

Hobbies

WEEKLY

May 17th. 1944

Price Twopence

Vol. 98. No. 2535

For chemistry and other needs, make a pair of DISPENSING SCALES

WE are giving in this article instructions for making a pair of dispensing scales or balances which are particularly useful to the amateur who deals in chemistry. If some hardwood such as oak can be obtained then quite a serviceable pair of scales could be made.

A good idea of the instrument can be gained from the illustration on this page. Briefly described, there is a box with drawer complete for holding the weights, etc., and this forms an excellent base for the scales above.

At the top of a pillar fixed to the rear of the box, there is a pivoted arm from the front end of which hangs the balance bar supporting the two pans.

Raising the Pans

At the back end of the arm there is a wire loop to which a cord is fastened. This runs down through a slot in the pillar to a lifting arm pivoted to the pillar further down.

The idea of this cord and lifting arm is to raise both pans clear of the base by depressing the disc at the fore part of the arm. A little metal pointer or indicator fixed to the front of the balance bar indicates the accuracy of the weight of material in the pan beneath.

The base measures 8½ ins. long, 4 ins. wide and 2½ ins. high. It should be made from mahogany in preference to any softer wood, and it requires to be well and substantially put together.

In Fig. 1 the general construction

is shown which, as can be seen, is of a simple character. The rear end of the box is omitted in this detail to

indicate clearly the make of the drawer which simply slides into the base. In addition to the measure-



ments we give a complete cutting list of wood, from which all parts can be easily marked out and cut.

The edges of the floor and top should be rounded slightly, as shown, with glasspaper. The three sides of the box are glued to the floor and further strengthened with brass fret pins or panel pins.

The drawer is glued together where possible and pinned for strength, a gluing block being added inside between the front and the floor.

The pillar for the scales is shown in the lower detail in Fig. 2, and this may be made from $\frac{1}{2}$ in. square wood. Some workers may desire to lighten

for the passage of the cord. The lower slots B should be $\frac{1}{4}$ in. wide while $\frac{1}{2}$ in. will answer for the width of C. At the top of the pillar an open slot is made as shown and $\frac{1}{2}$ in. wide.

Easy Working Essential

The insides of all the slots must be clean and smooth so the working parts which go into them move as freely as possible without, of course, too much lateral movement which would cause friction.

The balance bar is shown in detail in the top diagram in Fig. 2. A small brass eye is screwed centrally in the

glued and pinned to the front end of the lower arm as a finger press. Form a stirrup from wire for this arm as shown in Fig. 3 to take the cord. In Fig. 3 the arm is shown ready to be pushed into its slot and pinned.

A similar wire stirrup is made for the top arm for the cord after it has been passed through the slot in the pillar.

The ideal type of pan for use with these scales is that usually obtainable in glass from firms dealing in photographic and chemical accessories. If, however, such cannot be obtained then a light-weight cigarette ash tray holed in three places would make a serviceable substitute.

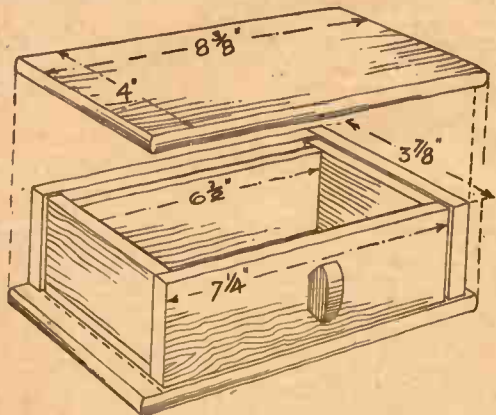


Fig. 1—Construction of box base

the appearance of the pillar by tapering it slightly towards the top, this work being done with the plane.

At A (Fig. 2) a halving is cut and fits down at the rear of the base as in

CUTTING LIST

- Floor—one 8 1/2 ins. by 4 ins. by 1/2 in.
- Side—one 7 1/2 ins. by 1 1/2 ins. by 1/2 in.
- Drawer, front—one 7 1/2 ins. by 1 1/2 ins. by 1/2 in.
- Ends—two 3 1/2 ins. by 1 1/2 ins. by 1/2 in.
- Top—one 8 1/2 ins. by 4 ins. by 1/2 in.
- Drawer, floor—one 7 1/2 ins. by 3 ins. by 3/16 in.
- Drawer, ends—two 3 ins. by 1 1/2 ins. by 1/2 in.
- Drawer, back—one 6 1/2 ins. by 1 1/2 ins. by 3/16 in.
- Pillar—one 9 1/2 ins. by 1/2 in. by 1/2 in.
- Balance Bar—one 5 1/2 ins. by 1/2 in. by 1/2 in.
- Arm—one 3 1/2 ins. by 1/2 in. by 1/2 in.
- Arm—one 2 1/2 ins. by 1/2 in. by 1/2 in.

