

A Simple Home Method

How To Make Glass Feeding Dishes

NATIONAL MOUSE CLUB NOTES

By "DICK" WARD, 57, Chantry Road, Sheffield 8.

COMING EVENTS:

May 17th—Spring Cup Show, Sheffield.
May 31st—Hebden Bridge.
June 21st—Nottingham.
June 28th—London

MR. BLACKETT'S recent remarks on the colour of Maxey cages have brought me some interesting views on this topic. This is all to the good; the more views we can get the better it is for the Fancy. There are many fanciers who read these notes and say to themselves: "Ah, I could say a bit about that. I shall have to be dropping a line to Mr. Ward." Unfortunately, that is as far as they go. May I beg these fanciers to grab a pen while the spirit is still willing and let all mouse lovers have the benefit of their ideas.

First, our old friend, "Fern End," has something to say about the colour of Maxey cages, and, as usual, he goes straight to the point. Everyone may not agree with his ideas, but they are certainly well worth studying as there is a lot of sound common-sense in them. Here they are:

WHY NOT "ONE COLOUR" CAGES?

"I read the notes on Maxey cages with interest. I judged at Sowerby Bridge on April 19th and the cage fronts were a variety of colours red, black, greens of light, medium and dark shades—but as a judge awards the prize to the mouse and not the cage I don't see that cage colour is anything to worry about.

All dissatisfaction, however, can be avoided by a one-colour cage. I have yet to see the advantage of a two-colour Maxey. One can never see the inside red as the cage is generally full of hay. If a one-colour cage was adopted probably we should get cages painted more often and looking a little cleaner.

"Not being a painter the difficulty of painting the edges and the inside is one of the reasons why I do not paint often. I feel sure that if little troubles like this could be easily avoided, and it was decided to adopt one style and colour, it would be advisable and of benefit, to the Fancy.

"For the next agenda I would like the following proposition to go forward: That the Maxey pattern show cage be a one-colour cage, inside, outside and bars to be painted Brunswick green."

"This should stop exhibitors hearing comments regarding preferential treatment.

"A one-colour cage would stop remarks to the effect, that certain exhibitors win because the judges know the mice by the colour of the cage fronts and edges."

CHROMIUM FRONTS SUGGESTED

Mr. J. Farrar's, Calder Valley, views are as follows:

"According to the rule book we know, or ought to know, that the colour of the Maxey cage is green outside and red inside, but it does not say anything about the colour of the bars. I can only see one way in which this rule can be improved and I would like to see it adopted, namely to have chromium wire fronts. I think fanciers will agree that they would set the Maxey cage off and look smart on the show bench. I have ordered four Maxey cages with chromium wire fronts."

This is certainly an up-to-date idea. I shall be interested to see one of these cages. For one thing it will prevent the bugbear of cage fronts rusting away and either letting a mouse escape or leaving a dirty patch on the nose of a good exhibit. The question of cost arises, and, perhaps more important in these days of shortages, the possibility of obtaining them.

Mr Farrar goes on to say: "I should like to see a book giving the desired matings to produce the mice one wants. I keep Chocolate and Tans. My tan is too pale for my liking. I want a rich tan. How am I to get it? Some fanciers advise you to mate your doe to one kind of buck and another fancier says something entirely different. And there you are, just guessing as to what to do to produce what you want."

There are many fanciers, myself included, who would like to see an up-to-date book on the fancy mouse, but I am afraid that under the present conditions it is something we shall have to hope for in the future.

A "SID" BOOT STORY

Several fanciers have written to me saying how much they appreciated Mr. Johnson's recent article on "Better Mouseries." I have not had the pleasure of visiting Mr. Johnson's own place, but I believe it is well worth seeing. While we cannot all hope to reach the same heights we can at least try to make our places something likely to attract new recruits to the Fancy. I will remember dear old "Sid" Boot telling me of a visit he paid to one fancier's stud. To say that they had not been cleaned out recently was putting it mildly. "Well," said Sid, "when does that clean out?" Promptly came the reply: "When I can't get 'lid on."

