire was again used by some breeders and the birds become rather coarse and lost much of the fineness which they had obtained from the Belgian. This caused another reaction. There was an outcry against big, feathery birds that were being shown, and once more the Belgian was used to fine down the big bodies, heavy heads, overhanging brows, coarse feather and bad carriage which the too free use of the Lancashire had brought about.

THE FOUNDING OF THE YORKSHIRE UNION.

In 1889 a series of conferences were held which led to the formation of the Yorkshire Union of Ornithological Societies, and the drawing up of a complete set of standards

and the adoption of an ideal bird. The writer had much to do with these things being brought about, the first conference being the result of a meeting held at his house, and he later assisted in the drawing of the standards by which during the last thirty-odd years the breed has been governed. The founding of the Yorkshire Union, which was closely followed by the formation of the Yorkshire Canary Club, and the Southern and Northern Yorkshire Canary Clubs gave the breed a tremendous impetus, and for the last thirty years it has advanced by leaps and bounds.

From time to time there has been an inclination on the part of some judges and breeders to depart from the standards of the Yorkshire Union, but the balance of opinion has been against them, and the breed has found more supporters in all parts of the country.

Not only in England, Ireland, Scotland and Wales has the Yorkshire a great following, but when on my world tour in 1922 I found that in Australia it is the most popular of all breeds, whilst in New Zealand and Canada too it has many followers.

The wonderful progress of the breed since the establishment of the Yorkshire Union and the enforcing of its authority in the breeding and judging to its authorised standards and ideal.

A BIRD OF GRACE AND BEAUTY.

In the Yorkshire of the twentieth century there is nothing coarse or unrefined. On the contrary it is full of gracefulness and a refined beauty that captures the eye of all who admire these qualities. Its head is small and delicately moulded ; not the slightest sign of eyebrow can be traced ; its neck is long and straight ; its shoulders are narrow, long, and well filled, with no trace of hollow-ness or prominence ; its back is long and straight ; its tail is also long, closely and compactly made, not wide and spreading ; a loose open tail is a great blemish ; its breast narrow and well-rounded. The old idea of a Yorkshire being able to go through a wedding ring was a good one ! I wonder how many of the present champions could do it ? The idea though was a good one. It kept before the breeders and judges the idea that the

Yorkshire must never be big or coarse. From the breast to the tail the bird must be slim and tapering. A long slim waist adds much to the appearance. The legs must be long, straight, and well set, not showing too much thigh. The position of the bird should be graceful and dignified. It should be as nearly erect as possible. A Yorkshire should never stand over the perch ; a bird that shows the slightest inclination to crouch should at all times be discarded. The carriage of a high-class Yorkshire is bold, free and jaunty, showing nerve and vim.

Quality of feather in the Yorkshire is of much importance, and the breeder who neglects feather will never attain any degree of prominence in connection with this variety. A high-class Yorkshire should bear the appearance of having been moulded in wax, or chiselled out of a block of marble. Every feather should lie close and tight to the body, and in texture resemble the softest silk. The evenly marked birds of this variety are particularly handsome. Given a rich-coloured, well-frosted buff Yorkshire possessing a long, slim, delicately proportioned body, with a pair of well-marked eyes and wings, where is the bird that can beat it ?

GREAT RANGE OF CLASSIFICATION.

No breed known to the English show bench has such a wide range of classification—1 Clear, 2 Ticked, 3 Lightly Variegated, 4 Heavily Variegated, 5 Unevenly marked, 6 Evenly marked. Double these in Yellows and Buffs and you have twelve classes ; again double for the sexes and you have twenty-four classes. Then there is the Cinnamon-marked which classified in the same manner, excluding Clears, and it gives you another twenty classes. Then there are the Greens with another twelve classes, add to these stock bird and selling classes, and you have a show schedule of over sixty classes, and all of the one breed.

One of the greatest benefits the Yorkshire Union conferred on the fancy was when it issued the decree that in all classes type should have the preference over marking. Its greatest effect has been seen in the quality of the birds competing in the Green-marked and Cinnamon-marked classes. Thirty years ago these were far

behind the Clears and Ticks so far as type was concerned. For some years past they have been equal to the Clears, and judged on breed characteristics only have often defeated the Clears for some of the most valuable trophies in the fancy.

COMMON FAULTS.

The perfect bird, no more than the perfect man, has not yet been bred, therefore every bird that appears on the bench has some failing. One occasionally does hear it said of a particularly fine exhibit: "You cannot fault it." I have heard judges say this, and then known them on another day to find a bird which they considered just a bit better, and so they pegged back the bird of which they had previously said: "You cannot fault it." In speaking of common faults, I mean those that may be seen in birds on the show bench.

Many a good bird is spoilt by a heavy beak. Often have I seen judges puzzled to say what it was that made them hesitate over a bird. There was something about the bird that spoilt the general finish. It has been a heavy beak. The most common of all faults is flatness of head. Hundreds of otherwise excellent birds are pegged back year after year for this fault, and rightly so. The head of the Yorkshire should rise from the back and fall away from the back skull into the neck. Viewed in profile the head should be oval. "Hollow in neck" has been the fatal verdict on many an otherwise grand bird. The worst of it is that the birds which have this failing are generally those that excel in style and nerve. Faulty wing carriage—in some cases a slackness in the flights which causes them to gape, or fall apart, in others a crossing of the flights. The last failing is most often seen in birds which are flat-sided. Thick and open tails are the cause of much vexation. Pointed chests and flat sides generally go together and frills often accompany them. Then there are birds that are stout in waist and some that are too heavily feathered about the waist and thighs. Shortness of leg and bare thighs are two bad faults, never seen in one bird but in birds of totally opposite character. The former in birds that lack something in style, the latter in those long raky stylish

birds that want just a little more finishing about the body.

This is a fairly long catalogue of faults, but I have named them so that breeders may know what they must avoid in selecting stock for breeding.

WHAT IS REQUIRED IN BREEDING.

So far as colour is concerned, it is usual to mate yellow to buff. In a general way it does not matter which is the yellow, the cock or the hen. The colours are usually pretty evenly distributed in the sexes, and naturally must be used. Never would I advise the practice of double-buffing in Yorkshires, as it gives you two things you want to avoid, that is stoutness of body and increased feather, which generally speaking is coarse in texture. As my old friend, the late H. W. Battye said; double-yellowing and double-buffing he did not agree with, although there may possibly be some instances when it may be necessary. Double-buffing will frequently produce a superabundance of long, broad feather, and this, if not of a superfine quality, will be the cause of endless trouble in the way of eyelash, frilled breasts, and feathery thighs, while double-yellowing has a tendency to produce scanty-feathered birds with thin pointed breasts and streaky-looking feather, especially in the region of the wing butts.

Sometimes one or two exceptionally good birds are bred this way, as, for instance, if a buff bird should happen to come from double yellows, a circumstance I have known to occur; this bird becomes valuable as a stock bird if paired again with a yellow. Birds bred this way frequently produce birds of very superior quality, but as a general practice I cannot recommend either double-yellowing or double-buffing, and would strongly advise the young fancier to stick to the orthodox system of yellow to buff and buff to yellow.

BALANCING WEAK AND STRONG POINTS.

In mating up your stock to breed the ordinary clear or ticked birds always make a point of noting any weak

point in either cock or hen, and try to remedy that failing by pairing it with a bird correspondingly strong in this particular point. I do not mean that you are not to pair a couple of birds together that are about perfect, that is if you are fortunate enough to possess them. If you are fortunate enough to possess really tiptop exhibition birds by all means mate them, but, recognising the rarity of this, there being very few birds which do not fail (if only in a minor degree) in some given point, the breeder must, to properly match his birds, be ever on the look-out for these little weaknesses in one bird, and try to strengthen the weak places in the way I have indicated, by balancing them by extra strength on the other side.

For instance, I should advise mating a long leggy cock to a smart, close-feathered, typical, active hen. At the same time I may say I have bred good birds with pairs just the opposite, viz., small cock and long hen. When I say a long leggy cock, I mean a bird of good length from beak to tail, with long, tapering body, long flights and long tail, each in proportion to the other, and not a cock with a long neck, abnormally long tail and a short body chopped off close behind its legs. Such a bird may be of standard length, or even more, but it will be ungainly and out of proportion as its length will be in neck and tail, and thus there will be no true symmetry. In a general way, strong lusty cocks that are a bit coarse or overdone in feather should be mated to very finely drawn typical hens a bit under-sized. In such cases the hen will correct the coarseness of the cock. Size and colour come from the cocks; type, especially heads and quality of feather, from the hens. This is the general rule; there are exceptions to this, as to every other rule, but one can only speak generally when advising in a work of this character.

MATING CLEAR AND VARIEGATED BIRDS.

Most fanciers are agreed on the principle of matching clear and marked birds. By so doing colour is maintained and also the quality or fineness of feather. There is no doubt whatever that the continual breeding together of clear, or clear and ticked birds results in loss of colour

and also of silkiness or quality of feather, and for, this reason is it to be condemned. The green blood is the fountain of colour, therefore those who are wise keep plenty of green blood or variegation in their breeding stock, and mate clear or ticked birds with those that are variegated.

I do not advise the pairing of two clears together, as by the continual use of variegation on one or both sides of a pair one is able to obtain birds of good sound colour, and to maintain that colour indefinitely without getting too many heavily variegated birds which the frequent introduction of self-coloured birds is liable to produce.

BREEDING FOR MARKED BIRDS.

In breeding for marked birds, whether cinnamon or green-marked, pair a full-marked bird to a clear. By a full-marked bird I mean a bird practically four-marked or over, and if you have not a clear to mate with it I should prefer to have one marked on eyes to being marked elsewhere. If I have a preference in regard to which bird of a pair should be the marked bird, I should prefer it being the cock, but the results are much the same whichever parent carries the markings. Some say you will get good results from pairing two well-marked birds together, but this is a course I should not follow. You may get a good-marked bird this way, but the chances are not more favourable than the way I have suggested. Of one thing you certainly can be sure about, and that is you will get a fair percentage of rubbish in the way of heavily variegated birds. I always try to match my birds to breed youngsters on the light side in markings, believing that there is the same chance of getting well-marked birds as by any other way.

Pedigree has much to do with the production of marking, and in breeding for marked birds the value of a good and reliable strain is perhaps as much in evidence as in breeding for any particular point connected with cage bird breeding, as some birds of a proved strain seldom fail to throw one or more fairly-well marked birds in every nest, no matter how they are mated, provided their mates are from the same strain. You must not cross strains if you are breeding for markings. This rule must

never be overlooked. It is one that cannot be broken without disastrous results following.

Years ago when classes used to be provided at all the best shows for evenly marked Yorkshires, a great deal of faking used to go on. When the classes were abolished many thought we should lose all our beautiful marked birds. But we have not. The result has been that to-day we have far more well-marked birds than ever we had, and in addition they are typical specimens, because, as I have said, the Yorkshire Union insists that type shall be considered first, whereas in the old days the markings were more than half the bird, and it was quite possible to see two birds standing first and second in a class, one little removed from a Border Fancy and the other almost a Lancashire, but the marking brought them together. The present classification gives no undue weight to marking, and as a consequence we have far more beautiful birds shown in all the marked or variegated classes.

THE FASCINATING CINNAMON MARKS.

Years ago, when marking was the Alpha and Omega of the Cinnamon-marked fancy, we had far more well-marked Cinnamon-marked birds than green-marked, but, beyond the lovely quality of feather always associated with the Cinnamon blood and the beauty of their marking, there was little to commend them. In those days there was little true Yorkshire character about the Cinnamon-marked birds, but the Yorkshire Union standard altered that state of things, and the Cinnamon-marked birds, which were then a race practically by themselves, have now been so interbred with the dark-eyed Yorkshires to secure type that both sides of the family have benefited. So mixed, however, have the birds become that there is scarcely a Yorkshire breeder anywhere but who has pink-eyed birds in his room, even if he has no Cinnamon-marked birds. As a consequence, Cinnamon-marked birds now make their appearance in studs where they are not specially bred for as they were in the olden days. Good breeding stock was then hard to find. Not so now when there are plenty of stock birds to be found for the breeding of Cinnamon-marked Yorkshires, and a large

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percentage of the ordinary Yorkshire birds are impregnated with Cinnamon blood. Owing to this being the case, it in many instances upsets, or seems to upset, the generally acknowledged fact that to breed Cinnamon-marked in the first instance you must have a Cinnamon-marked or clear pink-eyed cock. I have known Green-marked cocks, when paired with a Cinnamon-marked or pink-eyed hen, throw Cinnamon-marks and clear pink-eyed birds as well as Green-marked and clear dark-eyed birds; and, what is more curious still, there are cocks as well as hens of both colours—Green-marked and Cinnamon-marked. It has been said that you must have a cock that is three-quarters Cinnamon-marked blood in order to breed Cinnamon-marks and pink eyes on both sides of the family, but to-day, when the blood is so mixed, that old idea gets some rude upsettings.

CURIOUS RESULTS FROM CROSSING.

Amongst breeders of Cinnamon-marked it is generally accepted that if you pair a pink-eyed cock, whether clear or marked, with a dark-eyed hen, the hen having no Cinnamon blood in her veins whatever, the young from this cross which happens to be pink-eyed will all be hens, and those with dark eyes will be cocks. This sometimes is disputed, but in such cases it is usually found that the disputants have overlooked the important stipulation given above, viz., that the hen must have no Cinnamon blood whatever in her veins. And, where this condition can be guaranteed, I should be quite willing to back the statement at the long odds of a hundred to one, as an expression of my own confidence in its accuracy. When a fancier sets out to instruct his fellow-fanciers, he should not try to deal with questions on what is mere hearsay. Speaking from experience I have never had a pink-eyed cock or a dark-eyed hen from the cross mentioned above, and I have tried the mating very often.

If you put a dark-eyed cock, with no Cinnamon blood in his veins, to a pink-eyed hen you will breed nothing but dark-eyed birds, and, if the pink-eyed hen should happen to be Cinnamon-marked, you will probably rear a large percentage of heavily-variegated and nearly green birds,

this, in fact, being one of the surest and quickest ways of breeding heavily variegated birds I know of. The hens from this cross, though what may be termed half-bred, will, when paired with a pink-eyed cock, fail to produce any pink-eyed cocks; the pink-eyed birds will be hens. This mating has been the cause of many disappointments to breeders, who were just commencing to cultivate this variety, as they could only get Cinnamon-marked hens, Cinnamon-marked cocks being very rare. But when they are impressed with the fact that the pink-eyed bird should be the cock, and that to breed an equal number of both sexes of this variety they must have Cinnamon blood on both sides, at least 75 per cent. on the male side, also a pink-eyed hen for his mate, they realise the absolute correctness of the rule.

THE CINNAMON BLOOD FROM THE MALE.

To be absolutely more certain of the rule working correctly, both birds must be pink-eyed. When this is not possible and you are anxious to improve the Yorkshire breed characteristics of your stock, and must do so by using a dark-eyed bird, let the bird be the hen, and work the Cinnamon blood in from the cock's side. Never forget that to introduce the Cinnamon blood into a strain of any variety of canary in which it does not exist, with the object of producing either Self-Cinnamons, Cinnamon-marked, or clear pink-eyed birds in a direct line it must be done from the male side. Starting from the raw material, and working on the lines I have laid down, you have full control, and can keep that control up to a certain point as long as you only introduce Green blood from the hen side. But once you get the Green blood into the birds from the male side, and well mixed up among your stud of Cinnamon-marks, away goes your control, and you cannot be at all confident whether a nest of youngsters will be Green or Cinnamon-marked. I have known Cinnamon-marked cocks that threw a few dark-eyed birds, even when mated with pink-eyed hens. The only solution of the problem being that in their veins there must have been a strong influence of Green blood. This is one of those things in connection with breeding

Cinnamon-marks that cannot be explained, and such cases help to make the variety mysterious, and at the same time full of interest.

CINNAMON-MARKS NOT DELICATE.

At one time there was an idea prevalent in the fancy that Cinnamon-marks were not so strong as the Clear or Green-marked Yorkshires. Why I know not. I have always found them quite as robust as any other member of the Yorkshire family. The late Harry Battye once had a clear buff, which he had bred himself, and which for eight seasons was one of the best breeding cocks that my old friend ever possessed. This bird turned out winners year after year. He was a fine shapely typical finely-feathered bird, full of the very best Yorkshire character, and he used to plant his mark well on his progeny. He was each season mated to two hens, and he must, in his eight years of breeding, have sired not less than 150 youngsters. Harry used to say he could always depend on four or five in the nest from the old boy. One of his sons ran equally as well as his sire for seven seasons to my knowledge, and he may have beaten his sire's record. Delicate? No, certainly not, is my answer to the question, Are Cinnamon-marks delicate?

BE SPARING WITH GREEN BLOOD.