Fig. 3, two round-head screws making a strong connection here.

At B and C in the pillar diagram are two slots. The one lettered B is for the lifting arm and C, a narrower one,

top edge, and two more eyes rather larger at the ends which take the cords and wire support of the pans.

The two moving cross arms are shown in outline in Fig. 4 with $\frac{1}{2}$ in. squares ruled over to facilitate the necessary enlargement to full size. Cut from $\frac{1}{2}$ in. hardwood and glasspaper down so they slide smoothly and freely in their respective slots. Wire nails with their heads removed make excellent pivot pins for these two arms.

A $\frac{1}{2}$ in. diam. disc of thin wood is

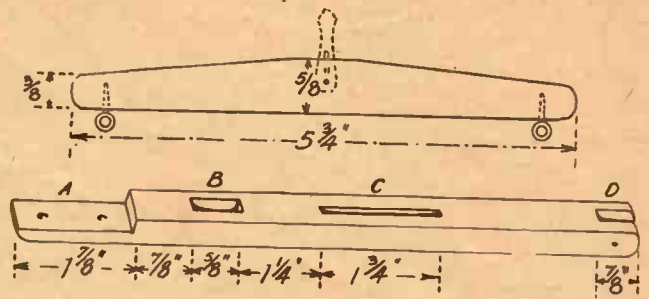


Fig. 2—Shape of post and cross arm indicator

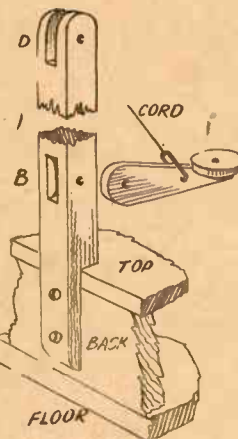


Fig. 3—Details from back

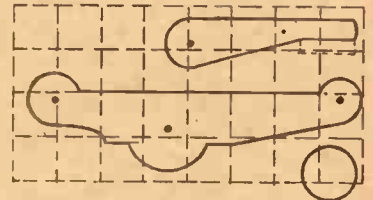


Fig. 4—Lever parts and disc

Hanging pan

One of the pans is best provided with a wire support making for easy access. Bend the wire to a neat hook at the top and at the lower end solder it to a Vee-shaped strip-brass or copper arm. This arm must be carefully bent to take the curvature of the pan.

The balance bar is hung to the top arm by a loop or stirrup of wire, holding close to the wood bar.

The woodwork of the box and front of the drawer should either be french polished or stained dark and varnished. The wood of the upper parts should be oiled or wax polished.

Sailing Boat—(Continued from opposite page)

bottom of the hull for the lower end of the mast, so be sure to have the hole bored as accurately as possible.

The boom, for the main sail, is affixed to the main mast by a wire hook, same fitting on a wire "eye" in the mast. Hooks and eyes are bent from wire, including the bollards on deck. The bow-sprit is affixed on deck with panel nails.

Fine linen is the best material for making sails. The edges of the main sail and jib are hemmed on a sewing machine. Small fixing, or rigging, holes are made in the sail edges, as shown. Twine is used for mast rings—that is to say, one has "rings" of twine.

The side view at Fig. 1 shows up most of the rigging details. It will

be seen that there is a bollard forward and aft for the jib sail and main sail so these can be adjusted.

The best test for a new yacht is to wet the sails prior to setting it on the water. The extra weight of water in the sails will show whether the yacht is sea-worthy enough. A well-balanced yacht should always right itself when blown sidewise.

A straightforward method of making a plain SAILING BOAT

THIS is an average-sized model yacht, as can be seen, but it is possible to make a larger or smaller size simply by increasing or decreasing the size of the squares in which the outlines are plotted (see Fig. 2). The model can, therefore, be made according to available materials.

The yacht is, without doubt, a war-time one. Many of the usual fittings, such as mast rings, mast-step, etc., are replaced by quite ordinary things. The hull of the yacht can, by the way, be solid, or made partly as a shell; the latter feature giving extra buoyancy.

The keel is a plain-shaped piece of thin wood, fitted on by means of a tenon. At each side of the lower end of the keel small lead weights are screwed. These weights can be cast in a small wooden mould, details

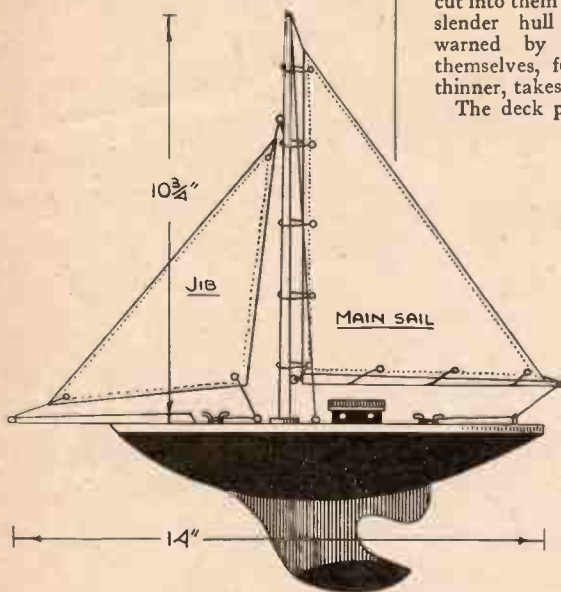


Fig. 1—Side view with sizes and details

of which are given. Painted in bright enamel, with properly rigged sails, the yacht should give an excellent performance on any inland lake or pond.

