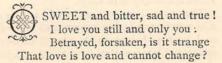


FINAL FAITH.



O vain regret! the days depart: And, day by day, the faithful heart, That loves you still, is full of pain For days that will not come again. O fond and fickle, false and fair! Do you recall the days that were, And think of these without a thrill Of pain for one who loves you still?

O last and first! the songs of love Are full of faith on lips above: And, having loved you, is it strange I love you still and cannot change?

I. R. EASTWOOD.

HOW AN AMATEUR CARPENTER MAY MAKE AN AVIARY.



NE of the charms of having a good garden is the opportunity it affords, not only for the study of shrub and flower culture, but also, if the possessor be so inclined, for keeping different pets, caged or at liberty; and those who are fond of birds can find no

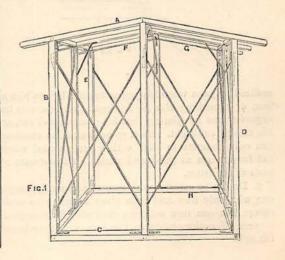
easier way of watching their habits than by keeping them in an out-door aviary. Readers of the Magazine* have already been instructed in the management of canaries in a breeding-cage; but considering that before we proceed to set up a stock of them, we must have a house to put them in, and that canaries, apart from their song, are not birds of much force of character, and never show off their saffron coat to better advantage than when it is contrasted with the red of the bullfinch, the ruddy bronze of the chaffinch, the quiet brown of the linnet, and the different hues of the other finches—while we are about it, we may as well have a variety of birds, as it is no more trouble to feed fifty than five.

Such being the case, I propose in the following paper to say something about the construction of an aviary, where a large number of birds may be domiciled in health and happiness; not entering into

minute details, because if the reader has not a natural turn for saw and chisel, no amount of description would give him one; but in the hope of encouraging any who, having already some knowledge of the manipulation of edged tools, would like to make something of the sort themselves, but might be deterred by fear of the magnitude of an undertaking which, destined to be exposed to the elements, involves strength of sides to resist gales of wind, coupled with tightness of roof to defy rain to find its way inside. But in making the birds'-house from which the plans are drawn there is no difficulty but what may be (and has been) overcome by an amateur-supposing him to have a workshop, ordinary tools, and to have made up his mind to put on an old coat, and go in for some real hard, laborious work.

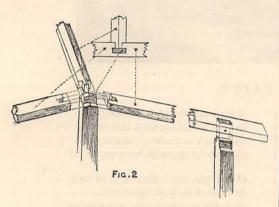
There are certain aphorisms and facts connected with carpentry to be borne in mind and acted upon.

1. Buy only the best tools, and keep them sharp.



* February, 1879.

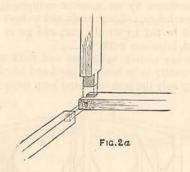
2. Keep your tools, when not in use, well out of the reach of children, who would be glad to use your chisels, if not to dig out refractory tin-tacks, at least as



screwdrivers; and of the cook and kitchen-maid, who, looking about in a hurry for something to cut a joint with an immoderately long bone, might think master's finest tenon-saw just the very thing to effect the required amputation.

3. If your new pincers, wire-cutters, or centre-bits chip and break off in a most annoying way, it does not follow that you are to put it down to your inefficiency in their use. The fault may lie with yourself; but if the chipping occurs when they are being called upon to do no more than the work they were intended for, it is owing to the tools being badly tempered—i.e., too hard and brittle.

4. The old and true saying—"Bad workmen find fault with their tools"—often requires to be qualified by another one, equally true—"Good workmen cannot do good work with bad tools:" a fact not enough



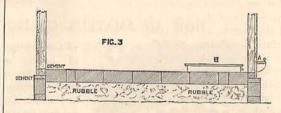
realised by papa when his young hopeful brings him a box, or something else he has made, and excuses its imperfections by hinting that his planes won't cut, or his chisels can't cut. Be it remembered, an amateur can only compete in skill with a professional when the former has as good and varied an assortment of tools as the latter.