If you are seeking to improve the Yorkshire breed characteristics in a strain of Cinnamon-marks do it very carefully. Do not use more Clear or Green-marked dark-eyed birds than you are forced to do. If an unnecessary quantity of Green blood or dark-eyed blood is introduced into a strain of Cinnamon-marks you are likely to have considerable trouble in controlling the marking. Rather than use the alien blood I would make careful selection amongst the Cinnamon-marked birds and gradually build up the strain. Apart from that, there are to-day plenty of remarkably good Cinnamon-marked-bred birds that may be obtained, and I would prefer to take outside blood from an established strain

of Cinnamon-marks than risk taking it from a dark-eyed strain of Yorkshires.

THE SELF-GREENS.

Years ago the Greens were a race quite by themselves, and were seldom seen outside the city of Liverpool and its suburbs. In type they were nondescripts, approaching the Lancashire in length and feather, though not in size. Colour and colour only seemed to be the one point of importance, and most beautiful the colour was—a rich, grassy green with no bronze or grey tinge.

About thirty years ago the Green Club was formed, and it was decided to bring the bird up to the Yorkshire standard so far as type was concerned. I had much to do with the formation of the Club, and drew the standard by which the modern Greens have for the last generation been judged and bred to.

For a long time some of the oldest breeders would have nothing to do with the Club, but it made great headway, not only in Lancashire, but in Cheshire and Yorkshire. In a little while the Club extended its field of operations, and took up the cultivation of Norwich-type Greens. It made good progress up to the time of the Great War, but since then it has not displayed much energy, and, as the Yorkshire, Norwich, and Border Clubs have all paid some attention to the Green, I have concluded that so far as this work is concerned the Greens must be included with the breeds according to type, as one can hardly speak of the Green Canary when we have Yorkshire, Norwich and Border Greens.

WHAT FOLLOWED THE CINNAMON BLOOD.

To improve the type, the pioneers of the Green Canary Club decided that they must cross the old Liverpool Greens with birds of the Yorkshire family, and that the best way to do it, so as not to have too many variegated birds, would be to use the Cinnamon-marked Yorkshires. This certainly gave type, and it avoided the excess of broken-coloured birds which would probably have resulted

A PRETTILY VARIEGATED YORKSHIRE CANARY.

from crossing with the ordinary clear or ticked Yorkshires, which would have been the only other cross at all suitable, because the Green-marked Yorkshires of that time were not sufficiently typical to be used for the purpose. Type and carriage were secured in this manner, but at the expense of soundness of colour. The rich brilliant green, giving place to a lighter tone, which was not so sound and pure as the original.

The Greens of to-day have not the lustrous brilliancy, the rich grassy green which the old breeders of Greens would have. Then the wings show a bronziness that is not at all attractive, and the vents and thighs run light in colour. Writing on this, the late H. W. Battye, said:—"They are dull and smutty in colour." Speaking of the general effect of the crossing he said:—"Take the Green-Marked Yorkshire, many of these have a considerable amount of Cinnamon blood in their veins, and the markings in many cases are of a grey cast, some being between a shade of green and cinnamon. The same remarks in some instances will apply to the Cinnamon Marks. Some of these by having been crossed with Green Marked birds (in an endeavour in most cases to improve their type) are nearly what may be termed half green and half cinnamon in their markings. These points will, in the future, have to be considered, and, if some who may doubt the above statements will observe the difference in the colour of a good many of our self-coloured Cinnamons and Greens and the markings on Green and Cinnamon-Marked Yorkshires, it may be the means of convincing them that there are some grounds for the statement that seldom does the crossing of Cinnamon and Green improve the colour of either, but in the majority of instances is the means of injuring that colour."

Whilst agreeing as to the effects of the crossing of Green and Cinnamon blood I must say that the evil effects mentioned may in time be removed by carefully selecting the breeding stock and absolutely refusing to breed with Greens or Green-Marked Yorkshires that show the objectionable bronze or Cinnamon tinge.

VALUE OF THE FOUL BIRDS.

When the Greens were on the crest of their wave of popularity, classes were provided for Sells. Foul (pied

wing or tail only) and Foul (broken in body feather) This meant that a full classification gave twelve classes, which could by giving the unflighted birds equal representation be increased to twenty-four classes.

Regarding the Foul Greens, some do not believe in catering for them. Much may be said in favour of these classes as being an outlet for birds that are not perfect as self-coloured birds, and this no doubt is the reason which causes some to stick to the variety when otherwise they might drop it for some other variety or perhaps leave the fancy altogether. But these classes may cause breeders to be more careless in their mating, and, instead of their sole aim being to breed sound, self-coloured Green Birds, which should be the ambition of all Green breeders, they, instead of discarding birds with white feathers in wings and tail and light throats and vents, keep and breed with them, knowing that there is a chance of exhibiting them in these classes for foul and pied birds.

The chief aim and object of the breeder of Greens should be the self-coloured bird. That is the Simon Pure. But the provision of these foul and pied classes does give a greater range of competition, and, if breeders are careful in the selection of their breeding stock, I do not think the ill effects which some have feared will arise. On the other hand, I think it quite possible that by careful use the pied birds will clear the colour, and eliminate in great measure the ill-effects of the Cinnamon blood. White blood does this in other kinds of stock, and I see no reason why it should not in the Green Yorkshire. But I would urge the use of birds that are pied in wing and tail, not those that are broken, or pied, in body feather only.

THE SELECTION OF GREENS FOR BREEDING.

Much of subsequent success of a stud of Greens depends upon the selection of the original breeding stock, and the young fancier should start out fully imbued with the idea that, though his birds must be Yorkshires, they must be Green Yorkshires. Colour should be *sine qua non*. He should give careful attention to the soundness of colour in the birds he intends to try and breed his winners from. Avoid those with light throats, waists, and vents.

Select them with dark legs and feet, though if a bird had flesh-coloured legs, but had dark claws, I should not hesitate to use it for stock purposes. These dark toes are a sign of the bird being full of dark or green blood. See that the pencilling is even, and as distinct as possible. I like to see bold and distinct lacing at the sides of waist, both in breeding and exhibition birds. A large percentage of points are allowed in the standard of the Green Canary Club for level, sound, and rich colour with distinct pencilling, and preference is given to birds having dark legs, feet and beaks therefore the importance of paying great attention to this question of colour in the first instance must not be neglected.

He who intends to make a name for himself as a successful breeder of these Greens will have to patiently build a strain of his own that can be depended upon not to throw light throats, waists, vents, or thighs. To do this he must discard all the birds that show these faults or that have a tendency to produce them in their offspring, and must stick to those that are richest and soundest in colour throughout.

Type and feather will require strict attention, and the same methods that are advised in the breeding of the ordinary Yorkshire are equally applicable to breeding the Yorkshire Green.

THE SQUARE FEATHER BOGIE.

At one time there was an occasional disqualification at our shows for birds having what were called square feathers. These feathers were generally found on the shoulders or saddle of the birds, and some judges and exhibitors alleged they were cut for the purpose of throwing up the green colour on the back, while others said it was done to get rid of bronze-ended feathers, whilst others suspected it to have been done to clear away a few white-tipped feathers. Perhaps there have been odd cases where feathers have been cut, owing to the presence of either bronze or white feathers; this I could understand, but the idea of cutting the feathers for the purpose (as some say) of showing up the green colour on the back seems absurd, because most breeders know that if you take

off the top covering of feathers either on the back or any other part the under feathers will show a lighter shade of colour. Still the fact was there that many birds were shown that had square-tipped feathers.

I believe I was the first judge to detect these square-tipped feathers, and I disqualified a number of exhibits. In the face of the scientific evidence that has since been produced, I am not going to say that square-tipped feathers may not in some cases have been natural, but the curious thing was that these birds which I and other judges disqualified were otherwise most excellent representatives of the breed. They suddenly made their appearance at a time when competition in Yorkshire Greens was very keen and that after the disqualifications their numbers decreased. In defence of those who exhibited these birds it was urged that a slow moult was the cause. The obvious reply was : Why are Greens only so affected ?

THE BEAUTIFUL EVEN-MARKS.

It is generally agreed amongst canary breeders that the most beautiful of all canaries is a high-class, evenly-marked Yorkshire. Given a bird of good type, rich colour, well-balanced eyes, wing, and tail marking, with the beautiful frosting seen in a high-class Buff, you had a picture which could not be surpassed. Many there are amongst the old breeders who regret that the Even-Marked birds are not now bred for as they used to be, but the faking that used to take place, together with the present system of classification killed them. The birds recognised in the old days were the two-pointed, that is, birds marked on both eyes, both wings, or both sides of the tail, the four-pointed, that which were generally marked on both eyes and both wings; and the six-pointed, which had both eyes, both wings, and each side of the tail marked. The latter were considered the perfection of marking. Next come the four-pointed. Some consider this bird quite as handsome as the six-pointed, but not being so rare, or quite so difficult to breed, it must be classed as inferior to the bird with tail marks, and given an equality in other points the six-pointed bird will and should beat the four-pointed bird. Next in importance were the

birds marked wings and tail, and birds marked eyes and tail. It is an open question which is the most valuable of the two. Eye markings anything like perfection are at all times difficult to obtain. The style of eye-marking desired was that known as pear-shaped, the mark covering the front of the eye, coming over and under the eye, and finishing in a fine line behind the eye.

Although classes are no longer provided for the Even-Marks, we have a number of birds to-day that naturally are as well marked as were the birds which used to compete in the Evenly-Marked classes, but as they can now be shown in the variegated classes there is no incentive to trim or fake them. More than that, breeders of to-day prefer to exhibit these birds in their natural condition, and whilst striving to breed them as nearly even-marked as possible are quite content to compete in classes where markings are not the beginning and the ending of competition, especially so as the opportunities to do so are more frequent than they were in the old days.

STANDARD OF PERFECTION.

This Standard is for Clear and Ticked Yorkshires.

	<i>Points</i>
<i>Head</i> .—Small and round and narrow	5
<i>Neck</i> .—Moderately long, straight and well filled ..	5
<i>Shoulders</i> .—Narrow, rounded, and well filled in ..	5
<i>Body</i> .—Back, long and straight, well filled; wings long, tight and well-balanced; breast, round and smooth; waist, slim and neat. The body must taper gradually from the shoulders to the tail, and the length over all be $6\frac{3}{4}$ inches ..	20
<i>Legs</i> .—Long, and thighs well set in body and covered ..	5
<i>Tail</i> .—Long, straight, tightly packed	5
<i>Position</i> .—Erect, bold, and nervy in appearance, head, neck, back, and tail carried in a straight line	20
<i>Feather</i> .—Body feather short, compact, silky in texture; wings and tail tightly braced	20
<i>Colour</i> .—Sound and even	5
<i>Condition</i> .—General smartness and cleanliness ..	10
<i>Total</i>	100

In the Evenly-Marked 30 points may be added for correct balance of marking, and in the Variegated 20 points for general balance of marking.

THE YORKSHIRE GREEN.

This Standard is that of the Green Canary Club, and is acknowledged by the Yorkshire Canary Club.

	<i>Points</i>
<i>Colour :</i> Rich deep grass green, sound and level throughout ; beak, legs, and feet dark	35
<i>Shape :</i> Head, small and round ;	3
Neck : moderately long and straight	3
Shoulders : narrow, round and well filled	3
Back : long, straight, and level ..	3
Breast : round, smooth, body gradually tapering to a neat waist ..	5
Legs : long, straight, without being stilty	3
Wings and tail : long, compact, and well carried	5 — 25
<i>Position :</i> Attitude : erect and fearless ..	15
<i>Feather :</i> Soft, silky, and compact, showing plenty of that characteristic called quality	15
<i>Condition :</i> Health and general smartness ..	10
<i>Total</i>	100

N.B.—Light beak, legs, or feet are not a disqualification, but count against a bird according to their extent.

CHAPTER XI

THE LANCASHIRE

THE GIANT OF THE CANARY FAMILY.

BEYOND the fact that it is the largest member of the canary family, the Lancashire also enjoins respect by the fact that it is one of the oldest, if not the oldest, of our English breeds. Its history as an exhibition bird goes back well over a century, and the chronicles state that it was known more than 200 years ago. There has always been amongst modern fanciers much speculation as to its origin, and many say it is an offshoot of the old Dutch Frill canary, but there is no evidence that it is so; therefore one might equally claim that the Dutch Canary has sprung from the Lancashire. Its origin is lost in the mists of antiquity, and those who like the glamour of age to surround their hobby may delight in the knowledge that the Lancashire is one of our oldest breeds. There are those who would have us believe that the Huguenot refugees when they came to England brought it with them. They may have done so, but, if the Huguenots really brought us only half of the good things they are said to have done, they were indeed great benefactors to their adopted land.

In length, style, and profusion of feather the Lancashire is like unto the Dutch Frill canary, but there the likeness ceases. The Lancashire is a much more massive and substantial bird than the Dutch, and its head both in shape and covering is very different. Some really ridiculous things have been written about the Lancashire. One writer who had a big following five and thirty years ago said large Yorkshires and Plainhead

THE LANCASHIRE COPPY.

Norwich had had much to do with the evolution of the Lancashire, as both these birds were at that time, and always have been, much smaller than the Lancashire I could never see any reason for his deduction.

A BIRD ROYAL.

The Lancashire is indeed what it has been described.—“Majestic in appearance, and carrying with it the consciousness that it is of the royal family of the canary tribe.” The word “Cuppy” used in connection with it is a tribute as to its age, as “Cuppy” is the old English term for crest, and was originally used in connection with the tuft of feathers on its head, because years ago its head-gear was nothing more than a mere tuft.

At one time an attempt was made to change its name to that of the “Manchester Cuppy,” because at the time its breeders in the Manchester district were a pretty strong force. This called forth a wave of indignation from the breeders of Oldham, Rochdale, Ashton, and other towns in the Palatinate and the movement was defeated. It is therefore not correct to say, as has been said, that the name Lancashire has only been adopted in comparatively recent times. It was not “formerly known as the Manchester Cuppy or Manchester Fancy,” but an attempt to foist that nomenclature on the fancy was frustrated by the breeders of Lancashire outside Cottonopolis.

Lovers of the Lancashire have in all times been practically confined to its home county and its neighbour—Cheshire. Scattered here and there in other counties North, South, East and West it has been, but in no other counties has there ever been a body of breeders. This seems strange because years ago, when the Crested Norwich was far more popular than it is to-day, Lancashires were eagerly sought after by breeders of that variety for the purpose of crossing to improve the length and width of body feather and the size and droop of the crest, but these birds were used for crossing only, they never captured the admiration of the breeders who secured them for the one purpose, and one purpose only.

NEVER A POPULAR BREED.

Never a popular breed in the wide sense of the word, it has since the Great War suffered still greater diminution of its sway in its own county. Rochdale and Oldham, ever the two great strongholds of breeders, seem to have lost their love for the canary, and no longer do they run the big open shows that they used to do. Few shows now give classes for the Lancashire, and those that do have cut them down from a dozen or sixteen to two or four. I have seen in Rochdale and Oldham as many as twenty classes in a show, some of them with over thirty entries each and to think that to-day neither boasts an open show is saddening. Again in the society members' shows of those towns I have knowledge of the time when there would be a score of classes for Lancashires, and all other breeds except the Lizards catered for in one class only.—A.O.V. To-day what does one see in these same Society shows—more classes for Yorkshires and Norwich than there are for Lancashires and Lizards. What such old stalwarts as James Fielding, Abraham Hamer, Levi Robinson, Ben Turner, Ben Viles, John Wright, Levi Butterworth, Robert Barrass, and other breeders of thirty to fifty years ago would say could they but see how their loved breed has deteriorated I cannot conceive, any more than I can with assurance give a reason why the breed has declined.

The Lancashire is a bird of distinctive character, and one would have thought that alone would have kept it popular, but it has not. The chief reason why it has declined is doubtless due to the fact that Lancashire breeders have not moved with the times. They have not supported shows outside the home area, the birds have seldom been seen outside their own county, consequently sales have been few, and in face of the enthusiastic manner in which such breeds as Yorkshires and Norwich have been pushed the Lancashire has had to go to the wall, because its breeders did not advertise its merits, and make the Fancy appreciate them.

WHAT IS WANTED IN THE LANCASHIRE.

The Lancashire canary is a large, massive bird, and well merits its title as the "Canary Giant." In length it is

about eight inches, although exceptionally grand specimens will sometimes measure a trifle over eight inches ; the head should be large, both in width and length, and fairly flat, the eyes well browed with feather, giving the bird a ferocious appearance ; the beak small and well set ; a long beak spoils the appearance of the head, making it look thin and snipy. The neck should be long, straight, and massive, being well filled all round ; the shoulders must be broad and well filled, yet not in any way prominent like those of the Belgian Canary. The back should be long, broad and straight, but a perfectly straight back is seldom seen, most specimens being slightly curved in the back, especially when they excel in length. The yellows are, as a rule, straighter than the buffs. The breast should be full and prominent ; the under part of the body long, and tapering away towards the tail, which should be long and straight, full and compact, not loosely made. The wings should be long and tightly braced ; slovenly carriage of wings spoils many an otherwise good bird. The legs should be long and massive, not showing too much thigh, and well set, or the bird will present a stilty appearance, which detracts greatly from its value, and spoils the erect and graceful carriage which is a great feature in a well-bred specimen of the variety.