The Deck Piece

The deck piece is the first thing to prepare. It is cut from $\frac{1}{2}$ in. wood, the shape following the outlines given in the 1 in. squares.

It will be seen by the sectional view that the hull is built up from three pieces of wood, two being $\frac{1}{2}$ in. thick, and the other $\frac{1}{4}$ in. thick. These three pieces may be cut the same size as the deck piece, then the "centres" cut out of the two $\frac{1}{2}$ in.

thick pieces to the shapes plotted in the squares.

As the keel plate is cut from $\frac{3}{4}$ in. wood, a suitable tenon is cut at the top of it, as shown, then a mortise cut in the $\frac{3}{4}$ in. thick hull piece for the tenon. When the hull parts have been cut to shape, they are glued neatly together in their respective order and put aside to set.

Shaping the Hull

When the glue has set, shaping can be commenced. As much waste wood as possible is removed with a sharp penknife, and then the roughness smoothed off with a spokeshave. The keel, of course, is not glued to the bottom of the hull until all the shaping has been done.

When spokeshaved neatly, the surface is smoothly glasspapered. Incidentally, owing to the cut-outs in the hull pieces, be careful not to cut into them by making an extremely slender hull shape. You will be warned by the centre apertures themselves, for the wood, becoming thinner, takes on a different colour.

The deck piece should not, if you

hole cut in it, is nailed on top, but not before the inside of the wooden mould has been sooted with a candle flame.

Moulding the Lead

The lead is melted in an old tin and poured carefully into the mould until full. When cool, the top covering is removed and the cast weight removed, then a second weight cast in the same way. Holes are bored and countersunk in the weights so they can be screwed to the bottom end of the keel.

The thickness of the weights depends on the size of the model you are making. Naturally, everything will be larger, so there is no need to have the weights any thicker than $\frac{1}{4}$ in. unless experience shows that the particular size of model you have constructed requires heavier weights owing to its top-heaviness. The weight of the sails has a lot to do with the top-heaviness of the model craft.

Any roughness on the cast weights must be removed with a file. This is best done when the weights have been

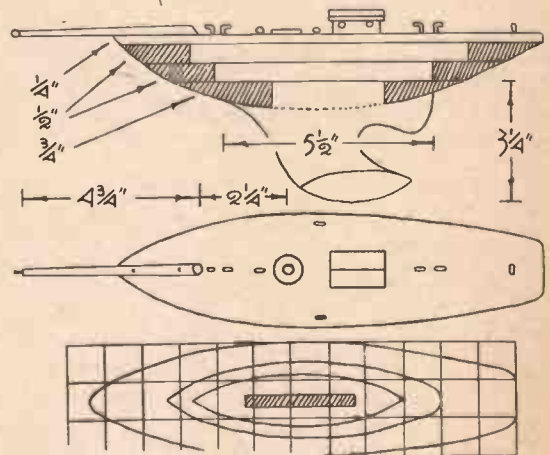


Fig. 2—Top view and section with 1 in. plotted plan

are making a shelled hull, be attached until all the shaping has been done. In spite of every care, you expose the central apertures, go ahead with your shaping to have both sides identical. Any opening can be blocked up with plastic wood, applying it from the interior.

The Keel and Weights

Having cut the keel to shape, make the lead weights. The latter could be cut from flattened pieces of lead gas pipe, or alternatively, lead sheeting. If you prefer to cast two weights, simply cut their shapes in a piece of $\frac{1}{2}$ in. wood, then nail a bottom piece to it. A top piece, with an inlet

screwed on the keel plate. Sharp edges must be filed smooth, including the heads of projecting screws.

The Masts

The masts, of course, are made from $\frac{1}{2}$ in. dowelling. The main mast is cut from a piece 12 $\frac{1}{2}$ ins. long. It tapers towards the top, this being done with a smoothing plane or a small block plane.

The position of the main mast can be judged from the top plan of the deck. Having bored the hole, cut a washer from $\frac{1}{2}$ in. or $\frac{1}{4}$ in. wood and glue it over the hole. By the way, a supporting hole is bored in the

(Continued foot of opposite page)

Readers should try their hand at making some ARTIFICIAL FLOWERS

HINTS on the use of crepe paper in making artificial flowers would be helpful, for so far, we have only achieved some rather amateurish roses and daffodils," is what an R.A.M.C. doctor, a prisoner of war, wrote in a recent letter. It was an appeal which has prompted this article, but you, too, will find the subject interesting, for it is covered in a simple, easy manner which anyone could follow.