5. Do not be satisfied with your results until, though one who only now and then gives attention to such things, you can turn out from your workshop as good a piece of workmanship as the man who spends his life at it. 6. In doing any out-door work, such as a fern-frame, dove's-house, or what-not, never put together any part of it inside the shop until you have ascertained that such portion will somehow get through the door-way. This remark brings us back to the aviary, and its general size.

If it is to be about seven feet square, the frame of each side can be set up in-doors; if larger than that, each piece of wood, when prepared, will have to be taken out, and the various parts joined together near where the aviary is to stand.

The materials we require consist merely of ordinary deal rafters, two inches square, and a good number of deal boards, $\frac{5}{8}$ inch thick, planed on one side, with rebate and groove already cut—all of which may be obtained of any timber merchant.

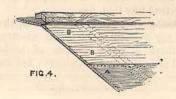
First, the frame of one side, as before stated, is put together (Fig. I, A, B, C, D), then that of the opposite side (E, F, G, H); the various corners being duly mortised into one another (Fig. 2). Then the remaining parts of the frame having been got ready piece by

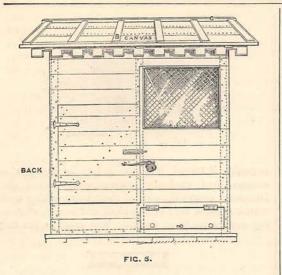


piece, the whole may be set up. The two iron stays between each couple of upright rafters must on no account be omitted; nor yet the galvanised iron squares, similar to those used by shopkeepers to support their window-shelves, which will be found most useful and effective to strengthen the angles.

Advanced thus far, we get the mason to come with his cement and some bricks, and build up on the selected site (of which more anon) a level foundation for the house to rest on, spreading a layer of cement along the top of the upper course of bricks, to which the base of the frame-work (which must be lifted on to it while it is moist) will adhere. Then, to give additional stability, and lessen the risk of the house being lifted or shifted by a gale (for, being open in front and sides, it will offer, like the inside of an open umbrella, far greater resistance to the wind than would be the case if glazed as a greenhouse is), an inner line of bricks is next cemented against the side of the bottom rafters all round, and flush with their surface, as seen at Fig. 3. Lastly, when the floor has been paved with bricks, the mason's job is finished, and further extraneous aid can be dispensed with.

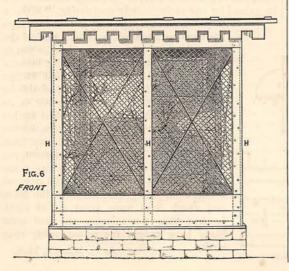
Now comes the roof. This is made to play out



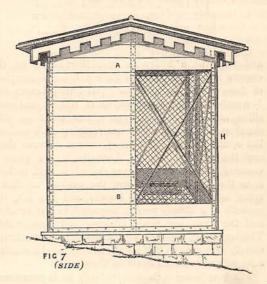


widely for two purposes: to give our aviary a somewhat ornamental appearance, and also to carry the drip well clear of the walls and wire netting. First of all the boards, B (Fig. 4), must be nailed on, planed surface downwards, to form a smooth ceiling; then the whole is covered with strips of stout canvas, A, overlapping one another. The ends of the canvas are fastened tightly under the eaves; and the exposed selvedge of one strip, with the selvedge of the next beneath, is properly tacked to the wood. Finally, the top piece, C, and the narrow strips of wood, B, B (Fig. 5), being securely nailed on over the canvas, the roof is complete; and when eventually painted with light lead-colour, to give it an airified appearance, it will be perfectly waterproof, and have the appearance, without the weight, of a real leaden covering.

There remain the sides to be walled up. The boards for these can now be nailed on from the bottom upwards, with the exception of those extending from A to B (Fig. 7), and the pieces H, H (Fig. 6), which must be left over until the wire netting has been attached to the upright pillars. A window, two feet



square, of a single pane of strong glass, well bedded in putty, to give more light to the interior without extra draught, and with wire netting over the glass on the inside, is placed at the back; where also is seen the door, capacious enough for a person to get in and clean out the aviary when required; for which purpose three feet by two feet will give sufficient room. But we do not want the bother of unfastening this big door, and stooping down to the floor, every time we put in the saucers of food, besides running the risk of allowing some of the birds to fly out during the operation; so we construct another one, much smaller, at the side, c (Fig. 9), at about the height of one's elbow when standing by it. Two brackets, A, A, fixed to the door, as shown, serve to keep it in a horizontal position when open, thus forming a table on which to stand and fill the saucers with seed and bread-andmilk, before transferring them to the wooden tray at the same level inside. The task of putting fresh water daily may be entrusted to the gardener (see that