In body this description is applicable to both the Plainhead and the Coppy as excepting the head they are alike, but the head in the Coppy is adorned with a crest, closely and flatly packed ; it should come well over the beak and eyes ; from behind the eyes it should finish off merging into the feathers at the back of the head without any break or deficiency of feathering. The centre of the coppy should have an opening about the size of a pin's head ; this centre should be clear and well defined, and from it the feathers of the coppy should radiate in a uniform manner over the beak and eyes.

Size, shape, carriage, and density of feather the Lancashire must have, these are its cardinal points ; if in addition it has quality and tightness of feather and colour it is all the more valuable, but colour not being a great asset in the make-up of the Lancashire it has been neglected and has been lost, as has quality of feather, and possibly it is due to its lack of colour and quality that the breed has decreased in popularity.

THE YORKSHIRE GREEN.

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In the Lancashire the usual method of pairing yellow to buff has not been so steadfastly adhered to as in other varieties. Two buffs are often paired to increase the size ; but this must not be overdone, or what is gained in size will be lost in shape and carriage. Another break from the orthodox is that occasionally two Coppy birds are paired together to improve the quantity of head feather, but this practice must only be resorted to when the crests or coppies are deteriorating in size. If it is followed up it will result in large, shapeless, broken coppies, wholly wanting in that beautiful symmetry of form so dear to the educated eye. In the same manner two Plainheads are sometimes mated so as to secure increased width and substance of skull. This may be done once now and again with manifestly good results, but if the Plainheads are bred together too frequently the shape of the coppies on birds bred from them will be found to be bad, and the centres will not be clear and distinct as they should be. But, from double-coppy, double-plainhead birds some of the best have been bred. By this I mean when one of the parents has been bred from two Coppies, and the other from two Plainheads. This doubling process must, however, not be performed more than once now and then.

WHAT OF THE FUTURE OF THE BREED ?

This is a serious question. If things go on as they have done for the last ten years, another decade may possibly find the fancy without a Lancashire canary. Those who are interested in the breed should rouse themselves, guarantee classes for it outside of Lancashire and create a demand for the bird. Attention should also be paid to the breeding of colour and quality of feather so as to make the birds more pleasing to the eye. From thirty-five to twenty-five years ago breeders of Crested Norwich made big inroads upon the best studs in Lancashire. The modern Crested Norwich was made from the Lancashire, and it seems to me that if the Lancashire is ever to get back to its old position it will only be by getting back from the Crested Norwich those properties which the Crested Norwich secured from it years ago.

WHAT TO AVOID IN BREEDING.

In selecting stock for breeding, one should avoid Coppies in which the copy or crest runs to a point over the beak, is badly split and tufted, badly centred, or harsh and husky in feather. In the same way a Plainhead that is narrow in front of the skull, and is scanty in eyebrow, and skull feather should not be used. A Copy that is bald behind may be used if a very heavily feathered Plainhead is mated to it. This is one of the chief points in the Plainhead, and a bird is of little use for breeding if it is at all scanty in head feather. The head feather when turned back ought to come completely over the head and cover the beak, especially so when the division is made in the centre of the skull, because that shows the bird has a good front. A pinched back skull is to be avoided, as is a thin or hollow neck. Narrow shoulders are generally accompanied by bad wing carriage and both are faults. Although slackness of feather is a fault in a show bird, it should not condemn a bird in the breeding room, because such a bird paired with a mate that has good feather will possibly increase the quantity of feather in the strain, and thus add to its value. These heavily feathered birds are often most useful as breeders. Birds that are short in leg and squatty in carriage must not be used for breeding.

WHAT TO LOOK FOR IN STOCK BIRDS.

Points that are essential in the breeding of exhibition Lancashires are necessarily quite the opposite to the faults of which I have been speaking. The ideal pair would, of course, be the very best and most perfect pair of exhibition birds one could find. As to which is the yellow and which the buff it is immaterial. Let us imagine an ideal pair—a fine, bold, yellow Plainhead cock, a bird of great length and substance of body, with massive head, neck, and shoulders, standing bold and erect on a well-built lengthy pair of legs, with his wings coming down evenly well over the root of the tail, and the latter held firmly and straightly. In feather our Plainhead must have heavy eyebrows and a good “turn-back,” that is heavy, dense, long, wide head feather, and

an abundance of good-quality feather on his body, the same fitting closely to the body. His mate should be a buff, or buff ticked Coppy, possessing a neat, well-centred coppy, or crest, with long wide feather drooping well over the beak and eyes, and then behind the eyes without any absolute break, merging itself into the feather of the back and skull and neck. In body the more she is like unto the description given of her mate the better. Needless to say, both birds should be perfectly strong and healthy, and one at least should be two or three years old, that is if the other is a yearling, or both may be two years old. As breeders birds are at their best from two to four years of age.

As really first-class Lancashires are difficult to find in these times anyone taking up the breed would have to so pair their birds that the deficiencies of the one were covered by the excellencies of the other in each pair. Thus if the hen failed in length and substance the cock must be extra good in those points; if the cock be short in feather the hen that he is mated to must have extra length of feather; if one fails in substance the other should have extra bulk, and so on in every case balancing weak points with strong ones.

Lancashires have the reputation of not being very good breeders, and also of being bad parents, and fanciers invariably use common hens for feeders. Some there are who breed both Lizards and Lancashires, using the former really as fosters for the latter, and risking their luck in getting a few good Lizards as well. One of the charges brought against the Lancashire cocks is that they do not fertilise their eggs. This is quite as often the fault of the owner as of the birds, because they neglect to trim them before putting them up to breed. It is wise when pairing Lancashires to clip the feather all round the vent and thighs of both cocks and hens, as the heavy feather prevents the proper fertilisation of the eggs. It is also as well to clip the coppy all round so that the birds may the more easily see their way about. This tends to the comfort of the birds and also enables them to see the way about the cage and attend to the wants of their families in ease and comfort.

The Lancashires being large birds, they should be given extra large nest pans or boxes. Many of the old breeders

used the old-fashioned square boxes long after the modern earthenware pans were introduced, because they found the latter were too small. The large leather nests used by Scottish breeders are very serviceable for Lancashires.

STANDARD OF PERFECTION.

Points

<i>Head.</i> —In the Plainheads, wide, almost flat with very slight rise densely covered with long, wide feather, which should hang well over the eyes, giving a sour, scowling appearance. In the Coppies, the crest should lie flat on the skull, the centre should be clear and well-defined, and the feathers should converge from the centre towards the beak and sides, falling evenly over the beak and eyes. From behind the eyes the feathers should gradually taper off into the back of the head and neck. The feathers should be flat and densely packed without a split over the beak or eyes.	25
<i>Neck.</i> —Long, full, stout and straight	10
<i>Body.</i> —Long, straight, and massive, especially the back, which should be very stout at the shoulders, and gradually taper away towards the waist into the tail. The chest should be round and full	20
<i>Wings.</i> —Long, well-braced, and evenly carried	5
<i>Tail.</i> —Long, straight, very close, and carried in line from the back	5
<i>Legs and Feet.</i> —Legs long and straight, feet well spread	5
<i>Position.</i> —Bold, erect, and commanding	10
<i>Feather.</i> —Profuse, long, broad and fitting close to body	10
<i>Condition.</i> —Clean, smart, and healthy	10
<i>Total</i>	100

TWO BEAUTIFUL EXAMPLES OF THE LANCASHIRE AND
NORWICH CREST WHICH ARE SO NEAR AKIN.

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CHAPTER XII

THE DUTCH FRILL

A BREED NOT WIDELY KNOWN.

ALTHOUGH much has been written regarding the connection of the Belgian and the Lancashire with the Dutch Frill, the latter has never been popular in this country, occasionally specimens are seen in the A.O.V. Classes, and one or two Societies have given classes for the breed. So far as I have been able to gather from my frequent visits to Holland it is not very extensively bred in that country. One of the chief authorities in Holland says it first attracted attention there about 85 or 90 years ago, some years after it was introduced to France, the date is given as 1850, and then later into Belgium. If this is correct what becomes of the fable about the Belgian and the Lancashire having been bred from the Dutch Frill?

My old friend, the late L. Van der Snickt, the well-known Belgian fancier and journalist, said that so far as he knew it was practically unknown in Holland. Thus his experience agrees with my own. There is however plenty of evidence as to its breeding in France.

Mr. C. I. Young, the hon secretary of the Frome Fanciers' Society, is one of the oldest breeders of Dutch Frills in this country, he having kept them for something like 20 years. Another stalwart of the breed in the Western town famous for cheese and printing is Mr. W. J. Minty, whilst Mr. A. E. Brooks, of Cambridge, is another enthusiast who has kept Dutch Frills for many years.

WHAT A GOOD FRILL SHOULD BE.

The Dutch Frill is a large bird running from $7\frac{1}{2}$ inches to 8 inches in length. It is stouter in build than the York-

shire, but not so massive as the Lancashire. It will, therefore, readily be gathered that it is a bold and commanding bird. Its head is large and full, something between that of the Yorkshire and Lancashire, its neck is very long and full, its shoulders are large and well rounded, but not so high as those of the Belgian; its chest is deep through and very prominent, the back is long and fairly wide, its legs are long and straight like those of the Yorkshire, and the thighs should be well set in the body, its tail and flights are of great length and both must be well braced and compact, the carriage of a first-class specimen is bold and erect.

The most striking feature of the Dutch Frill is its feathering, its breast feathers curl and twist inward, forming a series of frills, the feathers on the back are divided and spread over the sides of the bird, on the top of each thigh there is a bunch of loose feathers which project outward and downward. These are styled side-fins, and long fine feathers drop from the root of the tail over the bottom of lower part of the body.

The colours are as in other breeds, yellow and buff divided into clears, ticked, variegated, and green. It is said that the variegated and green birds are the strongest. That I cannot vouch for, but certainly they are more handsome, and generally speaking are larger than the clear and ticked birds.

A STRANGE PECULIARITY.

There is one peculiarity that the Dutch Frilled Canaries have in common with the frizzled fowls and bantams, and Frillback pigeons. In damp, dull weather the feather loses its curl. The best time to see any of these peculiarly feathered birds is on a warm, bright summer afternoon when the feather appears to be twisting back to its extreme limit.

In the breeding of Dutch Frills whilst it is advisable to pair together the very best specimens so far as shape, size and carriage are concerned it is not wise to put the heaviest feathered together. Better results being obtained by having one bird as profusely feathered as possible, and the other rather sparsely feathered. This way

THE DUTCH FRILL CANARY

better birds are bred than when both are heavily feathered or when both are of medium length of feather. Whilst Dutch Frills are not particularly good parents, they are not all bad, some will attend to their duties well, and others will not, therefore it is wise to keep a stock of common hens as feeders.

Yellow and buff is the usual order of pairing, preference being given to a clear or ticked bird and a variegated or green. This form of mating helps to keep the strain robust, and maintains the quality and length of the feather.

Owing to their excessive feather, Dutch Frills require careful attention during the moult, especially in a cold, damp autumn. This being so, it is wise to finish all breeding operations at the end of June or early in July.

TRAINING FOR SHOW.

Dutch Frills require training for show, and should be put through their paces in much the same way as are young Belgians. The treatment to be pursued will be found described in the chapter dealing with the breed.

When washing Dutch Frills for show the owner must be very careful not to break the feather by attempting to rub or brush it until it has become thoroughly soaked and sodden in the soap-suds, as described in the chapter on exhibiting.

STANDARD OF PERFECTION.

The following standard is of Continental origin, but has been approved by English breeders :—

	<i>Points</i>
<i>Size</i> .—As large as possible	10
<i>Position</i> .—Elegant, slightly curved, with a humpy appearance and well elevated on legs ..	10
<i>Feathers</i> .—(1) Long, fine, and silky. These should be parted, falling symmetrically down the back, called the “mantle”	8
(2) Those on the chest, undulating (or wavy like) converging to the centre in the shape of a shell, called the “craw” ..	10
(3) Those to the right and left, forming two	

very fine bunches of feathers in the region of the thigh bone, well formed and frilled up ; these are called " fins." If these last frills exist on one side only, or if the feathers are flowing down, and not, as it were, affording a support for the wings, the bird is not a show bird ..					12
<i>Tail</i> .—The tail should be long with a few fine feathers drooping each side of the rump, accompanying the large feathers of the tail ; these are called cock-feathers					5
<i>Wings</i> .—To cross slightly					5
<i>Head</i> .—Size in proportion to the body, without any crest, but if the back of the head is slightly hooded, as in the case of a Jacobean pigeon, additional points are allowed, but this is not essential					10
<i>Legs</i> .—Long and supple, without stiffness					5
<i>Colour</i> .—Usual canary colours : yellow, buff, or variegated with bright plumage, not patchy in colour					10
<i>Condition</i> .—Vigorous, showing nerve and action ..					10
<i>Cleanliness</i>					5
<i>Total</i>					100

CHAPTER XIII

THE CRESTED NORWICH

THE KING OF THE FANCY.

FORTY years ago there was a discussion in the fancy press as to which bird was entitled to the high-sounding appellative "The King of the Fancy." Up till that time it had been claimed by lovers of the Belgian for the breed in which they were interested, but the breeders of the Crested Norwich disputed the right, the chief arguments being that Crested Norwich were far more widely bred, had a more extended classification, were more difficult to breed to a high state of perfection, and commanded a far better market than did the Belgian. These points were unanswerable at that time, and if they were then how much more are they to-day? At that time Belgians of the highest class would not command more than £20, whilst Crested Norwich were frequently sold for £30, £40, and £50. The sale by Messrs. Mackley Bros. of a very famous bird, known as "King of the Champions," for £70, just over thirty years ago, created a sensation at the time, but a year or two after a still greater sensation was caused by the refusal of £100 for the wonderful bird, "King of the Season," which was bred by Mr. Toward, of Spennymoor. At that time Spennymoor was a veritable hot-bed of the Fancy, and some wonderful birds were bred in and around that little mining town away in Durham. From time to time quite a number of birds have changed hands at prices ranging from £50 to £100, but the climax was reached three seasons back when the late Bernard Steel paid Mr. Colledge, of Derby, £150 for a Crested Norwich. Included in that deal were two other birds, one at £65, and another at

GREEN CRESTED-BRED CANARY.

£50. This is a record, and I take it that it will be a long time ere we hear of another breeder receiving £150 for a single bird, or £265 for three in one deal.

HIGH PRICES CRIPPLE THE FANCY.

High prices are not conducive to the welfare of the Fancy. Quite the reverse. Up to twenty-five years ago the Crest fancy was as much the fancy of the working man as of the rich man, but the fabulous prices which have been paid within the last two decades have almost driven the working man out of the Crest fancy, and as a consequence Crest breeders of to-day are not one in fifty compared to the numbers of twenty-five to thirty years ago, whilst the Crested Canary Club has not one-fifth the membership it enjoyed at that time. During the last ten years the competition in the Crested Canary classes at our best shows has been very limited, and we have seen the show of the year with only three and four birds in a class, and some classes even cancelled. Why? Because all the best birds in the country were in the hands of three or four exhibitors. Men who were simply out to win at all cost, and who purchased every first-class bird that they could. When this happens in any breed that breed soon declines in public favour, and its popularity wanes, as has that of the Crested Canary.

At the moment there is hope that it may recover. Two or three of these big studs have been dispersed during the last year or two, and at the moment a more sane idea of the value of birds is making its presence felt. More than thirty years ago I was exhibiting Crested Norwich, and in those days it was not at all unusual at our provincial shows to find from twenty to thirty Crests in one class, and sometimes more, and we used to see the same thing at the Crystal Palace, which in those days was the show of the season.

FIRST CLASSES FOR CREST-BREDS.

In the year 1888, on the suggestion of the late John North, of Stockbridge, classes were provided for Crest-

YELLOW NORWICH HEN.

breeds, and at the Crystal Palace of that year was given the first classification for these birds, which up till then had only been looked upon as stock birds, and were sold for about as many shillings as their companions fetched pounds. I give the classes together with the number of entries in each:—Clear, Ticked, or Lightly Marked Yellow (13); Heavily Marked, Variegated or Green Yellow (16); Clear, Ticked, or Lightly Marked Buff (33). Heavily Marked, Variegated, or Green Buff (18); Any Variety Yellow Hen (15); Any Variety Buff Hen (21); The late Joe Bexson, of Derby, was the Judge. From thence onward Crest-bred classes have been provided. At the same show the Crest classes were Evenly marked Yellow (12); Evenly marked Buff (20); Ticked Yellow (17); Ticked Buff (26); Clear Body Yellow (11); Clear Body Dark Crested Buff (14); Clear Body Light Crest Buff (13).