The rose—the Queen of Flowers—is covered fully; its construction is practically the same as most other flowers. However, necessary details for several varieties of flowers are provided, each one being simple, yet attractive in its own way.

One good thing about artificial flower making, incidentally, is that one can have a fine display of "blossoms" the whole year round. In fact, almost any flower can be turned out in crepe paper, down to the last detail. At a distance, few could (when made by an expert) tell the difference between the artificial copy and the real thing.

The Materials Required

Equipment consists of a pair of blunt-nosed, sharp scissors, a bone paper knife (used for curling petals) thick wire (for stalks) and thin stuff (for binding purposes), plus a pot of paste and the coloured crepe paper.

The latter is usually sold in sheets about 20ins. wide by several feet in the length, rolled up and banded in the middle. It is wrong to remove the wrapping, as this acts as an excellent guide in cutting off desired widths.

The Rose

What kind of rose to make depends on yourself, for there are several

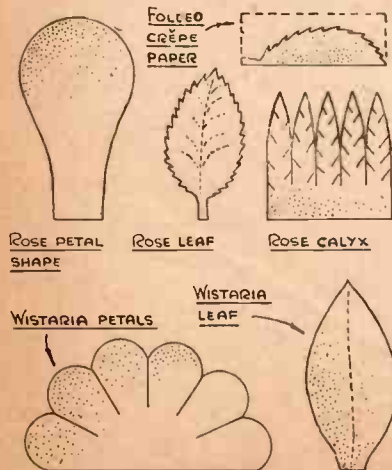


Fig. 2—Detail of petal, leaf and calyx

types. The standard variety can be one colour or two-coloured. Twelve to fifteen petals are needed, in most cases, for a single blossom, plus an 18in. long wire stem, a leaf-green calyx and a few leaves (see Fig. 2).

It is advisable to make a cardboard template so you may cut out the petals, leaves and calyx shapes more uniformly and quickly. Of course, the petals and leaves are never exactly the same shape or size in the real flowers, so if cut out separately, a quick way is to fold the paper in half and cut the half shape, as shown. However, it is best to cut out a number *flatly* first particularly in regard to petals.

The petals and leaves of all flowers, excepting the leaves of geraniums and pond lily pads, are cut so the "grain" of the paper runs from tip to base. Curl the rose petals by drawing the edge of the paper knife gently, but firmly, up the back of them; a little practice will show the different effects that can be obtained. Rambler rose petals, by the way, are best curled by rolling them around a knitting needle.

The Assembly

To assemble the rose, paste and roll one straight petal (into a cone shape) on the tip of the wire stalk, then fix the other petals around it. The base of each petal should wrap the previous one and, having arranged them together in the conventional manner, bind with fine wire, then paste the calyx around the base.

A 1in. wide strip of green paper is rolled around the wire stalk at a slanting angle to cover it. Other stems can be added, including a few leaf sprays as you go along. A few buds lend a touch of realism to the work. These are made from balls of paper, covered with a single (or double) small calyx having finely-pointed sepals (see Fig. 1).

To finish the rose spray, the petals must be realistically twisted and "cupped" with the fingers. Grip the wire stalk between your knees. The petals are cupped by pressing the paper into a bulge with the tip of the thumbs of both hands. This is an "art" which comes with constant practice.

If making a two-colour rose, the most popular combination is salmon

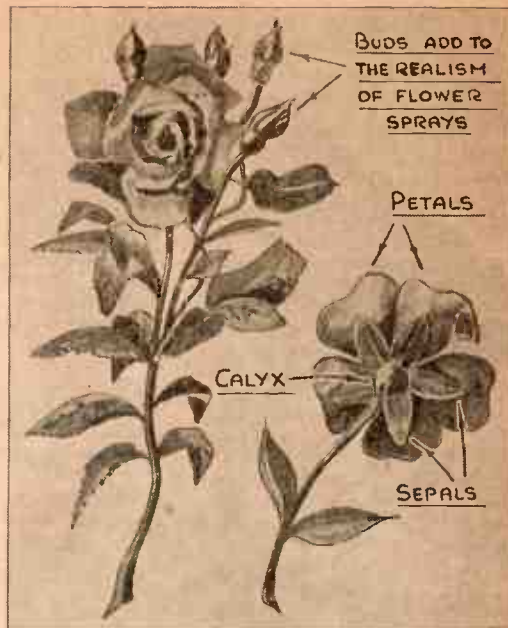


Fig. 1—A rose spray, and back view of five-leafed flower

pink and apricot. The darker shade is always put in the centre. Single colours are red, coral pink, cerise, yellow and light orange.