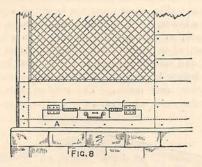


he does it); but inasmuch as, if the water were passed in through the large door, it is possible he might one day, thinking about anything except his work, as servants will, go away and leave the door wide open,* another little door, fourteen inches by four inches, with the bottom of it flush with the brick floor, A (Fig. 8) and a spring like that of a mouse-trap attached to the hinges to make it shut spontaneously, will be amply large enough to admit a zinc trough, one foot square, two inches deep, which will contain abundance of water to give all the birds a good bath daily.

Two coats of lead-colour painted over the whole outside wood-work, two coats of dark green over that and over the wire netting, three coats of light leadcolour (as before stated) over the outside of the roof, with three coats of white paint over the walls and roof inside, will complete the work of the house itself.

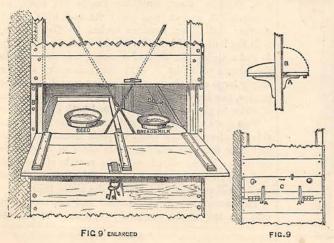
The arrangement of perches and nesting-places may be left to the reader's judgment. The goldfinches will want some slender twigs close to the roof, and a swinging perch, such as in Fig. 10, as they love to get up as high as possible, and look down contemptuously on everybody else. The canaries and red-polls will like another swing, Fig. 11, suspended from a stout perch above by a small swivel and chain, and placed in the front near the wires, where they can be swung to and fro by the breeze. It is pretty to watch the canaries singing as they swing.

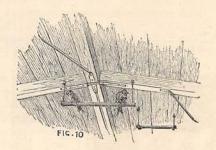
The site should be as sunny and sheltered as possible. If the front of the house can face south,



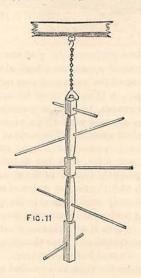
and there be a hedge or spreading shrub on the eastern side, the birds will have nothing to complain of from spring to autumn. But falling leaves and November cold are suggestive of ulsters and sealskins, and our conscience must not smite us with the thought that our birds are roosting with nothing but a thin board and a bit of canvas between them and the full-moon frost. Accordingly, we place a cover of thick, warm felt over the whole roof, tacking it to the narrow slips above the canvas, so that a space is left between the boards and the felt, the warmth of a double roof is imparted to the interior, and the birds are made all snug and comfortable. This covering, together with a wooden shutter fitting closely over the top half of the netting on the weather side, will be removed again in March.

Far from being such delicate birds as is sometimes believed, canaries will stand the cold of average winters, at least in the south of England, with





impunity, if turned into the aviary in summer or autumn, and gradually acclimatised. When chill December covers the roof of their house with a thick mantle of snow, they will be sleek and hearty, chirruping away merrily, at thinking how much better they



are situated than the half-starved winnards and grey-birds outside.

One word more. It may happen that at feeding or cleaning-out time a cock bullfinch, or some valued bird, will slip out and escape. Nothing whatever will be gained by our lachrymosely exclaiming, "What a

pity!" nor would it be wise to chase the fugitive from bush to bush, as though we had the salt-cellar with us, and expected to be just in time to apply the proverbial pinch; because to pursue would merely frighten it farther afield. But if left alone it will probably be much too astonished at the novelty of its freedom to think of flying at first farther than the nearest thick shrub. So, having noticed where it has flown to, we must fetch the trap-cage without losing a moment, put in a hen from the aviary as call-bird, a few grains of hemp as bait; stand the cage on a box, or anything else, close to the bush, and watch from some point out of sight. In less than ten minutes we shall most likely have caught the truant safely once A. H. MALAN, M.A.