All lovers of these beautiful birds must lament the fact that such classes have not been seen for some years. Shall we ever see them again? If breeders will only adopt a more reasonable idea of the value of stock the Crested-bred Norwich will come again—of that I have no doubt.

THE INTRODUCTION OF THE COPPY.

When I first remember the variety there was great division and much discussion owing to the appearance on the show bench of several birds which, whilst they had much improved head-gear, were not of Norwich type. This was towards the close of the 'seventies. Two very sensational birds were a couple shown at Nottingham in 1879 by Mr. Thompson, of Lancaster. They were far in front of any Crested Norwich shown before, but they were before their time, so to speak; opinion had not ripened enough for their admittance, and they were disqualified. Why? Because they had what were then styled Coppy backs to their crests, and were somewhat elongated in body. One of the most notable of the then modern innovations was a most beautiful bird known as "Sunshine," which was bred in 1883 by Mr. G. E. Russell, of Brierley Hill, and sold by him to Mr. J. Bastock, of Birmingham. This bird had a most wonderful career.

"Sunshine" cost Mr. Bastock £15, and that was a big price in those days—in fact a record. It's a far cry from £15 to £150 which I have mentioned.

THE LOVELY YELLOWS.

Years ago, as will be seen by the figures I have given, Yellows were almost as plentiful as the Buffs, but as the rage for the big Crests increased double-buffing was practised continuously, and the Yellows have almost disappeared. The judges were to blame, because at the smaller shows in which Yellows and Buffs had to compete together they went all out for size of Crest, and the Yellows got crowded out until breeders in despair gave up trying to breed them. It was a great pity. For real beauty there is nothing to compare to a well-balanced Evenly-marked Yellow Crested Norwich. Nottingham was a town in Crest circles years ago, and it turned out more high-class Yellows than any other centre of the fancy, not even excepting Norwich, which also upheld the Yellow strongly. Shall we ever see the Yellow in a strong position again? I fear it is too much to hope we shall. But, if not, why not? Once we get the Crest fancy running on more normal lines then the Yellows will come back. By this I mean when real love of the Crested Canary and not *f* s. d. rules the fancy.

ONE POINT JUDGING HAS DONE.

Before we go farther we will consider what are the properties which go to make up a first-class exhibition Crested Norwich. It was in 1883 at Yeovil Show the late W. A. Blakston, discussing with myself my own exhibits at the show as well as others, said in reply to a remark I made in reference to one of my exhibits being rather Coppy-tailed:—"We don't bother about that end. It's the other end that counts." That was true then, even as it is true to-day, and in that has been the setback of the Crest fancy. Head! Head!! This has been the cry of judges and exhibitors, until we have had birds that required a nurse in constant attention

to keep their crests fit for show ; this and the abnormal prices has driven the working-man fancier from the Crest fancy. Years ago Plymouth, Exeter, Taunton, Cheltenham, Bristol, Brighton, Southampton, London, Northampton, Kettering, Coventry, Nottingham, Leek, Derby, Sheffield, Norwich, Wymondham, Yarmouth, Lowestoft, Manchester, Liverpool, Gateshead, Rochdale, Oldham, Sunderland, Newcastle, were all centres of Crest breeding. When I say centres, I mean that each of these towns possessed quite a large number of fanciers who were breeders of Crests. Where are they to-day ? In many of the towns you would not find a single breeder of the variety. In others you might find from one to six. Only one reason can be given for the change—the one stated.

WHAT IS WANTED IN CRESTS.

Before going on to say anything about the breeding of the variety, we will consider the properties that go to the

HEAD OF CRESTED CANARY:
showing Radiation of Feathers.

making of a first-class exhibition Crest. Starting with the beak it should be small. A long, coarse bird requires

more feather to cover it, and when a fair expanse of beak is seen protruding under the crest it makes the latter look short, even when it is not. Now we come to the property which gives the breed its name—the Crest. This must be large, some say it cannot be too large, but it depends in great measure on the head which supports it. The Crest must be large, it must be evenly centred, that is the centre must be placed as near the centre of the bird's

HEAD OF CRESTED-BRED CANARY,
showing rise of skull and heavy brow feathers.

skull as is possible, and from the centre the feathers, which must be long, broad, dense, veiny, or well-ribbed, and of rich quality, must radiate uniformly all round, drooping well over the eyes, beak, and poll in a manner which secures for it the definition of a weeping crest. The skull itself must be broad and long, its width and length almost equal, so as to carry the crest evenly; it must not be flat, but be cushion or dome-shape. The back of the head must be broad and well feathered, the neck must be stout, the shoulders wide, also the back, the

A MASSIVE GREEN CRESTED CANARY.

chest round, full and deep, its body should be short, also its flights and tail. The shape of a good Crested canary should be that of a robin, only possessing more substance of body. The legs should be short and the bird should stand well across the perch in a free, cosy, and graceful manner.

The Crest-bred must possess the same body characteristics as the Crest, and the bodies of both must be densely covered with feather of great length and width, yet not coarse. The beak must be short. The head very wide, round, dome-shaped, and covered with an abundance of long wide feather which must commence immediately over the beak (this is called the entrance), and continue over the crown into the poll. The feather of a good Crest-bred should when turned back come over the head and cover the beak. This is styled "having a good turn back." Important as it is that the feather should cover the beak when turned from the back of the skull, yet far more important is it that when it is turned back from the centre of the skull, or even just behind the forehead or brow, it should do so. Many birds that turn well from the back of the skull do not do so near the brow. The eyebrows also should be well covered, or "lashed" with feather.

OBJECTIONABLE PROPERTIES IN CRESTS.

Narrow or pointed frontals, breaks in the radiation either over the beak, the sides, or back. A bare patch on the back of the skull just under the crest, known as "hollow backed" horns, that is tufts of feather at the back of the crest. A flat, hairy crest, an ill-defined centre spoken of as "rough in centre," or badly placed centre, which makes the crest out of balance, lightness or lifting of the crest feather, thin brows. Narrow or pinched-back skull and neck, long body, shallow or flat chest, badly carried wings and tail, and slack body feather.

THOUGHTS ON BREEDING.

Knowing what we do want, and also what we are to avoid, we come to the consideration of the all-important

matter of mating our stock so as to secure a maximum of those properties which are desired, and a minimum of those which are objectionable. As I have said, double-buffing is generally followed in the breeding of Crests, but it should not be. The orthodox system of pairing yellow to buff will give far more colour, greater quality of feather, smarter carriage, and not a great deal will be lost in size either of skull or body. Frankly our Crests of to-day are abnormal and if a little more attention was paid to shape of body quality of feather, markings, carriage of wings and tail, and style, our birds would be far more beautiful than they are. When all the value of the breed is placed on one property that breed has taken the first step on the downward path, and it is only a question of time ere it is ranked amongst those breeds that are not popular.

WHAT THE CRAZE FOR CREST HAS DONE.

The craze for size of crest has led breeders to leave the study of yellow breeding, also that of markings, and as a consequence for years past the majority of our birds have been greens or very heavily variegated. If it had not been for this we should have had ten times, possibly a hundred times as many more men breeding Crests to-day than we have. How seldom does one see a Clear Body Dark Crest, or an Even-marked. The majority of the breeders of to-day know not how to produce them, and have never tried. It is no easy matter to breed either; and yet once a strain has been built up, to breed either the difficulty would not be so great.

It cannot be denied that Crest breeding is one of the most interesting branches of the canary fancy. There is here more scope for the development of individual thought and experiment than there is in either of the other breeds. Take, for instance, the breeding of evenly marked birds. The breeder of the Norwich Plainhead Yorkshire or Border has only to get his markings; the breeder of the Crest has to get markings and crest. Then again, in breeding clear-bodied birds, the breeder of all other varieties has to simply get his birds clear. The breeder of clear-bodied dark Crests has to get the body of his

birds perfectly clear, yet, while doing this, he has to keep the crest as dark as possible. It will at once be seen that breeding Crests is not quite so easy as breeding Plainhead Norwich or Yorkshires.

BREEDING FOR CLEAR BODY DARK CRESTS.

To produce a strain of birds that would throw Clear Body Dark Crests one should mate up two or three pairs, say a Clear or Grey Crest to a Crest-bred with a dark cap, and a clear body, or one with a clear body and lightly marked wing. Another pair might be a Clear Crest-bred, and a wing marked or Clear Body Dark Crest. The chief thing to avoid would be birds on either side with variegation about the eyes, neck and shoulders. A few years' careful selective breeding would give one a stud that might be relied upon to breed Clear Body Dark Crests with reasonable frequency. The difficulty is to breed the body absolutely clear and the crest dark. The old breeders used to do it, and the men of to-day could if they would. Size of crest would be lost, but what of that? A smart, stylish, Clear Body Dark Crest with neat wings and tail, close body feather of high quality is a far more handsome bird than a slack-feathered striking Green that has only size of crest to recommend it.

In breeding for the Clear Body Dark Crests there would come some of those handsome Clear and Grey Crests which used to be so numerous, and which were generally admired. To-day one seldom sees such a bird. In the old days the Light Crests invariably carried heavier and better-shaped Crests than did the marked and variegated birds. I have recollection of some magnificent Light Crests shown by Miss Howison, of Cheltenham, Messrs. Tom King (Cheltenham), C. L. Quinton (Yarmouth), J. H. Scothern (Nottingham), H. Spelman, J. Gowing, H. Frost, J. Howard and the famous Mackley Bros. (Norwich), G. E. Russell (Brierley Hill), J. North (Stockbridge), Kent and Langman (Plymouth), T. Heath (London), and others.

THOSE BEAUTIFUL EVEN-MARKED DARKS.

In the olden days when fanciers bred for markings what glorious birds we used to see. Foster, of Ports-

mouth, was a great breeder of these gems, others I recall—Tom Crossley, of Kendal ; J. North, of Stockbridge ; St. Leo Smith and J. H. Scothern, both of Nottingham, W. Bowyer, of Leek ; W. Radmore, Kent and Langman, Halse Bros., and J. Findlay, of Plymouth.

In the breeding of Evenly-marked Dark Crests one would have to use Clear Body Dark Crests, Unevenly-marked Crests, also Evenly-marked. The great thing to avoid would be the mating of birds variegated about the body, or of two birds both with well-marked wings. If marked birds are paired together they should always incline more to being lightly marked than heavily marked. In fact, it is wise never to pair together two birds both marked in wings. Generally speaking, an evenly-marked bird should be paired to a clear-bodied bird, or one very lightly marked. Once a strain is established one can do many things that are quite impossible with strange blood, and it may be possible to pair together two evenly-marked birds and secure birds not too heavy in marking, and in the same way two very lightly-marked birds might be relied upon to produce almost perfectly-marked birds.

At the start I should advise the mating of Clear Body Crests, either Clear or Dark Crested, with wing marked Crest-breds, and Clear and Dark-capped Clear Body Crest-breds with wing marked Crests. Careful selection would have to be made of the progeny, guided by how the initial pairs produced markings. Clear Bodied and Lightly-marked birds only should be used at first. The Crests of to-day are so full of dark blood that it is far easier to produce heavily variegated and green birds than it is anything else.

Those who set out to breed Clear Body Crests, and Evenly-marked Crests have a difficult and uphill task, one that will exercise all their patience, knowledge, and ingenuity, but the result will well repay them. That is if they are true fanciers.

WHAT THE CREST CLUB SHOULD DO.

If the Crested Canary Club would only instruct its judges to pay more attention to quality of feather and

EVENLY MARKED NORWICH CRESTED CANARY.

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well-balanced markings the Crest fancy would regain its old vigour and increase its followers. It is useless to allow things to go on in the manner they are going. The Club and the Fancy are both much weaker than they used to be, and the birds are gradually decreasing in numbers as are the shows which now provide classes for Crests. Forty years ago every show gave classes for the breed. To-day there are not more than about a dozen shows in the whole country that give classification for the "King of the Fancy." At the moment we have a Crested Canary Club, in the old days we had not. This leads one to ask what has the Crested Canary Club done for the Crest Fancy?

BRINGING BACK THE YELLOW CREST.

I have said that double-buffing has destroyed the Yellows, and did Crests breeders follow the orthodox method of breeding canaries they would come back again in all their glory. What is needed to-day is more sport, and less commercialism in the fancy. Love of the hobby and not £ s. d. is what should hold sway in the fancy. Those who would like to see the Yellow Crests occupying their old position on the show bench should set resolutely about the task of producing the birds, and inducing the Crested Canary Club to give special encouragement to their breeding, not only by seeing that classification is provided, but by instructing its judges to pay more attention to all-round properties and less to mere sign of crest.

At the moment there would be a difficulty in finding Yellow Crests and Crest-breds as they are few in number, still they are to be found. In starting to breed with the idea of founding a strain I should prefer to use yellow cocks and buff hens. In this way I should expect to secure more colour and lose little in the way of crest.

Further, I should like the yellow cocks to be Crest-breds. As to whether they were clear-bodied, variegated, marked or green I should prefer them variegated or green. The first and chief thing would be getting the yellow blood into the breed again. If I could not find a Yellow Crest, or Crest-bred I should search round for a big thump-

ing yellow Plainhead Norwich cock and a yellow Lancashire. There are plenty of the former to be had ; Norwich would give colour, shape, and style. The latter would give Crest qualities but little else, and would need to be used very carefully. The chief thing to consider at first would be the getting of the yellow colour, and in mating up the progeny from the first year's breeding all the yellows would have to be used if it was at all possible, because it would not be wise to use either the Plainhead Norwich or the Lancashire more than once at the start. One can only speak generally on such a matter as this, but I should take the very best yellow

A STUDY IN HEADS.

Crest-bred
too flat in skull.

Crest split in front.

Crest with weak
sides.

Crest-bred cock if there was one amongst the progeny and pair him back to his own mother, that is the variegated or Green-Crest hen, then I should mate any other yellows there were to other buffs of the same strain. I should work in the same way with the progeny from the Lancashire pairing the best yellow Crest-bred to his dam. If I thought they lent themselves to it I might pair some of the first cross Lancashire-Crests with some of the Norwich Plainhead-Crests, and thus build up my strain.

BREEDING FOR CREST PROPERTIES

We now consider the ordinary mating of Crests and Crest-breds so as to produce show birds. When starting Crest breeding, the fancier must be prepared to lay out a large sum of money—that is, if he means to become a successful exhibitor. I should not advise the indiscriminate purchasing of a lot of prize-winners, but rather

the brothers and sisters, uncles and aunts, of noted birds. Further, I advise that the stock be all purchased from one breeder. Fresh blood can be introduced after the purchaser has done a little breeding on his own account. Many pay high prices for exhibition stock and pair them up thinking that they will get some wonderful youngsters. They should not forget that show birds purchased at haphazard very rarely produce show birds. This is a fact that can be verified by all who have made a careful study of Canary breeding. The champions so purchased do occasionally throw a bird that is fit to follow in its parents' footsteps, but very rarely. On the other hand progeny of the best birds carefully mated with other birds of the same strain often produce magnificent specimens, and it will generally be found, on tracing the pedigree of the best birds that they were bred from the relatives of noted winners, and very seldom from the cracks themselves. In starting a strain it is always the best plan to start by purchasing birds from some noted amateur breeder, and getting full particulars as to their pedigree.

In an established stud we must mate together the very best Crest and Crest-bred in the room, that is if they are suitable. I will explain. We will suppose that the best Crest in the stud is a variegated cock. A good all-round bird, but its failing is a tendency to run thin, or possibly narrow, in front. The mate for such a bird would be the best Crest-bred show hen in the stud, because nine times out of ten she would have a strong front, but if it should so happen that she failed in front then she would not do as a mate for the best Crest cock, and we should have to find a hen that was extra good in front, even if she had some other fault. A Crest cock or hen that was good otherwise, but pinched in back or crest would have to be mated to a Crest-bred excelling in back skull, and also very heavily feathered. Body properties and feather should also be considered in the same manner, and two birds slack and loose in feather should not be mated together, nor should two birds that were long or shallow in body. In each case the mates selected should excel in the property in which the other failed. A Crest that was otherwise good but was inclined to lift should be mated to a Crest-bred with a very densely feathered bird with good shape of skull, and bred from a bird that was as

near perfect in the radiation and lay of its crest feather as possible. Then a Crest with a large, heavy crest should be mated to a Crest-bred with very wide, heavy feather on its skull and bred from a bird with a good, veiny or leafy crest. Then there is the Crest that is "horned," or shows a tendency that way. The best mate for that is a Crest-bred that is extra wide in skull and thicker in neck, because "horns" are usually found on birds that are long and somewhat narrow, or pinched in skull.

THE VALUE OF THE TURN-BACK.