The Wistaria

Wistaria flowers can, for decorative purposes, be made in yellow shades. However, for a realistic copy, you need three mauve shades such as purple, heliotrope and violet. There are three sizes of petals, the small purple ones being 2ins. wide, with the violet ones 2½ins. and the heliotrope 2¾ins.

A number of petals are best cut out at once from several suitable sized sheets of paper, using a cardboard pattern as a guide. Only half of the pattern is shown at Fig. 2.

Having cut out and twisted the petals (by holding them in the left hand and giving each one or two complete twists with the right hand) put a bend in your length of stem wire and pass the small sizes of petals down to the bend at the end of the wire.

Petal Fixing

Secure with paste or wire, working this up the stem as you proceed, as follows: Take three or four medium size (violet) petals and slip them on, keeping them fairly close together so the stem is hidden, then do the same with the large sized (heliotrope) petals, the number depending on the size of bloom you desire to create.

Stem up to the end of the stalk after you first paste the stemming paper over the edge of the last petal.

A large number of leaves are wanted. Starting from the point of the new stem, wrap on green paper, then add a single leaf on each side as you work down; finally, join to the stalk of the wistaria.

The Tulip

Cover a small ball of paper with leaf-green paper and pinch it tightly. A piece of black paper is cut into a fine fringe and rolled between thumb and finger. Wrap a $3\frac{1}{2}$ in. long piece around the ball.

For petals, adopt the pattern used for roses, but with the sides cut somewhat straighter. Six petals are cupped, three being bound around the fringed ball equidistantly; the other three are similarly attached to show between the previous ones.

A couple of leaves are needed for each tulip. These are attached when one has practically reached the bottom of the stem. Tulips should be bunched nicely, with their leaves curled outwards.

To make the large type of carnation,

eighteen (sometimes twenty-four) petals are needed. The stem wire is covered (with a portion of the paper used in making petals) at the top end, the latter being turned over a trifle. Petals are worked around this and bound with fine wire.

The calyx—which is like the rose type, but not cut down more than $\frac{1}{2}$ in.—is pasted on. Start covering the stem with the stemming paper a short distance below the base of the flower, working up towards the petals, then turning back to wrap it on in the usual manner, adding leaves here and there.

Carnation petals are best made by cutting a piece of green paper 5 in. wide, with the grain running lengthwise. Cut it into $\frac{1}{2}$ in. wide strips, then cut again through the centre to make $\frac{1}{4}$ in. strips, these being pointed at the top. Do not separate the strips (petals) at the bottom.

General Hints

Stamens for the centre of flowers are made from pale yellow paper by

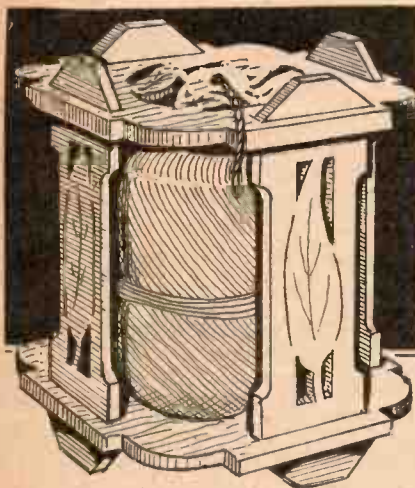
cutting a piece into a fringe and twisting it with the fingers and thumbs. Most flowers need a piece not more than 1 in. long, the poppy only requiring a thick, black fringe, finely cut.

Straight wire, not spool stuff, is used for petals and leaves, cutting the wire longer than the petals and leaves. When stemmed, the back of the leaves are pasted on and set aside to dry. When wrapping on the stemming paper, keep it taut and at an angle so that, when the wire is twisted, the spirals overlap each other neatly. Do not paste the paper all the way down the wire. Paste is only needed at the beginning and ending of the wrapping.

Leaf Veins

The "veins" in leaves can be suggested on leaves by just merely scoring the lines on with the point of a knitting needle. Double leaves, with the stem wire running down the centre, is often adopted—in other words, the stem wire is sandwiched between two identical leaves.

See Cover iv for full size patterns of this handy STRING HOLDER



LIKE most other articles nowadays string is something to take care of and not to be wasted. This is where a string box comes in handy, and looks neat on the table or desk, as well. The box will hold an ordinary size ball of string or twine, comfortably.

Full size patterns for the box are given on Cover iv to be cut from $3/16$ in. thick fretwood. Two Hobbies panels 4 in. by 9 in. will be required to make the box. Nearly one panel will be wanted for the top and bottom parts.

Cut the two 4 in. squares necessary and nail them temporarily together

with the pattern pasted on top. Now cut the slots A, B and C, then the outline. Take the pieces apart, and in the top one saw out the simple fretwork pattern and bore the string hole in the centre. The slot C is then extended to the dotted lines at each end, making it $1\frac{1}{2}$ in. long instead of 1 in.