I once again express my grateful thanks to Mr. Johnson or his invaluable help in getting the ballot papers ready. By the time these notes appear they will have been posted. If any member has been missed I shall be glad if he will notify me. There is a good deal of work behind the scenes in any club and this particularly applies in the N.M.C. I should be failing in my duty if I did not

emphasise the very great assistance Mr. Johnson has been in this way.

From two fanciers come the following ideas which may prove useful to those who wish to make their own food dishes in these days of shortages. Mr. Gilpin, the well-known Scottish fancier writes:

"First obtain a bottle, or jar, of the same diameter as the glass dish you wish to make. Fill up to the level needed with oil—old motor oil is what I use. Stand on a level surface then plunge a red-hot poker into the oil and a crack will be heard. The top can then be lifted off. Leave the bottom until the oil cools. The edges can then be filed if it is needed. I have made many of them and I find that they are good. They do not easily overbalance and when washing they will stand hot water."

Mr. R. Phillips, Kingswood, Bristol, sends a similar idea. He writes:

"As a novice I was very interested in Mr. Johnson's notes in 'Better Mouseries.' There is one other thing that he could perhaps have mentioned (if he will forgive a novice for saying so) and that is food dishes. These help to prevent food being fouled and wasted. Excellent food dishes can be made from small jam jars. The method is to tie a piece of wool round the jar about three-quarters of an inch from the bottom, having previously soaked the wool in paraffin. Set fire to the wool and gradually turn the jar until the wool is burnt out. Then plunge immediately into a bucket of cold water and the jar will break neatly at the required place. A piece of emery cloth will smooth down the sharp edges, and there you are."

If any fancier has a few Silver Browns or Fawns to spare I would be glad to hear from them. These are urgently needed for genetic research at Cambridge. Exhibition stock is not required. This is an experiment which may have most interesting results and be of benefit to our Fancy, and I should be most grateful for any help.

Don't forget your entries for the Spring Cup Show at Sheffield, on May 17th. Tom Fitzwater and Eza Skinner, like the good fanciers they are, have at very short notice offered to judge. The show room is the A.E.U. Institute, Stanley Street, within five minutes' walk of the centre of the town and within easy reach of both stations. It is hoped to hold a meeting of the executive in the afternoon.

Mr. W. Turton will judge the A.O.V. classes at the N.M.C. spring show on May 17th.

PIGEONS

A NEW MAGAZINE

"PIGEONS AND BANTAMS," the new publication from Fancy Press Limited, made its appearance last week-end, and by now will have been read with keen enjoyment by the many pigeon and bantam breeders who have become subscribers.

Volume No. 1 is a tastefully produced magazine of twenty pages. The illustration on its coloured cover is of a champion White Muff Long-faced Tumbler bred by Messrs. G. Fundell and Son.

Of outstanding interest to pigeon breeders is the article by Mr. W. L. Wilkinson, of the Dragon, and the full page of illustrations depicting the Craigie Red Sells.

There are notes from the secretaries of the Polish Lynx Club, the Mottle, Rosewing and Whiteside Club, the Long-faced Self and Barred Tumbler Club and the Fantail Club, whilst Mr Sam Billingham contributes notes about his favourite—Tipplers.

An editorial gives the story of how "Pigeons and Bantams" has come into being, and makes the welcome announcement that the initial response to the magazine has been good and has included inquiries from America, Canada, Norway, Denmark, Australia and New Zealand.

BREEDS IN BRIEF

HOW A LOVELY VARIETY GOT ITS TAIL

THE fascination of pigeon breeding is the pleasure one gets from the hope and anticipation of producing, or attempting to produce, specimens better than those already in the lofts. The Fantail gives one plenty of opportunity to indulge in this great pleasure.



The Modern Fantail is a great achievement. The length and breadth of the forty or more feathers which constitute the upright tail and the stout cushions which act as a vice in keeping the tail in peacock-like position are a pleasure to behold. In the early days of the Fantail there were only about twelve feathers in the tail, which was straight and consisted of short feathers. The amount of interest and pleasure which Fantail devotees have derived in the adding of each feather cannot be estimated. The beauty of the present-day Fantail is a thing which attracts fanciers of both sexes.

To see a Fantail strutting in a walking pen at a show is a wonderful sight. It will rise with the crown of its head lying peacefully on its cushion, and its magnificent tail spread fan-like behind. It is produced in blues, silvers, blacks, reds, yellows, saddles and laces.