The new hand must be very careful how he starts, and before purchasing should consider what he is going to breed. That is Clear Body Crests, Evenly-marked Crests, or anything that may crop up in the way of colour. In buying stock he should see that the Plainheads are possessed of good broad skulls, well-browed eyes, and thick, stout bodies. The Crests should be carefully examined. Many birds with long weeping crests are often deficient in density of crest feather—that is, the under feather is short, thin, and scanty. This cannot be observed unless the crest is carefully lifted and turned back. It is also wise to turn back the feathers on the skull of the Plainheads. I have already pointed out that it sometimes happens that birds possessing good brows are not well feathered on the top of the skull. This is a most important point in selecting stock, and should not be overlooked. The crested birds should possess a good centre, and from this centre the crest feather should radiate in a uniform manner all round ; there should be no break in the feather, which should lie quite thick and flat on the skull, drooping evenly over the eyes, back, and neck.

In all matings great attention must be paid to the shape of the skull of the Crest-bred used. In every case select the widest and most heavily feathered skulls, and never, if it can be avoided, use a Crest-bred that is long in head. You will never breed good Crested birds from Crest-breds of this character.

The Crest breeder has not only to produce good Crests, but he has to keep them in good condition, or he will never win prizes. Much attention must be paid in this

CREST-BRED NORWICH CANARY.

direction by providing suitable eating and drinking vessels and by seeing that the feeding holes in the cages are of good size. The best of Crests are easily spoiled by a little negligence in this respect. The birds should not be washed more often than is absolutely needful, nor be allowed to use the bath indiscriminately themselves. The perches in their cages should at all times be kept low, or the birds will damage their crests by knocking their heads on the perches and cage tops.

No matter how good the Crests may be, they need grooming, even those that lie perfectly even on the head, whilst those that are inclined to lift or twist are appreciably improved by being brushed with a badger hair tooth-brush once a day. This brushing trains the feather and keeps it in the direction it should fall, it also keeps it clean, and thus preserves its beauty. Before using the brush it is advisable to dip it in water just to damp it, nothing more.

THE IDEAL CREST AND CREST-BRED.

The Crested Canary Club in its standard describes the ideal, but does not allot any given number of points to the different properties as do most of our specialist clubs. Its standard reads as follows :—

THE CREST.—Size and formation shall be the first consideration. A crest cannot be too large. It should consist of an abundance of broad, long, and veiny feathers, evenly radiated from a small centre, well over eyes, beak, and poll. A good crest may be flat if well filled in at back, and without splits, but a drooping and weeping crest shall have the preference.

Type and quality are of the next importance. The body should in shape resemble that of the Bullfinch, possessing substance in proportion to its length, with a broad back nicely arched, full and well-circled chest, tail short and narrow, wings not extending beyond root of tail, nor crossed at tips, but fitting close to the body. The neck should be full and the beak short. The bird should stand well across the perch on short legs, with thighs and hocks well set back.

THE CREST-BRED should possess a body as above described. The head should be large and round, broad

CHAPTER XIV

THE NORWICH PLAINHEAD

THE MOST POPULAR OF ALL COLOUR BREEDS

FORTY years ago the Norwich Plainhead was the most popular of all canaries. It runs a close race with the Yorkshire even now, and it is a moot point which of the two has the largest following. What changes have I seen in Norwich! I first remember it as a small bird about the size of a Border Fancy, the regulation length being 5 to 5½ inches; its coat was fine and tight, and shone like silk. I have seen it go through the wars that have waged over K.N.-fed, Non-K.N.-fed, Natural Colour, and Open Colour, Flighted, and Non-Flighted, also the great length question and type.

Thirty-five to forty years ago the Norwich Fancy was lively indeed. When exhibiting one never knew if his Natural Colour birds would be disqualified or given the highest position. I have had birds win first at one show and be disqualified the next. One or two judges would have colour, whilst others barred it sternly. Some wanted the K.N.-fed birds as red as tomatoes, and the "Natural Colour" ones without scarcely a vestige of colour. I have had birds disqualified as not being "Natural Colour" that had not had a particle of colour food.

Exhibiting was a funny game in those days, and controversy waxed hot and strong and frequent. Yet the popularity of the bird never suffered, and none other came near it in the estimation of the fancy. It is only since all the fighting and squabbling over type and colour ceased and the fancy took the line of least resistance that its supremacy has been shaken by the Yorkshire.

In my early days our leading authorities were Blakston

A NORWICH PLAINHEAD OF TWENTY YEARS AGO.

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and Wallace, and they both wrote of the value of the Lizard cross. It was that which gave the birds of that time their wonderful sheen and silky feather. The subsequent increase of size which came from the Prescot district was possibly due to an introduction of Lancashire blood. It destroyed those beautiful silky, sheeny coats, and we have never had them since. In those days the Norwich was indeed a bird of colour. That is, natural colour, and men bred for colour. In these latter days it is more fed than bred for.

COLOUR THE THING.

At that time no less than 45 points out of the 100 making the ideal bird were given to colour alone, and, as if this was not enough, twenty more used to be given for extra sheen and brilliance. Eight points only were given for size, and six for shape. To-day the standard of the Norwich Plainhead Club gives fifty for size and shape and only fifteen for colour. Thus instead of being, as it was, considered a bird of colour only, the Norwich is now a bird of type, and should be so judged. What a difference! Then only fifteen points were allowed for condition and quality; to-day they stand equal with colour. Unfortunately some judges even yet prefer colour to type, and if you give them a good big hot-coloured bird it will win over birds of finer quality and superior type.

These differences in the breed are so great that one can hardly credit that such changes could have been wrought amongst a body of men so conservative as cage-bird fanciers. These changes have not been caused by any sudden revulsion of feeling. There has been a gradual growth towards the modern ideal.

It was in the year 1887 that we saw the first of the big birds in the South of England; he came from the stud of one who has turned out many a good Norwich in the days that are past, and who is still with us, Mr. C. E. Silk, of Emsworth. That bird was of a totally different character to the big ones which came from Prescot, inasmuch as he had what they lacked, the much desired rich silky quality of feather. He was not, however, so

short and cobby as the Prescot birds. This bird set the fashion of big Norwich in the south, and we have had them ever since.

It was this bird which roused the ire of the men of Norwich, and led up to the great Conference which was held at the Crystal Palace two years later. It was then decided that the Norwich Plainhead should not be more than $6\frac{1}{2}$ inches in length.

Norwich then was the stronghold of the breed bearing its name, but other towns were running it hard ; Plymouth, Nottingham, Northampton, Coventry, Leicester, Wellingborough and London had hosts of Norwich breeders at that time. To-day the city of Norwich is a back number so far as the fancy is concerned, and quite recently one of the most prominent dealers in London, a Norwich-bred man, and the holder of an illustrious name in the annals of the fancy in Norwich, told me that he now bought but one Norwich in Norwich to every hundred he bought elsewhere.

POINTS OF THE MODERN PLAINHEAD NORWICH.

Before we go further let us consider what is asked for in the ideal Norwich of to-day. The head should be very thick and chubby, presenting an appearance of roundness even though it be not perfectly round. There must be no flatness about either front, top, sides, or back. It should rise gracefully from the base of the beak, and fall away into the neck at its junction with the base of the skull ; the face should also be chubby, hollow or flat cheeks are altogether wrong. Viewed from the front, back, or in profile, the head should have the appearance of roundness ; there must be no angularity anywhere, no flatness of skull, and no overhanging eyebrows. In front and at the back, too, it should be wide and stout. The eye should be bold and set in a line with the beak, it should be nearly in the centre of the head, not quite in the centre, or the bird will look too marble-headed, and that is not symmetrical, nor pleasing to the eye. The eye should be set just a trifle nearer to the beak than to the back of the skull. The beak must be short and neat, not too fine nor too stout. A beak which is too fine

gives the bird a mean appearance, and one that is too stout spoils the beautiful outline of the skull when viewed in profile, but, what is worse, it is often accompanied by flatness of skull and overhanging brows.

SHORT AND COMPACT BODIES.

A really first-class exhibition bird should be short and thick and stout in neck—in a word, bull-necked. It can hardly be too thick or too short. Many birds are spoilt by having long thin necks. This failing is usually seen in yellows of high colour and quality ; they are very apt to run fine in neck. The head, neck and shoulders of a good Norwich should be bunched all up together. The neck should be just sufficient to show that there is something between the head and the shoulders. To use a paradox I once heard expressed by an old breeder—a good-necked Norwich should have no neck. The ideal Norwich neck should be like that of the Bullfinch. The body should be round and compact, deep through from back to breast, broad in the chest and shoulders, well rounded in front and at the sides, whilst the back itself should be broad and slightly rounded. A flat back is wrong, so also is what is known as a roached back, that is a back which is so round lengthways that it looks humpy. The roundness of the back should be almost imperceptible, and rise from the sides and not from the shoulders. From the shoulders to the tail the back should present an appearance not of flatness, nor of roundness, but of being well filled in. Whilst the front of the body, that is the chest, requires to be bold, deep and broad. Behind the legs there should be little body, and what there is should have the appearance known as “well cut away.” The ideal Norwich is short all over, but many of the big ones are far from being short.

WING CARRIAGE OF IMPORTANCE.

The wings should be well set into the shoulders, short, tightly braced, and carried very close to the body. The flights must lie evenly, the tips meeting just over the

root of the tail. This is where many good birds fail, their wings, instead of meeting and being well balanced, cross each other. This arises very often through the back being narrow and roached, and sometimes by the birds being flat-sided. The wings should rest upon the root of the tail, and not cocked up so that a space may be seen between them and the finish of the back. Bad wing carriage is a very prevalent fault in the Norwich of the present time. The tail should be short, very tightly folded, and carried at a nice angle from the body, of which it should present the appearance of being a part. Some tails look as though they do not belong to the body that carries them, but as though they had been stuck into the body because a caudal appendage is necessary to the bird. Some are too long, some too wide, and some seem to work on a hinge, and not in unison with the body. A well-made tail adds greatly to the finish of a bird.

SMART AND JAUNTY CARRIAGE.

It matters not how well built the body of a Norwich may be, if it has not good carriage. The best body ever seen may be spoilt by bad carriage, even as a moderate bodied bird may show to great advantage by reason of its possessing correct carriage.

A Norwich should be smart and lively in its movements, and show a jauntiness and pertness of carriage like unto the robin. In this connection mention should be made of the legs; they have much to do with correct carriage of the body. If the legs are too long the body will be carried too upright and not enough across the perch; on the other hand, be they too short the bird will look cloddy and heavy, and be somewhat sluggish in its movements. With legs of medium length, the bird is able to throw just sufficient boldness into its carriage to throw its chest well across the perch, and for its head to be lifted well up in a bold, fearless manner. So much for structural properties.

We now come to those which are really the finishing points—quality of feather and colour. The feather of a good Norwich should be soft and silky, the under flue as soft and yielding as floss silk, and the top bright and

THE IDEAL NORWICH CANARY.

*Drawn by Mr. H. Norman, published by "Cage Birds," and
adopted by the Norwich Canary Club.*

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glistening, like unto a piece of highly finished silk. A harsh, dry, cottony appearance is altogether out of place in an exhibition Norwich.

Colour is all that is now needed to make the bird I have depicted a veritable champion. Colour at one time was nearly three parts of the Norwich Plainhead. It is not so to-day, but even yet it plays a great part in the judges' decisions, and always will, because nothing attracts the eye so much as colour. To meet the keenness of present-day competition a winning Norwich needs to be one rich golden orange tinge right through. This needs to be both bred and fed for.

There is nothing in the whole of the fancy which so upsets the fallacy of the argument of those who say our birds should be judged by points than this question of colour. Only fifteen points are given to it in the standard, yet judges there are, and exhibitors, too, who speak of it as the chief feature of the breed.

THE FIRST ESSENTIAL—TYPE.

We now come to the consideration of how to produce the bird we have been describing, and the first essential is type.

Type comes in great measure from the hens ; therefore the man who would be successful, and make a name as an exhibitor and breeder, must study very carefully the up-keep of a good stud of hens, and this can be done by never breeding from hens which are narrow in head or body, hens which are lacking in depth and width, hens which are hard and harsh in feather, or hens which are clumsy and awkward in gait. Unless a strain is carefully watched, deterioration in size will set in, and the way to avoid this is to keep away from cocks which, although they may be brimful of colour and quality, are just a bit fine and whippety in body. Such birds are nice to look at, but they are not much use as producers of a race of birds which are likely to win prizes. Type I want on both sides, but especially in the hens. Strong, heavy cock birds, which may perhaps be a trifle too long in body or too coarse in feather, make splendid mates for those neat, short, chubby, high-quality hens which just fail a

trifle in size for exhibition purposes. A hen is none the worse for being a trifle undersized, provided she has all the other needed qualifications; in fact, such a hen is far to be preferred to a large, coarse hen. The latter I would not advise anyone to breed with. Large hens are not as a rule good mothers; further, they breed birds which are ungainly and clumsy in carriage, and generally lack quality. The neat, natty little hen, of good type, is the ideal hen to breed with.

THAT INDEFINABLE BUT VALUED QUALITY.

It has been said that it is impossible to define quality. In a sense it is, and yet the experienced eye can always recognise it when present. It is that extra special all-round finish which makes the good bird complete. But quality of feather is capable of definition. As I have said years ago the Lizard cross was the fountain from which we drew quality of feather. The first canary I exhibited was one of those spangle-backed Norwich known as "a dapple backed 'un." In those days we often saw them. I have not met one for a long time, and even the saddle-marked birds which used to be common, and which also came from the same source, are not now often seen.

The Lizard cross used to give a beautiful softness and silkiness of feather which was most enchanting, whilst it also at the same time added a rich metallic lustre to the colour. I have often said that if breeders would now and again take a dip into the Lizard blood it would pay them. It might mean a sacrifice of size somewhat, but this could be rectified very quickly. I should recommend mating a rich-coloured, chubby, fine-feathered buff Norwich hen to a big silver Lizard cock. If it was carried out on these lines there would not be much loss of size. Young cocks bred from this cross should not be used for breeding, but sold as songsters. If they should be used they would tend to lower the size of the strain. Only the hens should be used, and these should be paired to Norwich cocks excelling in size. If it is not thought advisable to dip into the Lizards blood, then resource must be had to green blood, and here let me say that the man who seeks to build up a winning

strain of Norwich ought always to have in his breeding-room a large percentage of birds showing green blood, ranging from the ticked birds and lightly marked to the heavily marked or nearly green birds.

The clear bird is the highest form of the breeder's art, because it is farthest away from the wild canary, but the constant pairing of birds that are clear or lightly ticked tends to a loss of quality and colour, therefore it is necessary to watch one's breeding stock in this respect. If clear hens are used, then the cocks should be more or less marked, and vice versa. This system of breeding is followed by our most successful fanciers, and that fact alone is its best recommendation. One great factor in relation to the use of green blood is that not only does it add to the quality of the birds, but it also improves colour and increases the stamina of a strain. That is where the old time breeders of such towns as Nottingham, Northampton, Leicester, Plymouth, and Norwich used to excel. They bred for colour. They knew the value of the variegated birds in producing both quality of feather and colour, and they always used them in the production of their clears and ticks.

COLOUR MUST BE BRED FOR.

Colour being such an important factor in the awards of the judges, it behoves the breeder to pay much attention to its production. There are those who argue that, as colour may be put in through the medium of the food during the moult, there is no need to breed for it. This is a great fallacy, as the birds which are bred for colour take colour feed more readily than those which are not so bred, and, further, a bird which has a good store of natural colour does not require so much colour food as one in which breeding for colour has not been considered. Yellow variegated cocks are most useful birds for keeping up colour in a stud, but, strange to say, such birds as a general rule fail somewhat in type, being built on rather more racy lines than the clears. In using such birds in the breeding-room they must be paired to stoutly made buff hens. Buff-marked birds are often thick and chubby, therefore can be used freely with yellow hens,

either clear or lightly marked. Buff-marked cocks with yellow lightly marked hens often throw most magnificent birds, so far as colour and quality is concerned, and that without any loss of type or size. But as a general rule colour is more advanced when yellow variegated cocks and lightly marked buff hens are mated together.

WHAT IS A TICKED BIRD ?

This used to be a fairly simple proposition. To-day it is not. We have no definite rule. Some clubs say "a tick is a mark that may be covered by a threepenny piece," others say a sixpenny piece. Many years ago, the classes used to read, "Ticked, Marked, or Variegated." In these classes were generally to be found three or four, and sometimes more, evenly marked birds. These used nine times out of ten to secure the premier positions, because the judges, knowing the difficulty of producing even marks, used to give such birds a bit in type compared with the ticked or unevenly marked birds. Then for some years the schedules read "Ticked, or unevenly-marked," which shunted the evenly marked birds to the A.O.V. As a result, the breeding of evenly-marked birds has become almost a lost art.

A well-balanced four-pointed buff Norwich is one of the handsomest birds we have, and it has been a matter of deep regret to me to watch the gradual decline in popularity of such a charming fellow. Nowadays we get "Lightly Variegated" and "Heavily Variegated" classes. In other branches of the fancy, the chief aim of specialist clubs is to raise the varieties which are weak. In the cage-bird fancy an opposite policy seems to prevail. The Norwich Plainhead Club has been many years in existence, but has never done anything to encourage the breeding of the most beautiful members of the Norwich fancy—the four and six-pointed birds.