Veining the Leaves

In the fretwork pattern itself it is necessary to cut the curves of the leaves smoothly, or the general effect may be spoiled. The veining is put in with the fretsaw or a knife. When cutting the slots A, B and C, saw inside the lines to ensure a tight fit. Bad fitting mortise joints spoil the whole work.

Cut the sides, two of which will be sawn together. The veining and side lines of the leaves are sawn carefully—smooth flowing curves are desirable.

Do not extend the side lines beyond the limits shown or a weak spot will result which may cause a break through. Not a disaster this, but to be avoided by careful cutting.

Slide Part

The slide, which is also the fourth side of the box, is then cut similarly and the various joints tested for fit. The caps and feet can then be cut from spare wood left. Both are alike. Give all the parts a good clean up with medium glasspaper and pay attention to the edges.

Now fit all parts together, as shown in Fig. 1, and when satisfactory glue the joints and then glue feet and

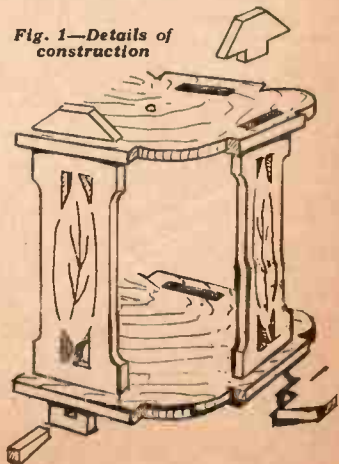
caps in place. The slide of course, is simply pushed down, not glued at all, and there held in place with a tiny wooden wedge.

This is cut from the pattern from a scrap of the fretwood, and is pared to wedge shape with a chisel to enter the slot in the bottom of the slide.

The edges of all parts present a neat contrast if stained black. Optional this, of course, but worth doing if a little black stain is to hand. Then the whole article can be given a coat or two of polish or varnish, to finish it off.

The slide must be withdrawn to allow the ball of string to be put in the box, the free end being drawn through the hole at the top. The slide is then pushed back and fixed with the wedge underneath.

Fig. 1—Details of construction



Complete details for the simple construction of a CONCRETE BIRD BATH

CONCRETE ornaments in the garden look well, and are easily and cheaply made. A concrete bird bath is doubly useful, it serves both as an ornament and a pleasing attraction to the birds. Bird lovers will delight in it.

Here is a simple method of making one which results in a well shaped ornament, looking A.1. in the gardens as an attraction to feathered folk who will delight in splashing in the water. A small quantity of sand and cement is wanted for the concrete and a few pieces of common wood for the moulds.

Knock a few boards together to make a square, the size given in Fig. 1. The upper surface of the boards should be smooth, so plane them if necessary. Round the edges of this board nail strips of 1in. thick wood, $\frac{1}{2}$ in. wide to make a rim.

Making the Concrete

Get some damp sand and pile this in the centre, making a circular shape 10ins. dia. and $1\frac{1}{2}$ ins. thick, no more, in the centre. Work it nice and smooth, forming a curve from the centre to the edge. The remainder of the wood inside should be oiled to facilitate removal of the cast when set.

Mix a concrete of 1 part cement to 4 parts clean sand in a dry state. Sprinkle it with water and turn over, repeating this until the mixture is wet throughout, but not too sloppy.

Then trowel it in the mould, working it over the sand and bevelling it from there to the sides. The total thickness should be $2\frac{1}{2}$ ins. at the centre, including the sand.

Smoothing

Flatten the centre to a 4in. square and work from there down to the rim. Make the surface as smooth as possible damping the trowel by dipping it in water occasionally to help the process.

Final finishing might be done with

an 18in. length of wood with one edge planed straight like a ruler, then drawn over the surface.

Leave a few days for the cast to set, then knock the frame away and leave the cast to season for a few days more. This is the basin.

For the pillar, first make up a skeleton frame (Fig. 2) of $4\frac{1}{2}$ in. sq. strips of wood with 3in. long pieces of lath nailed across. Let 3ins. of the bottom part of the sticks be free of the laths.

Take the boards used for making the mould of the basin, and re-nail the rim-pieces to it to make a square 12ins. each way, inside measurement. Oil this and fill up level with the concrete mixture, made up as before.

In the centre place the skeleton frame and build up the concrete round it to a height of 3ins. or level with the lowest laths. From there bevel it down to the rim as in Fig. 3. The levelling stick will come in handy again for this job as a smooth bevelled surface is very desirable. Leave to set for a few days, as before.