The Fantail has a good position in the Fancy to-day. Dr. Armstrong, of 65, Lee Road, London, S.E.3, has recently been appointed secretary of the Fantail Club.

II.—THE PIGMY POUTER

THE Pigmy Pouter is a merry little breed, full of vigour and hardly ever still.

The head should be small and dove-shaped, with an orange shaped globe. The beak should rest on the top of this in the centre. The body should be slim, with a wedge-shaped hollow at the back. The shoulders should be high and the wings well clipped in. The body should be narrow in keel and very thin at the waist. The legs should be as long and as straight as possible and very close together at the top so that the thighs are visible at the sides. The bird should look tall and slim. The limbs should be nicely stockinged, and the toes should be covered with "slippers" of fairly long, narrow feathers.

It is a beautifully marked variety. Imagine the lovely white crescent on the globe (called the crop markings), the rosettes of dotted white feathers on the shoulders are black, blue, silver, blue-bred cream, red, yellow and white. It is best to mate colour to colour, but blacks to blues can sometimes be used with advantage. Blue and silver is a good mating, as also is a yellow cock to a red hen. Good coloured blacks can often be produced by the use of one of the off-colours—lavender or ticked meales—mated to a black.

As whites are a self colour they have no points for markings when being judged, and this is worthy of consideration when competing against marked or pied birds.

Another important point when breeding the Pignies is to remember that it is a temperamental bird. Never put together two sulky or spiteful birds, as this is not the way to breed good dispositioned pigeons. To show themselves to full advantage a Pigmy should be merry, good tempered, and "in full blow." A judge likes a bird which is bright, happy, and full of go.

It is not necessary to use feeders for Pignies, but if you have a quality pair, the use of feeders can be an advantage in saving time in incubation and feeding, and will probably help to secure an extra pair of eggs. Good hens should not, however, be forced to lay.

When the youngsters are about seven weeks old they should be trained for show. Put a bird in a pen for a few hours every day with a block on which it can stand. Talk and coo to it. It should be handled often, but gently. At 10 weeks old it should be put into a larger walking pen, preferably with a good tempered old bird, when it will assert itself and start showing off.

Youngsters should be familiarised with the basket for travelling to shows, and a good method is to place a youngster in a basket about once a fortnight or three weeks and leave it in all night. It is necessary that they get used to baskets.

SELECTIVE BREEDING OF THE HAMSTER

By ALFRED J. CORK, F.Z.S.

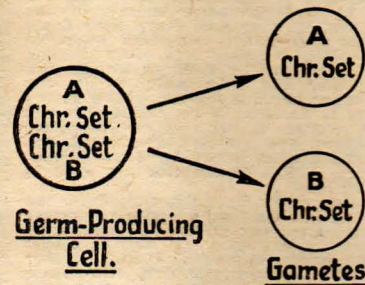
WHEN I first took an interest in the breeding of hamsters for variation, I was told that the animals always bred true, "as like as peas," and that was certainly the seem of things at the time. We were in the peculiar position of working with stock, every single animal of which had common ancestors, and if, by ill-chance, both the mother and father of the 1930 Aleppo litter had the small, and after careful study Mr. Edmund Many people felt that we were wasting our time, and that the only thing that we could do was wait for a mutation to occur. The possibility that every hamster at stud was genetically identical to every other was very small, and after careful study Mr. Edmund Battersby and I separately forecast the separation of the black and gold pigment. That prophecy is now in the course of being fulfilled, in fact, we now distinguish three shades, dark, natural and light.

When the colour variations began to show themselves it justified our early optimism, but since then other features have appeared, notable among which are the short/broad skull which is looked upon with great favour by show breeders, and shorter and denser fur. Two new coats, have, in fact, appeared, one a longish glossy fur, and the other a short, matt fur.

Having reviewed the results obtained, I now propose to give a very brief explanation of how new characteristics appear without the intervention of a gene mutation. This, I think, will be helpful to those breeders who do not already know the basic principles of genetics; knowing "how it works" always simplifies the operation.