BREEDING FOR MARKINGS.

In a general way the Norwich breeder of to-day troubles little about the markings. This is a mistake. When one

AN IDEAL NORWICH CANARY HEN.

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GREEN NORWICH CANARY.

breeds for markings the variegated birds in the studs are much more handsome than when little thought is given to the markings. When the birds are paired clear or ticked to variegated, just to balance colour and quality, there is a number of birds bred with a lot of body marking. When one breeds for markings these birds are not so frequent, as the marking stays about the eyes and wings and we get birds that are far more beautiful to look at.

Those who will take the trouble to breed for markings will, I am sure, never regret it, as apart from whether they are fortunate enough to breed a grandly marked four-pointed bird their variegated birds will carry marking that will generally give joy to the owner, and capture the eyes of the judges.

In commencing a strain to breed markings some three-pointed birds should be used, that is, birds marked on both wings and one eye, or both eyse and one wing, others with wing marks only, and some with eye marks only. These birds would prove invaluable to anyone willing to concentrate attention upon the breeding of even-marks. A three-pointed cock could be paired with a hen marked on eyes or wings only, or a cock marked on eyes only could be paired with a wing-marked hen, and so on. The great thing to remember in breeding even-marks is to avoid the use of two birds that are heavily marked. A bird with heavy eye and wing markings should be mated to one with very light eye-markings and no wing marking, or light wing-markings and no eye marking. A perfectly marked bird should be mated to one lightly marked, and so on. A season or two of breeding would give the necessary knowledge and experience, and afford plenty of scope for a fancier of an experimental turn of mind, whilst the pleasure derived from the general improvement of markings in the stud would more than compensate for the difficulties and failures encountered.

STANDARD OF PERFECTION.

The standard of perfection reads as follows for Clear, Ticked and Variegated Norwich :—

	<i>Points</i>
<i>Colour</i> .—Deep, bright, rich, pure and level throughout	15
<i>Shape</i> .—Beak, short and neat, clear in colour ; head, round, full and neat ; neck short and thick ; body short and chubby, with wide back, well filled in ; deep, broad, full chest	30
<i>Feather</i> .—Soft and silky, with brilliancy and compactness	15
<i>Wings and Tail</i> .—Short, compact and good carriage	15
<i>Size</i> .—Well proportioned	10
<i>Legs and Feet</i> .—Legs well set back and moderate length ; feet well spread	5
<i>Condition</i> .—Health, cleanliness and sound feather..	10
<i>Total</i> ..	100

EVENLY MARKED NORWICH.

An evenly marked bird must be four pointed (both eyes, both wings), or six pointed (both eyes, both wings, both sides of tail).

<i>Markings</i> .—Eyes : for neatness and regularity of outline, and for distinctness. Wings : for exactness of balance, the outer flights being clear	40
<i>Shape</i> .—Short and chubby, well proportioned ..	30
<i>Feather</i> .—Short compact body feather, close carriage of wings and tail	15
<i>Colour</i> .—Rich and brilliant	10
<i>Condition</i>	5
<i>Total</i> ..	100

THE GREEN NORWICH.

These birds are being extensively bred to-day. The remarks on breeding for type and quality apply to them as to the other Norwich varieties. My readers are referred to the chapter on Yorkshire Greens for other information. The standard reads:—

<i>Colour :</i>	Rich, deep, grass green, sound and level throughout ; beak, feet and legs dark	35
<i>Shape :</i>	Head—full and round	4
	Neck—short and thick	4
	Body—short, chubby, well filled in back, and deep, full chest..	20
	Legs—well set back, short feet, and claws perfect	6
	Wings and tail—short, compact, and smartly carried	6 — 40
<i>Feather :</i>	Soft, silky, and close fitting, showing plenty of quality	15
<i>Condition :</i>	Health and general smartness..	10
	<i>Total</i>	100

N.B.—Light beak, legs, or feet, are not a disqualification, but count against a bird according to their extent.

CHAPTER XV

THE LIZARD

A UNIQUE AND BEAUTIFUL OLD-TIME BREED.

No ONE with an eye for the beautiful can look upon a high-class Lizard canary and not be charmed by its wonderful spangling and colour. It is one of the oldest breeds known to the English fancy, its history going back a couple of hundred years. Judging from an old book published early in the eighteenth century, it was then known, and was spoken of as the "spangle back." When or how it first became known as the Lizard there are no records. There is evidence that in Lancashire 150 years ago they were known as "mooned 'uns." It is said that the Huguenots who were great canary lovers bred these birds in the sixteenth century, and that at that time they were known in Norwich, London, Nottingham, and Middlesborough, and from these places spread all over the country, eventually so strongly captivating the cotton workers of Lancashire that Rochdale, Oldham, Manchester, Stalybridge, Ashton, Warrington, Wigan and other towns became veritable strongholds of the fancy.

My own recollection of the breed goes back over forty years and in my time it was bred in Devon, Cornwall, Kent, Surrey, Middlesex, Lincolnshire, Durham, and even in Scotland a few admirers were to be found, whilst in Lancashire and Derbyshire it was very largely bred. To-day its breeders in Lancashire are few, whilst in other parts of the country it is seldom seen. The reason of its decline is difficult to fathom. It is urged by some that it is due to the fact that it is a one-season bird, by others it is said the faking that used to take place led to its fall. It may be that both, or either, of these

causes operated to bring about its present position, but with equal truth it may be said that they have existed for ages. Whatever be the cause, the fact remains that the Lizard fancy has, as the Irishman said, "advanced to the rear" during the last quarter of a century. It is a great pity.

THE PROPERTIES OF THE LIZARD.

Taking the bird as it stands on its perch, the first thing to catch the eye is its bald head, which is known as the cap. It is needful that a good exhibition Lizard should possess a good elliptic cap, which should commence at the base of the beak and extend over each eye to the back of the skull. Very few birds are perfect in this respect; some are much too large in cap, whilst others are too small. Both are faults, yet a bird with a large cap generally beats one with a small cap. The cap most to be desired is that known as the thumb-nail cap. This conveys a good idea of what the cap should be. If the cap runs down to the lower mandible of the beak the bird is said to be bald-faced. The ground colour of the body right through should be a rich yellow bronze, soft and subdued in appearance. From the termination of the cap to the end of the back the ground colour should be of one uniform shade all over the body, the spangling being bold, clear and distinct. The under parts of the body are lighter than the back, but they must be of one uniform shade. The sides of the breast should be regularly spangled. The wings and tail must be jet black; the more intense and brilliant these are the more valuable the bird. "Black home to the quill" is the standard. The legs, feet, and beak should be dark, the darker the better. A Lizard cannot be too dark in this respect.

This disposes of colour and marking. We now come to shape. The head should be rather large, wide in front, and flattish on the top; the beak short and stout; the neck short and thick; the breast broad and full; the back wide and slightly curved outwardly; the legs rather short; and wings and tail neatly made and gracefully carried, the general appearance of the bird being

smartness and gracefulness. In length the Lizard should be from 5 to 5½ inches.

SOME OF THE DIFFICULTIES IN BREEDING.

It is far more easy to say what the ideal Lizard should be than it is to produce it. Amongst the disappointments that challenge the courage and enthusiasm of the breeder are such things as bald faces. That is when the cap runs down below the eyes or cuts the base of the beak, light colour in the waist and breast, grizzled in wing or tail. A bird with any of these faults is useless for competition, and it is not of much use in the breeding-room. As a counsel of perfection I would advise that birds with such faults should be sold as songsters. They can be bred with it is true, and many do breed with them, but whilst such breeding is followed there is always a great tendency for these faults to be reproduced.

SELECTING BREEDING STOCK.

In selecting birds for breeding two things should be kept well to the front—one is size, the other spangling. Narrow-bodied birds can never show their spangling properly, however good it may be, whilst a bird that has indistinct spangling may be said to be no Lizard at all. Therefore see that you have good wide backs on your birds, and those backs well covered with even rows of bold, distinct, clear-cut spangles. Let the ground colour be rich and sound, the wings and tail as black as possible. Never use a bird that is grey in flights or tail, but, if otherwise good, one that has one distinct white feather or part of a feather white may be used, but the white must be white, not grey or grizzled.

In mating gold and silver is the orthodox method, although occasionally some of our best breeders mate two silvers. This is done when the colour is hard and lacks bloom. The mating of two silvers gives increased size, and also more of that beautiful luminosity which is so admired in the sheen of a silver Lizard. Double mating of golds is not advisable. It reduces size of body

and also destroys the boldness of the spangling. A very essential point is to see that your breeding stock is sound in colour on the shoulders, and the more spangle there is on the shoulder the better. In the same way select birds which have plenty of work on the sides of the body. Spangling is more easily lost than it is improved, so be strong in selecting plenty of spangle in your breeding stock. Clear-capped birds—that is those with perfect-shaped caps—may be mated to those that are broken-capped. Self or no-capped birds mated to birds that are over-capped—that is those in which the cap runs into the neck—will often throw perfectly capped progeny. Broken-capped birds—that is those in which the dark colour encroaches on the cap—are most useful, as they will keep the balance in the matter of caps. If you breed continuously from clear-caps you will surely get many youngsters that are over-capped, bald in face, and possibly pied and grey in wings and tail.

As a rule the finest examples of spangling are found in the broken-caps and no-caps. Therefore apart from their influence on the caps such birds are of all birds most valuable to the breeder because by their use he also keeps his spangle and colour properties well up to the standard. The late Sam Bunting, of Derby, who was a lifelong breeder of Lizards, was noted for the spangling seen on his birds, and at a show held at Derby about thirty years ago he exhibited what I consider the most perfectly spangled Lizard I have ever seen. It charmed me so much that I gave it the special for the best Lizard in the show, and no one grumbled. In shape, colour, feather and spangle it was a marvel. That bird I have never forgotten.

THE STANDARD OF PERFECTION.

Some years ago, when the Lancashire and Lizard Fanciers' Association drew up the standard, they paid me the compliment of asking me to submit a draft, and this was accepted:—

	<i>Points</i>		
Cap—for size and regularity	..	..	10
Ground Colour	..	..	15

CLEAR-CAPPED SILVER LIZARD COCK.

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						<i>Points</i>
Eyelash	..	..	..	..	..	5
Spangle	..	..	..	..	..	30
Wings and Tail	..	..	..	..	..	10
Size	..	..	..	..	..	10
Lacing and Covert Feathers on Wing—for						
size and regularity	..	..	..	..	..	5
Breast—for rowing or lacing	..	..	..	..	..	5
Beaks, Legs and Feet—for darkness	..	..	..	..	..	5
Condition—health, etc.	..	..	..	..	..	5
<i>Total</i>						100

CHAPTER XVI

THE CINNAMON.

A BREED THAT HAS INFLUENCED MANY.

ALTHOUGH in these days the Cinnamon is not so popular as it was thirty years ago it has still a fair following in all parts of the country from the northern counties of Lancashire and Yorkshire to Devon and Cornwall. Breeders of Norwich Plainheads, Crests, Yorkshires, and Borders all owe much to the influence of the Cinnamon, especially the marked and green sections of those varieties.

Compared to the original Cinnamon-coloured Canary, which in the early days was known as the Dun canary, and also the "Quaker," possibly because of its sober-hued plumage, the Cinnamon has undergone a great change in appearance, the crossing of the breed with the Norwich having been the means of the improvement. Some breeders have paired the Dun or Cinnamon birds in with the Yorkshire breed, and many nicely marked specimens have been produced, but to my fancy those birds partaking of the Norwich form are the best. The variety has found much favour with breeders and exhibitors, and many very lovely specimens have graced the show benches from time to time. Closeness of feather and rich cinnamon colour are important considerations. When K.N.-feeding was in vogue the pepper diet was much brought into play with this breed, but by so doing the colour, true to the term cinnamon, lost much of its charm and sober beauty.

Newly chipped canaries of the Cinnamon breed present a deepish flesh-coloured hue of skin, besides possessing the pink-coloured appearance about the covering of the eyes before attaining the sight, and even afterwards the

eyeball presents a pink colour different from other canaries.

This is to me the most fascinating variety of the canary, even as it was the one with which I scored my greatest triumphs as an exhibitor. There is something about the Cinnamon which stamps it as being above the usual run of birds. Its quiet, subdued appearance, easy, graceful style, and well-formed body, all appeal to the eye of the educated fancier. There is a refinement about it not noticeable in any other variety. Although possessing no great brilliancy of colour, it is nevertheless one of the most pleasing and attractive members of the canary family.

ITS WONDERFUL PLASTICITY.

The acknowledged chief characteristics of the Cinnamon—and the one that has such a peculiar fascination over the scientific breeder—is its colour. The wonderful plasticity of this colour is one of the most interesting features in connection with the canary fancy, and the most responsible for the development of fancy properties in many other varieties known to the show-room. The Cinnamon has been used for crossing purposes by the breeders of almost every other variety on the show bench. Colour, size, length, and density of feather, and those beautiful markings, have all been obtained from the Cinnamon at some time or other. The breeders of Crests and Yorkshires are largely indebted to the Cinnamon for many of the valuable properties possessed by their favourites.

Of its origin little is known. Many theories have been hazarded, but I think the most probable of them all is that it is sport from the original Green canary.

Some enthusiast no doubt noticed it and bethought himself of perpetuating it. A very old theory is that Cinnamons can be produced by pairing two Greens. That Cinnamons have been produced in this way I will not attempt to deny; but of one thing I am certain: one of the Greens (and that the cock bird) must have been bred off the Cinnamon; by this I mean that it had Cinnamon blood in its veins. It is most astonishing how the Cinnamon blood lingers in any variety into which

it has been crossed. I have known Norwich birds bred pure for five generations to throw back to the Cinnamon that had been introduced before that time, and on one occasion a strain of Crests in which no Cinnamon had been known for ten years threw some Cinnamon-marked and Crested birds.

Twenty to twenty-five years ago we had some very fine Cinnamon Crests, but the variety seems to have died out, and it is years since I saw a Cinnamon Crest. Men who had devoted years to the breeding of Cinnamon Crests became tired because the judges showed so little appreciation of their work. The greatest breeder of Cinnamon Crests we ever had was Mr. Tom King, of Cheltenham, who for quite thirty years struggled with this variety. Other noted breeders who strove to produce these charming birds were the late G. R. Kennerley, H. Toms, and C. L. Quinton. It is a great pity the variety has died out.

About thirty years ago the men of Lancashire and Yorkshire, who at that time held the strongest studs, introduced Crest blood into their strains to increase the size. They certainly secured size, but at the expense of colour and feather, and after a few years the breed began to lose its popularity on the show bench. In recent years some of the lost ground has been recovered, and to-day our birds have better colour and finer quality of feather.

HOW TO BREED CINNAMONS.

Those who would breed high-class Cinnamons should select birds of good size. In shape they should resemble the Norwich variety. They should be sound in colour; any bird showing a green shade in its plumage should be avoided. Quality of feather also must be had, especially in hens. I have proved over and over again that high quality of feather is transmitted by the hen in a far higher degree than by the cock. For feather I like to breed from buff cocks and yellow hens, and it will generally be found that the best birds are produced in this manner. Mr. C. E. Silk, a very old Cinnamon breeder, once remarked to me, "You can do so much more with a buff cock than a yellow." The buff cocks prevent the size from falling

YELLOW CINNAMON COCK.

away whilst the yellow hens keep the quality of feather and style.

In commencing, breed from pure self-coloured birds, and leave all pied and greenish-coloured birds severely alone. This is necessary to produce birds of great purity of colour, and as the breed is a colour breed, colour is the great essential.

Having secured a strain of your own after a few seasons' careful breeding, you can then introduce any cross that may seem advisable. But don't go dabbling in crossing till you have birds that you can rely on to produce what you require. If you require size I should advise you to pair a buff Cinnamon cock with a heavily variegated or green buff Norwich hen of good quality; the Cinnamons from this cross will be hens, the cocks will be green; yet these cocks when paired to Cinnamon hens will produce Cinnamons. Years ago, when Norwich were much smaller than they are to-day, the Crest-bred was used, but that is not advisable now, because you can get size from the Norwich and not lose so much in quality and colour as if you used a crest-bred.

Cinnamon greens are known to be very fountains of colour. From a cross such as I have mentioned you will, by careful selection, be able to improve both the size and colour of your birds without losing much in quality of feather. Should your birds become too coarse in feather and also need improvement in brilliancy of colour, the best cross is a buff Cinnamon cock to a yellow Norwich Plainhead hen of good size and heavily variegated. A good method of improving and deepening the ground colour of the Cinnamon is to match two buffs, and then mate up the produce in the usual way. This, however, must only be done now and again, or you will lose colour and quality of feather.

COLOUR-FEEDING CINNAMONS.