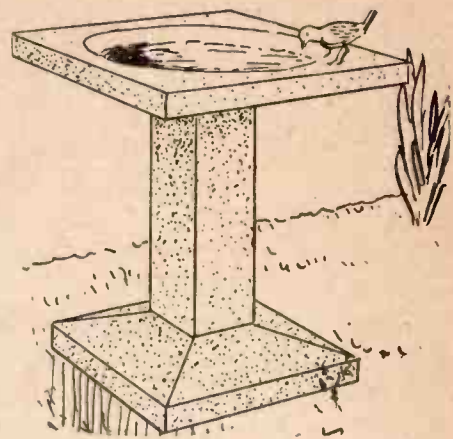
The Centre Pillar

When there is no fear of the skeleton frame moving, the concrete being hard enough, with the trowel press concrete on the laths until the whole framing is covered all sides to a thickness of $\frac{1}{2}$ in.

Work the stuff, as in Fig. 4, forcing it upwards against the laths, so as to press it well between them to form a key behind. When all sides are covered, lightly draw the point of the trowel across the surface in diagonal lines to form a roughened surface for the outer layer to stick to.

After a day or so, for the concrete to harden enough, apply a second and finishing coat of concrete, and trowel it off smooth.

The bottom board and frame rim pieces can now be knocked away,



leaving the base and pillar clean and ready for the basin to be cemented on top. Level the top of the pillar and cover with a $\frac{1}{2}$ in. thickness of concrete.

Fitting the Basin

On this lay the basin and see it is level, either by using a carpenter's level on a piece of board, placed across the basin, or by nearly filling the basin itself with water and testing by that—a near enough method in the circumstances. When right smooth off the concrete joint and let the whole stand for a few days more to season off.

For a day or two change the water in the basin several times before allowing the birds to use it, then fill up with fresh water and let the birds disport themselves as they wish.

A few crumbs can be placed on the ledge of the basin where there is just enough room for the birds to dine. The position of the basin is not important but it is a good plan to lay a few bricks down to form a kind of platform base for it to rest on.

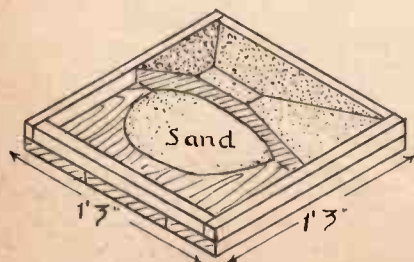


Fig. 1—Formation of basin

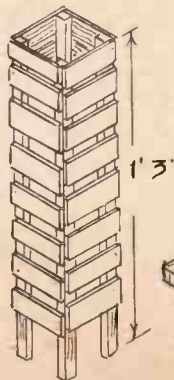


Fig. 2—Skeleton of column

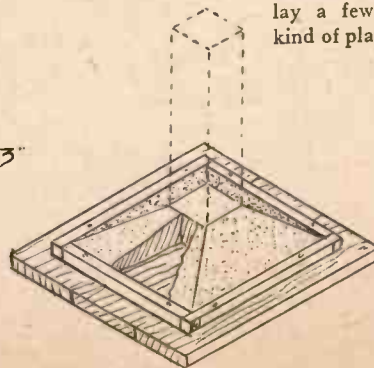


Fig. 3—Construction of base portion

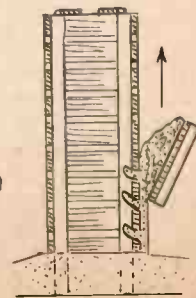


Fig. 4—Covering centre laths

Any youngster would love to have this PAIR OF STILTS



MOST youngsters enjoy using a pair of stilts, and get a great kick out of taking strides much longer than could normally be done, or wading through water or mud which would otherwise be impossible.

The making of the stilts does not call for a great deal of work, but the main point is to ensure suitable material is used and that strength is provided for the steps fixed on to the side.

Do not use deal, but if you can, get a nice piece of ash or elm. In any case, the wood must be strong and

not liable to snap in use. The actual height, of course, will vary according to the age and height of the user. Length may be 5ft. to 6ft. of 1½in. square stuff.

Handle Grip

Clean the whole of the post thoroughly with glasspaper to ensure that no shivers run into the hands when in use. You can round off the corners slightly or make a chamfer along the edges with a plane.

The top end, too, can be rounded down to make a comfortable grip, whilst the lower end can be slightly tapered towards the foot. This, however, should not be overdone. If you prefer, the whole pole can be made an octagonal shape which is quite comfortable for handling.

The Foot Rests

The foot rests must be of strong hard wood 4ins. by 3½ins. One corner is sawn off to a long angle, as shown in the diagram, or can, of course, be rounded nicely with a bow saw if you prefer. The thickness of this rest should be 1½ins. and a useful height for it to be is 18ins. from the ground.

This, however, depends on the length of the fellow who is going to

use the stilts. For an ordinary young boy, a height of 12 to 15ins. is sufficient.