It is fairly common knowledge now that all living things, plant and animal, are made up of microscopical cells. In ourselves and the more commonly known animals the cells are counted in millions, and each has its own separate life and is capable of existing under carefully controlled conditions, as a single living animal. Each of these cells, with the exception of certain blood cells, has a nucleus containing a number of pairs of ribbon-like structures called chromosomes; it is these chromosomes that are the carriers of all heredity. As such they are the units with which we who grapple with the problems of breeding are concerned.

It has been said that each cell has a pair of chromosomes, but this is not so in the germ cells, or gametes. These cells (the male sperm and the female egg) arise when a special germ-producing cell divides into two in such a way that one set of chromosomes goes into one gamete, and one set into the other, as in the following diagram:—



The importance of this point will become evident later.

For every single hereditary feature there is a mysterious something within the chromosome which is called a gene. Thus we speak of the gene for red hair, the gene for blue eyes, the gene for albinism, etc. Though little is known of the nature of genes, there is no doubt that they are real things, for it has been shown that a particular feature is influenced, not only by the particular chromosome, but by the special part of the chromosome in which it is carried. These facts hold true in all normal cases but occasionally changes take place in the chromosomes, or in the genes themselves; this is a mutation.

In the light of what has been said the

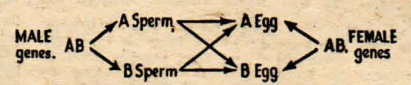
mechanism of normal heredity will be seen to be comparatively simple. When two germ cells, each with a single set of chromosomes, come together in mating, a new cell is formed with two sets, one from the male, and one from the female. From this cell develops all the cells that go to make up the adult animal.

Now we come to the point of the matter. The young animal resulting from the mating has two genes for each single characteristic seen and unseen, physical and mental, one from its mother, and one from its father. From any one feature there are three possible effects of this gene combination, namely:—

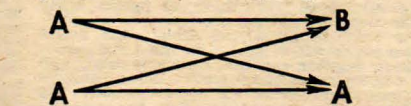
- 1 The maternal feature may show,
- 2 The paternal feature may show, or
- 3 A feature intermediate to both 1 and 2 may show.

In cases 1 and 2, the character shown is said to be dominant to the other (recessive) character. In the case of 3, the two genes may be of equal dominance, or one may be slightly dominant to the other, but not sufficiently so to overpower its companion gene. The presence of a dominant gene will always cause the feature which it carries to appear in the young animal, but a recessive characteristic can only show when the recessive gene is present in both of the uniting gametes. Thus it is of the first importance to be able to recognise dominant and recessive characters if selective breeding is to be effective and economical.

Suppose two animals of the same colour, which we will call "A" are mated, and some of the offspring are of a different colour, say "B." We know that the gene for "B" is recessive and that it must be present in both of the parents. We also know that, on average, 1 in 4 of all young from the particular pair will be "B" colour, as the diagram shows.



It will be seen that four unions are possible, A to A, A to B, and B to A, all give the "A" colour because they contain the dominant "A" gene, B to B give the "B" coloured animal, the dominant gene being absent. The form of diagram shown above can be used to determine what type of litter to expect from the mating of a pair whose gene pattern is known. Thus if an AA animal is mated to a BA animal (using the letters as above), the offspring will be 100 per cent. "A" colour with a ratio of 1 : 1 true breeding and hybrids, as is seen from the following diagram.



The only way to guarantee the appearance of recessive characteristics is to breed from two animals which show the character required, though it does not follow that other features will breed true.

We are very keen to know which of the features of the hamster are recessive and to discover new ones. This can only be done by mating, in-mating, and cross-mating, as such as possible regardless of whether show-bench types are appearing or not. The new short/broad headed hamster is an example of selection of a recessive character, the gene of which lay unsuspected for a long time. There appears to be very little difference in the power of the colour genes in the hamster, though there are indications that the gene for black is somewhat dominant to that for gold.

In all animals there are groups of genes which always work together, or else when they appear together, one gene has the effect of strengthening another and thereby making the feature which it influences more pronounced. We have two examples of this in the hamster, namely: the dark animal always has a whiter belly fur than its lighter fellows in the short and broad skulled variety, the dark animals have relatively broader heads than the light ones.

(Continued on following page.)