In feeding Cinnamons for colour a different method to that pursued in connection with the Norwich is needed. The following recipe will be found of much service in improving the colour of the birds fed upon it :—

- $\frac{1}{2}$ lb. of tasteless pepper.
- $\frac{1}{2}$ lb. of turmeric.
- 2 ozs. of red sandalwood (powdered).
- $\frac{1}{4}$ lb. madder
- 1 lb. of moist sugar.

These ingredients should be well pounded and mixed in a mortar, then placed in a tin and kept covered. To each egg and its accompanying quantity of biscuit should be added one tea-spoonful of the above mixture. In the place of the usual drinking water, the following mixture should be given : Water and solution of saffron in equal proportions. To make the saffron solution take $\frac{1}{4}$ oz. of best saffron, 10 or 12 chillies, and $\frac{1}{4}$ lb. of sugar ; pour over it $\frac{1}{2}$ pint of boiling water, cover down, let it stand till cold ; then strain off into a bottle, and keep tightly corked. During the moulting season I use drinking vessels about the size of a thimble. The birds should be allowed a plentiful supply of the flowers of carnation cloves, English marigolds, and dark-red nasturtiums. This treatment, to be effectual, should begin immediately the old birds have finished breeding and with young birds a fancier must use his discretion. The early birds may be put upon it when about eight weeks old, and the later broods at about six weeks. The carnations, nasturtiums and marigolds should be given directly the young birds are put into the flight cages.

WHAT A MODERN CINNAMON SHOULD BE.

A first-class modern Cinnamon should differ in no respect from a Norwich Plainhead canary, excepting the shade and hue of colour. The first and chief consideration is purity, depth, and tone of the Cinnamon colouring, which should be clear, bright, and free from any green tinge or smutty or smoky line, and it should run as level as possible over the entire body of the bird ; black stripes on the back, and light tinges on the throat, thigh coverings and vent are all detractions. Purity and refinement of colour, with the silvery grey luminosity which pervades a good buff, are points of high merit.

In type the best Cinnamons have always followed

the Norwich Plainhead canary, and the plumage should be short, silky, and tight-fitting to the body. In their efforts to attain size many breeders have sacrificed quality, refinement, and every other point that really constitutes a high-class bird of the variety. No wonder, then, that so many admirers of these birds, who have striven for years to bring them to a high standard of perfection, should throw them up in disgust.

There is no doubt whatever that birds which approach the Norwich standard in type are always the best in quality of feather, and are infinitely superior in colour to those that favour the Crest-bred, or even the Yorkshire. Breeders should aim at producing birds answering the following description :— Colour, rich, light-brown, or chocolate shade, nicely pencilled throughout, free from any green tinge ; head full and round, neck short and full, back straight and of good width across the saddle ; wings very compact, and not crossed at the tips ; tail short and thin ; chest full, and gradually expanding from the neck ; feathers of a nice silky rich hue, and nicely frosted in the buffs. A bird such as this is indeed a most charming and beautiful production of the breeders' art.

Those who are interested in the breeding of Cinnamons should study carefully the notes on Cinnamon-marked Yorkshires in the chapter on the breed. The principles of breeding which govern colour production are essentially the same in each case.

THE STANDARD OF PERFECTION.

The following standard is that of the Cinnamon Canary Club :—

Points

Colour, which should be a sound cinnamon colour, not showing any sign of green shades on body or wings, or light feather under the vent.

Size and shape.—A good type of Norwich Plainhead, only rather larger, stouter in body, and well set up, but not leggy, and with a well-shaped head, but not showing any eyebrows, which is a very bad fault in Cinnamons.

CLEAR-CAPPED GOLD LIZARD.

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<i>Colour</i> .—Depth and purity	35
<i>Feather</i> .—Quality of feather	15
Good wing carriage and compactness of tail	10 — 25
<i>Shape and Type</i>	20
<i>Size</i>	10
<i>Condition</i> .—Health and cleanliness	10
<i>Total</i>	100

The negative qualities for which points are to be deducted:—Any green tinge; cloudy or smoky colour; heavy dark pencilling; overhanging eyebrows; light throat, thighs or vent, white feathers in wings, tail or body to disqualify for self classes.

Although soundness of colour should be the *sine qua non* of the Cinnamon breeder he need not hesitate to breed from birds which show a white feather or two in the flights or tail. But he must watch carefully any tendency which his birds may show to run light at the throat, thighs and vent. Birds which fail badly on these points should not be bred with.

CHAPTER XVII

THE BORDER FANCY

THE PIGMY OF THE CANARY RACE.

WHEN I first became acquainted with the Canary fancy the bird now known as the Border Fancy was unknown. It was not recognised in the shows of that time, and had no place in the writings of the authors who then wrote for the fancy. I believe I was the first author to give it a place in the literature of the fancy. My little book, "The British Canary," published in 1889, contained a chapter on the breed as it was then, and had been for a few years, known—the Cumberland Fancy.

Classes used to be given at some of the shows in Cumberland, Westmorland, Devon, Wales, and the South of Scotland for "Common Canaries," and they were filled with birds of no distinctive type, the prizes usually being awarded to those that were the closest in feather and had most colour.

Towards the close of the 'eighties the men of Cumberland began calling the birds by the name of their county, and I was asked to assist in framing a standard, which I did. When the Southern Scots saw the Cumberland men forging ahead in this manner they declared war, and there was great controversy over the matter. The Scottish breeders said the Cumberland worthies had no right to claim the bird as their own, it was equally popular in the South of Scotland. It fell to my lot, as Cage Bird editor of the paper which then catered for the canary fancy, to guide this controversy somewhat. Eventually agreement was reached, and in the month of July, 1890, peace was declared and an agreement reached that henceforth the breed should be known as —the Border Fancy.

A FREAK IN COLORATION.

This remarkable Border Fancy Canary was bred by Mr. J. Forrest, of Whitburn. It is Cinnamon-marked on wings and eyes, and has a mixture of Cinnamon and Green markings on the breast, while on the back and around the neck it has the dark green markings of the common variegated canary.

The Border Fancy Club was formed, and the northern lions and southern lambs lay down together; peace, unity and concord were established, the breed under its most appropriate name went forward, and from that day to this has never looked back. At the moment it is popular in all parts of Great Britain, and in some districts is the leading variety, even in distant Wales, and the South and West of England.

TWO DISTINCT TYPES.

In the early days there were two distinct types. One was a low, squatty, angular sort of bird, which was known as "the thumb-shape," because of its resemblance to the top part of a man's thumb. This sort the Cumberland men would not have. They said, away with them, and away they went. They put forward a claim for a bird of grace and style. Their views prevailed, and the Border as a standard breed was established as a bird about five and a half inches in length, and as close in feather as waxwork; head small, neat, and beautifully round; wings carried close to the body as if never intended to open, and meeting evenly at the tips without the slightest appearance of crossing; tail of fair length, the feathers knit closely together; legs of fair length, but must show no thigh; it must stand well up, straight as a rush, easy and graceful, yet noble and majestic, bold and courageous, yet calm and refined; it must hop from perch to perch with becoming sprightliness. This was the ideal and the breeders soon produced birds approaching it.

The low squatty birds had to go, so had the long thin ones, of which there were plenty, especially in the West of England, in which district the birds were not so close in feather as in the North. The bird as adopted resembles the Yorkshire more than any other breed, standing well up on the perch, holding its head proudly aloft with characteristic independence, with a beautiful expression, which only breeding in one direction can accomplish. It is essentially a bird of quality, colour not being one of its strong points. "Colour," say the Border men, "is all very well and charming for those who like it, but we want type, style and quality of feather."

NO COLOUR-FEEDING.

The Border Fancy Club years ago decided that all the birds shown at its shows should be "natural colour," and many birds, good ones, too, have suffered disqualification because the judges have held they had tasted the "forbidden fruit." This has caused much discussion from time to time, also heart-burning, because high-coloured birds that had not been fed were disqualified, whilst others which had been given just a bit got through. Naturally every man declares his birds are "natural colour," but very few are shown that have not had something beside seed and egg-food. My own opinion is that warm colour such as we see in the Norwich and Yorkshire detracts rather than adds to the attractiveness of the Border.

THINGS TO BE GUARDED AGAINST IN BREEDING.

In selecting breeding stock it goes without saying that the nearer the birds approach the standard so much the more valuable are they for breeding, but, as every bird is not a show bird, those that do not quite reach the standard are useful for breeding. There are, however, some faults which should be guarded against, and birds possessing them should not be used unless it is absolutely unavoidable. Amongst such faults are coarse beaks, heavy flat skulls, stout or hollow necks, long or crossed flights, swinging tails, wide-rooted tails, narrow pointed chests, stout heavy bodies, coarse waists, slackness of feather on chest and thighs, too much leg, slovenly carriage. Birds with any of these faults in an exaggerated form should not be bred with.

Birds that fail slightly in any point may be used, but in every case weak points should be countered by strong ones. Thus if a cock is a trifle strong he should be paired with a hen full of style, but possibly a trifle fine in neck or body. A cock failing in head should have as his mate a hen exceeding in skull. Never, unless absolutely forced, breed with a hen that is either flat, pinched or too stout in skull. If you do, she will nine times out of ten, hand on her faults to her progeny. A hen that fails in colour should be mated to a cock extra rich in

colour. In all your matings strive to have your hens as near the standard as possible. The man who does this will have far more success than he who places most reliance on his cocks.

Never double-buff or double-yellow unless there is absolute necessity. Double-buffing is apt to make the progeny too thick in body and waist and double-yellowing tends to the production of thin necks, pointed chests and frills. There are cases when one or the other may be useful. If a strain is producing birds that are too stout, double-yellowing will give some finer-drawn birds which, if judiciously used, will correct the tendency to stoutness. On the other hand, if a stud is inclined to produce thin, whippety birds with hollow necks and pointed chests, a double-buff cross will correct it.

THOSE DAINTY EVEN-MARKS.

Evenly marked Borders are exceedingly pretty and dainty, and are much valued. Therefore most breeders of the variety try their hand at producing them, with more or less success. Good specimens are not plentiful, but their production is receiving remarkable attention. The evenly marked Yorkshire has been pressed into service, that variety possessing marks in a high degree. Yorkshire and Lancashire contain many fanciers of even marks, and breeding persistently from generation to generation in one direction has tended to produce this result. Cinnamon blood is undoubtedly the backbone of marks, its plasticity and tendency to produce accurate markings being known to the sapient ones; its virtues are inestimable in that way. So persistently and consistently have Border breeders followed breeding for even marks that there are now more even-marked Border Fancy canaries than ever, and they outnumber the even-marked birds of all other breeds. The high degree of excellence attained is really astonishing.

There are a few even-marked birds that are of good type and style, also in quality do they approach the ideal, but on the whole the marked birds fail to the clears and ticks in standard properties. It is all very well to talk about type and quality in evenly marked birds, but how

few are bred in which we find type and quality and accurate markings together at the same time! Some birds fail a bit in type, others in shape; but wonderful is the progress which has been made.

When we are determined to produce markings at whatever cost, other good properties fly off at a tangent. The fact is, marking has to be fixed before it will reproduce itself with any degree of certainty and accuracy. If a bird possesses type, quality, and perfect markings, such a one should win easily. The judge who in judging a marked class, would put a bird of type and quality with indifferent markings before an accurately marked specimen which is a little deficient in the former, never attempted to breed any, and consequently does not know their value. Those who want to practise the breeding of marked birds should read what I have written in the chapters on Yorkshires and Norwich.

Greens are very popular indeed amongst Border men, and here again I must refer my readers to the chapter on Yorkshires.

THE STANDARD OF EXCELLENCE.

The standard is that of the Border Fancy Canary Club.

	<i>Points</i>
<i>Head and Neck</i> .—Small, round and neat looking ; bill, fine ; eyes, dark and bright ; neck rather fine, and proportionate to head and body	10
<i>Body</i> .—Back, well filled and nicely rounded, running in almost a straight line from the gentle rise over the shoulder to the point of tail ; chest also nicely rounded, but neither heavy nor prominent, the line gradually tapering away to vent	10
<i>Wings</i> .—Compact and carried close to the body, just meeting at the tips	10
<i>Legs</i> .—Of medium length, showing little or no thigh, fine, and in harmony with the other points ; feet corresponding	5
<i>Tail</i> .—Close packed and narrow, being nicely rounded and filled in at the root	10

	<i>Points</i>
<i>Colour</i> .—Rich, soft, and pure, as level in tint as possible throughout, but extreme depth or hardness, such as colour feeding gives, are objectionable in this breed, and are debarred	10
<i>Plumage</i> .—Close, firm, and fine in quality, presenting a smooth, glossy, silky appearance, and free from frill or roughness	15
<i>Position</i> .—Semi-erect, standing at about an angle of 45°	10
<i>Carriage</i> .—Gay and jaunty, with a fine free poise of the head	10
<i>Health</i> .—Condition and cleanliness shall have due weight	10
Size not to exceed 5½ inches in length, measured in the usual way	
<i>Total</i>	100

Birds marked on both eyes or both wings to be allowed to compete in foul or ticked classes. In judging marked birds, "type and quality" should form the first consideration in these as in other classes, and no prize should be awarded for good marking alone when the type does not conform to the Club standard.

The great essentials of a Border Fancy are type and quality. The general appearance is that of a clean-cut, lightly made, compact, proportionable, sprightly, close-feathered, smallish-sized canary, showing no tendency to heaviness, roughness, or dullness, but giving the impression of fine quality and symmetry throughout.

CHAPTER XVIII

THE LONDON FANCY

A RELIC OF BYGONE DAYS.

IT is with regret that I write of this handsome variety as a relic of bygone days, but so it is for there are very few left in the land. The London Fancy is an exceedingly rare and handsome variety of the canary so distinct in its plumage and properties, and so mysterious in its origin, surpasses all other breeds for natural colour and silkiness of feathers, and when clean moulted presents an appearance of such sparkling beauty that belies their title of "London Fancy" birds.

Unlike other canaries the plumage of London Fancy undergoes several changes. Although somewhat resembling the Lizard in their nest feathers, if bred with a mark on the cap, such mark will disappear when undergoing the system of moulting so peculiar to the bringing of them out for show purposes ; but the Lizard bird will retain its foul mark on the cap when moulted. In casting off its nestling body feathers the London Fancy assumes its gayest plumage, its rich colour being in such striking contrast to the black wings and tail, every feather of which should be as dark as possible.

First-class specimens of this breed used to realise high prices, which is not to be wondered at, taking into consideration the trouble and attention needed to produce them. So far as I have been able to learn the terms yellow and buff have never been used in connection with this variety, but they have always been spoken of as Jonque and Mealy.

THE LONDON FANCY CANARY.

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WHAT THEY SHOULD BE.

The following notes are taken from an old work of nearly 200 years ago. It will be seen by these that the breed must have had a strong following at that time in London itself.

“ These must possess the following characteristics, viz., a fine large cap or crown (extending over the whole of the back part of the head) of a deep rich orange colour (not a lemon cast); and the same richness of ground must prevail in all its other parts, except where the rules prescribe black, viz., in the wings and tail, in which the feathers must be black home to the quill; the tail must have twelve black feathers, and each wing eighteen feathers black to the quill. Their backs the first year are always more or less spangled or mottled; and the first time they change or moult their quill feathers they become lighter. Indeed, every season after the first their feathers become lighter at every change. Therefore their beauty for prize showing is always in the first season, and to produce a good breed these requisites of feathers are as necessary in the hen as cock, which circumstance renders the hens valuable. In purchasing a fancy Canary Finch observe the following marks, which denote its age: His wings and tail will be black the first year, second year grey, third year lighter, and when five or six years old a fine jonque or mealy all over; the same applies to the hens.

“ Depth or richness of the orange colour is the grand object of all, therefore purchase at first a good cock and hen, with the requisites already mentioned. The cock, jonque, should be matched with a fine mealy hen; see that the cap, wings and tail are black and regular, with a fine feather. In breeding the fancy, as much, if not more, depends on a regular good-feathered hen as upon any other point.

“ EXAMPLES.

“ First.—If you have a fine jonque cock, of a strong orange colour, with much black in his feathers, pair him with a fine soft-coloured mealy hen, with as little

black as possible, except her tail and wings, which must be regular and true.

“Secondly.—For a strong mealy cock choose a healthy jonque hen, with fine soft feather and regularly marked tail and wings; never match birds of the same nest, as this will reduce and weaken your birds.

“Thirdly.—Among amateurs strength of feather means a considerable quantity of black spangles on the back, and too much black colour in general when you blow up the belly feathers; and they are without silkiness or softness of feather apparent in finer, richer-coloured birds, which, when you blow up their belly feathers, are fine, soft, and white; when so, match them opposite.

“Fourthly.—Mealy hens are deemed the best to breed with, because a spangle-marked cock with a mealy hen will produce a more regular-spangled back, and finer than if both were spangled marked. This rule you will find good in all matching and pairing; wherever one is too strong, match it to an opposite. And so you will find it with crown top Canaries; whichever has a fine crown, let the other have none, and you will produce a fine crown-top. If a male grey is put to a female white, or a male white to a female grey, the brood will be more beautiful than the parents. In the feathered tribe you produce the finest harmony from opposition.