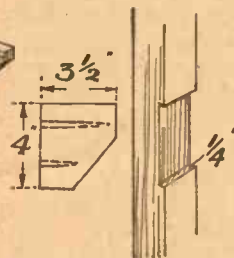
Great care must be taken to ensure that this foot rest is firmly fixed to the pole, and in addition to glue, long screws should be driven in through the pole into the rest. A hole for them must be bored first, taking care to get it in the centre of the thickness of the rest itself.

One long screw is driven in near the top of the foot rest, and the second one below it into the narrower portion. The position of these screws is roughly shown by the dotted lines in the diagram of the foot rest itself.

Shoulder Joint

If you wish, further strengthening can be given by providing a little recess cut into the pole itself. If this is ½in. deep, as shown in the diagram, it should be sufficient providing it makes a neat joint. If you cut it too deep you are apt to weaken the pole itself. Get the foot rest to fit very snugly into this slotted piece, and then glue and screw as before.

The complete stilts should be given a coat of creosote or some wood preservative which is preferable to paint. If you use a paint or varnish, it is apt to become sticky in use.



THERE'S ONLY ONE "PLASTICINE"

- ★ For A.R.P. this famous hygienic plastic material has many handy uses—sealing windows, cracks in walls, floorboards and skirting, pipe gaps and all crevices against entry of gas.
- ★ In the home generally you can use it for filling mouse-holes, nail-holes, fixing decorations, repairing roof-leaks, etc.
- ★ And in the garden "Plasticine" is useful for grafting fruit trees, shrubs, etc., protecting cut branches, smothering blight, training creepers, glazing greenhouses, frames, etc.

Limited quantities still available
from dealers only.



'FINISH is the true test of craftsmanship. It's easy to impart a real professional 'finish' to woodwork and furniture you make at home with "COLRON" WOOD DYE—the finest stain for all practical purposes.

One coat of "COLRON" is all that is required to emphasise the natural beauty of the wood grain. No smears—no 'overlaps'—no trouble! Leave from two to three hours, burnish with a rough dry cloth and you have a perfect base for french polishing or for waxing with "RONUK" FLOOR POLISH.

COLRON WOOD DYES

8 SHADES—ALL SIZES—8d. UPWARDS

Write for colour guide and full details to :

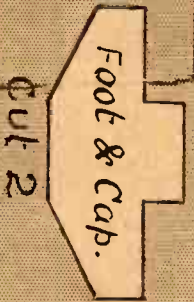
RONUK LTD. Dept. 62 Portslade, Sussex

String
Box

See page 53 for details

Cut 2

Top & bottom



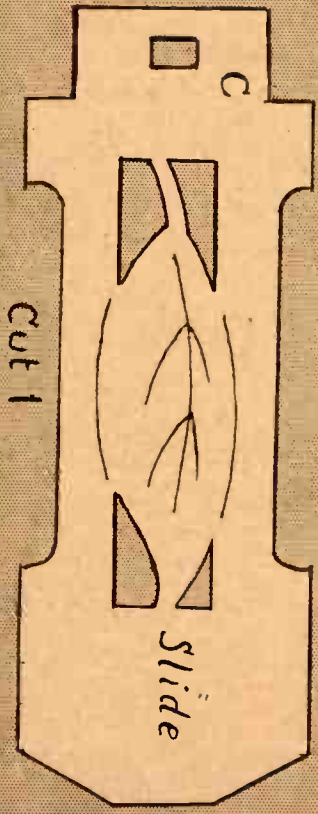
Wedge



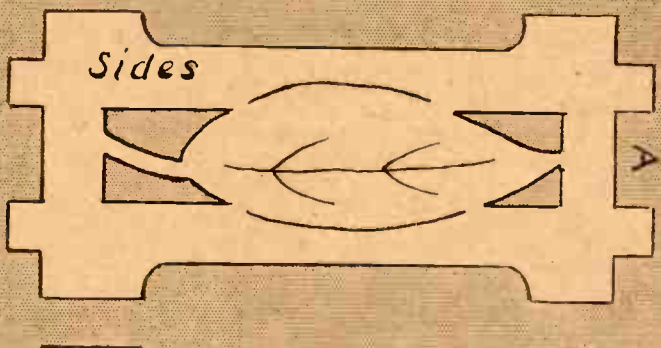
Cut 2

Feet.

Cut 2

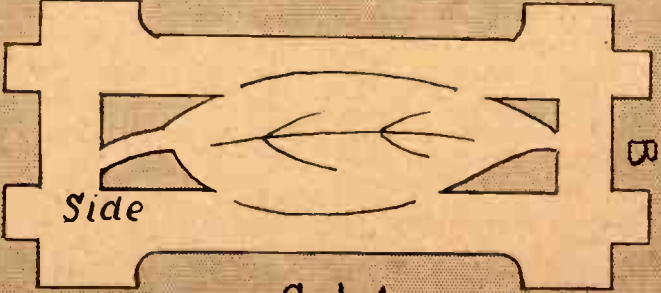


Sides



A

Side



B

Cut 1