“Fifthly.—To breed a fine, full-coloured yellow, without a spot or splash, you should get a large mealy hen, bred from a clear yellow cock, and match her with a clear-bred jonque cock. If possible, know that your birds come from a clear breed, otherwise you may have a spot or splash; and to breed fine clear mealies, *vice versa*.

“Sixthly.—To breed fine-coloured pied birds, take a clear jonque cock, match him with a rich-coloured greenish or dark grey hen, and you will have some more or less pied birds, strong and good songsters.

“Seventhly.—There is a class of Canaries called Lizards. They are obtained by matching a pair of strongly marked fancy birds together, which, being too strong in colour, produce that strong black mixture resembling the lizard; or match a common strongly marked grey Canary with a splash-marked hen, and you will get fine dark birds. A fine, strong, splashed common

Canary, with a fancy hen, will give you various dark birds ; some will be all dark, and make fine birds for song. To produce the cinnamon colour, get a strong grey or green-coloured Canary, and put him with a clear mealy or yellow-coloured hen. There is a lighter hue produced, called Quakers, but they are not admired, though lately they have been improved by matching a clear greenish-coloured cock and a quaker-coloured hen together, which produces a dove-coloured feather, and takes the name of the Dove Canary. And to produce white or flaxened-coloured birds follow up three or four seasons the lightest-coloured mealies you can together, and they become white ; then pairing one of those white, or flaxen-coloured Canaries, with one with red eyes, will give you another variety.

“ On these examples and observations depends your producing a fine breed ; and in this art, as with most others, experience will teach you more than books. Match your birds well in opposition ; pay attention to cap, tail, and wings being regularly marked ; put a strong jonque with a fine mealy hen, and *vice versa*.

“ It is by this method that the Canary Finch has been brought to that state of regularity in feather and height of orange colour.

“ CANARY BIRD SOCIETIES.

“ Many of my readers may not have heard of Canary Finch Societies in London, wherefore it may not be amiss to give some little account of them.

“ Some of these societies have their shows at the British Coffee House, Cockspur Street ; the Freemasons' Tavern, Great Queen Street ; the Gray's Inn Coffee House ; the Percy Coffee House, Rathbone Place ; the Sadlers' Arms, Swallow Street, Regent's Quadrant ; the Vernon Arms, North Audley Street ; the Red Lion, Old Cavendish Street ; the Fox, Duke Street, Bloomsbury, etc.

“ These societies consist of from twelve to eighteen members ; the laws they are regulated by, and the fines imposed, are various. Each member, on entrance, puts up two or three pairs of fancy-bred Canaries, with a

certain sum on every pair, to raise a fund for the prizes, agreeable to the articles subscribed to. The prize is given to the best-bred bird of that season, and must run as follows—in beauty, plumage, and properties :

“ STANDARD PROPERTIES.

“ First.—Cap for colour, magnitude, and regularity

“ Second.—Swallow and throat, for largeness.

“ Third.—Fair breast, regular.

“ Fourth.—Legs, for blackness.

“ Fifth.—Flue, for blackness.

“ EXPLANATION.

“ From the beak to the back of the neck must be of a clear orange colour, the ground of a rich colour, and the feathers edged with black. The feathers on the loins must be free from black, and the same colour as the cap. Every feather in the wings and tail must be black, without any intermixture of white ones. The whole of the breast must be free from black feathers, and of the same tint as cap and saddle.

“ REGULATION.

“ No bird shall be considered a fair show bird in feather or feathers, without black in stork or web, either in the back, the flight, or tail feathers. The back to be reckoned from the feathers which turn with the head, including the first single feather at the bottom, or that has less than eighteen flying feathers in each wing and twelve in the tail. A bird without pinion shall be considered in that respect preferable to a bird with one pinion only.

“ Having shown their requisites, to him who can produce the nearest bird of the season, according to colour and feather, is awarded the prize.

“ The societies meet about the first day of March, when the members are chosen and the rules are agreed upon for the season. Show days take place generally in November or December, as the young birds by that time are moulted

LONDON FANCY CANARIES.

The top bird is an average example of the breed, whilst the bottom one portrays the ideal.

off clean, and in full feather and colour ; it does not signify whether it be the first, second, or third nest, so long as it is that season's produce. Frequently, owing to a cold and backward spring, you will not be able to get your third nest early enough ; when this is the case, to enable them to bring them forward for show, amateurs use stock cages, to promote and force the first partial moult. This causes the birds to be very delicate and tender, wherefore you must be careful of their taking cold. Two or three days previous to the show day, the young birds should be washed by a tender, skilful hand, to produce the clearest orange colour the feathers can display. Some persons wash them over several times with water strongly impregnated with saffron, to give the feathers a strong orange colour ; an artifice not, however, allowed by the societies if detected."

About a dozen years ago breeders of the London Fancy were known in London, Lancashire, Leicestershire, Gloucestershire, Norfolk, Lincolnshire, Yorkshire, Kent, and away in far Ross-shire, but since the Great War little has been heard of the London Fancy. It is a great pity that so beautiful a bird has been lost to our shows.

CHAPTER XIX

THE ROLLER OR SONG CANARY

THE SWEETEST OF ALL SINGERS.

EVER great favourites with the British public who love a bird for its song and as a pet, the Roller has not, until the last twenty years, captured the imagination of those of us who like to indulge in the hobby of breeding canaries. Having once captured the affections of English breeders the Roller made rapid progress and at nearly all our important shows classes are now provided for them. It is strange how enthralling is competition to the Britisher. The breeding of singing canaries, as such, had little attraction, but, when singing contests began to be promoted as they are on the Continent, then at once the Rollers act as a magnet and draw many unto themselves.

We have in England, now, quite a large number of Roller Clubs, and as a result the importation of birds from Germany is not nearly so large as it used to be. Just before the Great War it was calculated that at least 100,000 German canaries were imported into this country annually at an average price of twelve to fifteen shillings each.

For a long time after they became popular breeders talked of them as Hartz Mountain Rollers, but since the War one seldom hears them spoken of by that title, nor by the other they were known by, German Canaries. The latter was more correct than the former, because for many years the Hartz Mountain district had ceased to be the great breeding centre it used to be. Although we now speak of them as Roller canaries, our breeders, many of them, still talk of the German strains. This will die out in time, but I think that even now Englishmen have bred Rollers long enough for the strains to be known by English names rather than by German. To-day many

thousands of Rollers are being bred in England, and were I wanting a singing canary I should prefer to purchase an English-bred Roller than one made in Germany, not altogether for patriotic reasons, but because it would, being acclimatized, stand the vagaries of the English climate better than an imported bird. Further, I should esteem it more if it came from Smiths' strain rather than the Schmidts. That's sentiment, and patriotism.

BREEDING ROLLERS.

In the years that are past there used to be great mortality amongst the Roller canaries imported into this country from Germany, and the better they were as musicians the more susceptible they seemed to be to the vagaries of the British climate. Why I cannot say, except that on the Continent many of the breeders keep their birds in rooms that are very warm.

The breeding of Rollers has one advantage over breeding exhibition canaries. It is not needful to use single cages as birds for singing purposes may readily be bred in aviaries. By this means it is possible to breed more birds, and to considerably minimize the time and labour spent in looking after them. Bred in such a manner the birds are strong and vigorous, easily reared and quickly moulted. When this plan is adopted a dozen hens and three or four cocks will breed a number of birds. I would not recommend a larger number of birds being together, for the simple reason that, should any infectious or contagious disease make its appearance, the risk of its spreading with alarming rapidity would be great. Care must be taken in aviary breeding to provide twice as many nest-boxes as there are hens, or there will be everlasting fighting for favoured positions, followed by consequent loss in the smashing of eggs and deserted young.

When very choice birds or birds of a particular line of breeding or strain are used they can be bred in large breeding cages, each cock being given two hens. Such a cage should be about 30 inches long, 11 inches deep from front to back, and 20 inches high. These double breeding-cages will be found fully described in the chapter on Cages. In speaking of choice birds, I mean those which

are either first-class performers themselves, or are from a strain of very high-class reputation, and whose progeny it is needful to keep an eye on.

Many breeders of Rollers have a prejudice against giving birds sand. They say it has an injurious effect on their vocal powers. This is all nonsense, a mere matter of fancy, as on the Continent the breeders use sand. I am a strong believer in sand, and like the birds to have plenty of it. When possible to obtain, there is nothing, in my opinion, superior to good sea sand, and many of the most successful breeders known to me are men who always keep a good supply of fresh sea sand upon the bottoms of their breeding cages and aviaries. One advantage sea sand has over ordinary land or gravel-pit sand is that it is not dusty. Next to sea sand good river sand is to be preferred.

THE FEEDING OF ROLLERS.

Both here and on the Continent those who have great experience in the breeding of Rollers are firm believers in the virtues of red summer rape. It is in their opinion the staff of life, in the same way as the breeder of ordinary exhibition canaries places his dependence on canary seed. Roller breeders say it is impossible to produce birds which shall be high-class performers unless rape seed is the mainstay of the diet.

It seems strange that in so small a matter as this there should be trouble and much difficulty, but it is so, and rape seed is one of the most largely adulterated articles which the canary breeder uses. Continental breeders are more practical in this respect than the majority of English breeders. They know that nothing is more likely to spoil a season's breeding than a change of seed, and thus at the beginning of the breeding season they purchase enough rape seed to last right through the season. Seed thus purchased should be stored in bags in a dry place, and given a good shaking about once a week. Great care is needed in the selection of rape seed. Much so-called summer rape is not summer rape. Red summer rape should when crushed between the teeth have a sweet nutty flavour; should it be at all hot, bitter, or acrid it is useless to the canary breeder. In purchasing

summer rape it is advisable to go to a first-class firm of seed merchants. You may have to pay a little more, but you will get what you pay for, and that is not always the case when buying summer rape.

TRAINING CAGE.

CABINET WITH TRAINING CAGES.

METHODS OF USING RAPE SEED.

The method of feeding adopted by many successful breeders of Roller canaries during the breeding season is to give a feed of scalded summer rape and some egg-food the first thing in the morning, again at midday, and in

the evening. Another method followed by a goodly number is to soak the rape seed in cold water for twelve or twenty-four hours. This draws away any acrid properties which it may contain, and does not kill any of those which are of value for feeding.

CAUTION REGARDING USE OF GREEN FOOD.

Green food should be given at least twice every day during the breeding season, if convenient it may be given four or five times, but much care must be exercised in connection therewith. Green food should always be fresh and clean. Never give groundsel which has grown on heavily manured land—it is apt to cause inflammation of the bowels. In the way of green food, any of the following may be used—groundsel, watercress, chickweed, dandelion, lettuce, cabbage, shepherd's purse, plantain, and any of the numerous flowering grasses. A little maw seed may be given two or three times a week, also a tea-spoonful of hemp. Canary seed may be given now and again as a tit-bit, but it is not wise to use much of it. Those who are skilled in the breeding of Roller canaries say that it has a bad effect on the muscles of the throat, and renders the song harsh.

MUSICAL TRAINING OF THE YOUNG.

When the young Rollers are a month old they should be taken from their parents, and, if of great value, be at once placed in flights in another room in company with a good old cock bird, one specially selected for his singing qualities. The old bird will, of course, be in a small cage by himself, his duty being to act as schoolmaster or trainer to the budding young vocalists.

If a good old cock, "a schoolmaster," is not available the birds may be taught their work by means of a flageolet or bird organ. This may be played several times during the day, but the morning and evening lessons seem to be the ones that make the most impression on the young vocalists. Whilst they are being trained they must not be too generously fed, or they will become fat and

lazy. It is wise when training birds by the use of the organ to give them a little tit-bit after each lesson, just *one or two* hemp seeds, or a small piece of sponge cake. This will make them associate lesson and reward, and lead to their becoming better performers. Some are very quick at learning, others need the exercise of a lot of patience. It is not wise to teach more than one tune.

Young birds easily and quickly acquire bad habits. Therefore they must be watched, and should one start singing bad notes it must be removed immediately, or all the others in the room will quickly pick up the wrong notes, and all become much lessened in value. It is song and song alone that gives value to one Roller over another. The best singers are found amongst those who commence singing with closed beaks.

For ten days or a fortnight after their removal from their parents their food should be the same as that given whilst in the breeding cage. Afterwards the egg-food may be gradually reduced until at the time they are eight weeks old they are on seed only, except that egg-food may be given once a week as a change of diet. The staple article of diet will now be dry summer rape, with occasionally a little maw, hemp, lin, or lettuce seed.

Breeders who are engaged in the production of the highest-class performers have small singing boxes provided for each bird, and during the whole of the training period, that is from the age of ten weeks till six months, the little songster is not allowed to see what goes on in the world around him. Professional breeders make a strong feature of this singing box, and in the training of the best class of bird it seems to be absolutely essential. In no other way can a bird be trained to become a champion at contest singing. When the object is to produce a number of sweet-singing birds without any exceptional accomplishments, then they may be moulted in a flight cage with a good old cock near them to train their voices in the way in which they should go.

FEEDING THE SINGING CANARY.

Our great opera singers have to be very careful in the choice of their food, or else the delicate vocal chords become ruined. So with our song birds. The staple food

must be summer rape, two or three times a week, a pinch of maw seed may be given, also a little canary seed, but very little. Lettuce seed, millet, and linseed may also be given occasionally, just a pinch, nothing more. Sweet apple is often given to birds by indulgent but unthinking

SINGING CAGE.

CABINET FOR SINGING CAGE.

owners ; it is bad for the vocal chords. A small piece of boiled carrot given once or twice a week, or a sprig of green food has a beneficial effect. Egg-food, or one of the prepared substitutes, may also be given once or twice a week. Should a bird show any signs of huskiness, then a tea-spoonful of lettuce seed may be given for a day or two.

FROM THE EIGHTEENTH CENTURY.

Treating on the management of singing canaries an old writer of the eighteenth century said:—"It may truly be said that almost all Canary birds differ in their temper and inclinations, but being afraid it would take up too much time to distinguish between them all successively, I think fit to divide them into four classes. In the first place I find some cocks who are always of a melancholy temper, and, if I may so call it, thoughty, who sing but seldom and in a doleful tone, being for the most part huffed up. This sort of Canary birds seldom answer the end they are designed for, for if you would teach them to sing flageolet tunes they are a prodigious time learning, and are never perfect in what they have been taught; besides that, what they have learnt they easily forget, especially the first time they come to be sick, as at moulting time and the like; and sometimes there are such as pine so much at being always covered that they die, and this sort of Canary birds, though they are cocks, I believe would never sing unless they were put to it under other old brisk Canary birds, that hearing them continually sing they may in some manner serve them instead of masters."

BUYING ROLLER CANARIES.

The best time of the year to purchase Rollers, either as singing birds, or with a view to breeding, is the autumn, soon after the birds have come through the moult, and are getting in full song. It is an easy matter then to select a good performer, as the best birds come to market early. If your object in purchasing is to make a start as a breeder yourself, then buy one of the best. Don't be tempted into buying something because it is cheap. It requires a practised ear to select a good songster, and, if you are unacquainted with someone who is a connoisseur in Rollers, you must more or less trust to the dealer from whom you are buying. What are known as hollow rolls and flute notes constitute the Roller's song. Amongst other notes there are bass rolls, water bubble rolls, flat, long, short, rising, falling, full, soft hard, bell, rattle, whistle, and other rolls. A high-class performer will utter all his different notes full, clear, and dis-

ting, and continue each different roll for a long time. It is this capability to sustain the roll which distinguishes a first-class performer from a second or third-rater. Birds which change their note quickly, are harsh in their song, or which make frequent stops, even if only for a second are not to be classed as good singers. What is wanted is a bird that starts out clearly and goes right through his song with the different notes in proper sequence.

CHAPTER XX

LESSER KNOWN CANARIES.

At various times during the last twenty years White canaries have been shown, but they have not secured the approbation of the fancy, and have remained in few hands.

In Wales an attempt is being made to establish a breed named after the Principality, but thus far not much progress has been made.

A few enterprising breeders are seeking to secure the approval of the fancy to the production of Dwarf or Pigmy breeds, and at the National Show at Bradford in December, 1922, a class was provided for Pigmy Yorkshires not exceeding $5\frac{1}{2}$ inches in length.

When in Canada in the summer of 1922 I found that the breeders of British Columbia were engaged upon the production of two miniatures, one following the Norwich in type, and the other the Yorkshire, and quite a large number of the two breeds were shown at a show, which I judged, and which was held in connection with the Vancouver Exhibition and Fair. The birds of Yorkshire type were then being called British Columbia Fancy, and those of Norwich type British Columbia songsters, they having been evolved from the ordinary small common singing canary. These were the most popular, one of the classes containing no less than twenty-three exhibits.

I was much interested in these midgets, and I see no reason why canary breeders should not have distinctive dwarf breeds as have poultry breeders. There is a big field here for experimental breeding.

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