

# HOBBIES WEEKLY

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JANUARY 5th 1955

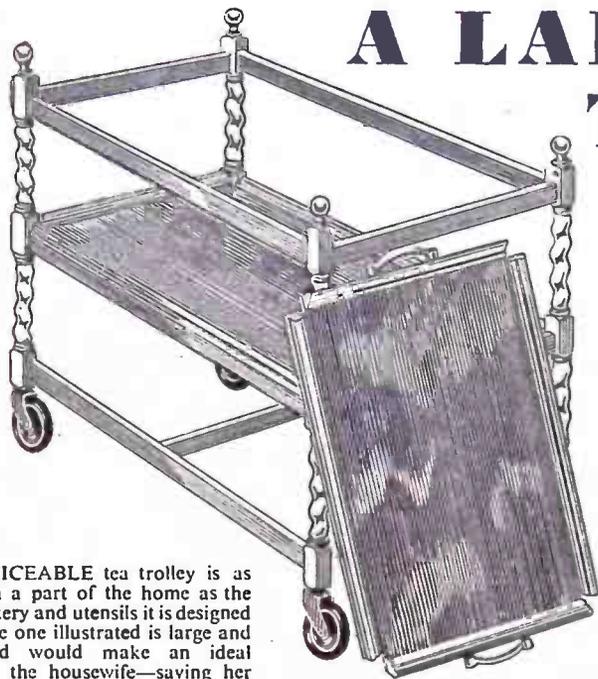
VOL. 119

NUMBER 3088

You can make it from our *FREE* Design Sheet—

## A LARGE TEA TROLLEY

With Detachable Tray



**A** SERVICEABLE tea trolley is as much a part of the home as the crockery and utensils it is designed to hold. The one illustrated is large and strong, and would make an ideal present for the housewife—saving her countless journeys from kitchen, to dining-room.

Running on 3in. castors, it is of solid construction, and, considering the ex-

tremely high quality of the materials, the price of the complete kit is reasonable.

The top tray is detachable, and can be used apart from the trolley if required, and the lower tray can be lifted sufficiently to facilitate easy cleaning.

### How to Start

Begin construction by preparing the legs. First, cut off the unwanted feet, and then set out the position of the holes to be drilled for the dowel joints. The drawing on the design sheet shows a complete leg (less the turned sections). On each of the square sections concerned, draw the positions of the rails as shown,  $\frac{1}{4}$ in. from the shoulder of the section. Then,  $\frac{1}{8}$ in. from the top and bottom edges of the resulting rectangle, mark the centres for the drill holes. The holes are  $\frac{3}{16}$ in. in diameter and should be drilled to a depth of  $\frac{3}{16}$ in. full.

The rectangles on the drawing are intended to show the position of the rails in the final assembly, and are not to be confused with tenons. The construction of the frame is dowel jointed throughout, and the worker will find

All correspondence should be addressed to The Editor, Hobbies Weekly, Dereham, Norfolk

For Modellers, Fretworkers  
and Home Craftsmen

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this method of construction not only straightforward, but also amply strong enough for the job. The only requisite is that the holes should be drilled quite straight, and provided this rule is observed, a firm and true frame will result.

Note that the top and centre square sections of each leg are drilled on two sides, whereas the bottom section has only one set of holes. Make sure that the holes to be drilled are set out correctly before actually commencing to drill.

Now prepare the rails. The lengths are shown on the design sheet, and the positions of the drill holes are again set out by marking the centres  $\frac{1}{4}$  in. from the top and bottom edges. Drill to a depth of  $\frac{1}{2}$  in. full.

The cross-rail (C) is prepared next, and is intended to be dowel jointed to the frame pieces (A). The rail is drilled  $\frac{1}{2}$  in. full and the pieces (A)  $\frac{1}{4}$  in. full. As an alternative, screws can be used to hold the crossbar, and if this method of construction is chosen, the screws should, of course, be countersunk.

Next make the trays. Each consists of a piece of  $\frac{1}{2}$  in. plywood cut to the size shown, with four pieces of No. 25 tray moulding screwed along the edges. The notches cut in the four corners of the tray bottoms are to allow the trays to

fit into the framework, and also provide an easy means of cleaning. Crumbs, etc., which accumulate in the trays can be brushed out of the corners quite easily when the trays are lifted.

Now cut and prepare 44 dowel pins. They are  $1\frac{1}{2}$  ins. long, and each one is chamfered at the ends and grooved along the side as shown on the design sheet. The groove allows trapped air to escape when the dowels are driven home, thus ensuring firm joints.

To assemble the frame, begin with one or other of the ends. Take two legs and two rails (B), coat the eight dowel

#### YOU CAN GET A KIT

For making this Tea Trolley you can get a Kit (No. 3088), containing all necessary wood, turned legs, rails, castors and tray handles, from any Hobbies branch, or post free from Hobbies Ltd., Dereham, Norfolk, price 72/6.

pins required with glue, and assemble the work quickly. Do not use a hammer to knock the pieces together, or the woodwork will be damaged. Use instead a wooden mallet, preferably with a piece of softwood held against the woodwork of the frame.

Repeat the procedure for the other end. Then put together the two lower

rails (A) and the crossbar (C). This done, the six rails (A) can be dowelled into one of the ends, making sure that the pair containing the crossbar are at the bottom.

Now, slide the lower tray into position in the middle of the framework, and dowel the other end on to the rails (A). It will be evident from these instructions that the centre tray, once in position, cannot be removed. It can be lifted, however, for cleaning, as described earlier.

When all the glue is set, turn the assembly upside down and drill the feet to receive the sleeves of the castors. The holes should be  $\frac{1}{4}$  in. diameter and be drilled to a depth of  $1\frac{1}{2}$  ins. Place the sleeves in position and hammer home firmly.

Before putting the castors themselves in position, or the handles on the top tray, the job should be suitably finished. Glasspaper thoroughly and generally clean up the work. We would suggest a finish of good spirit stain, followed by generous applications of wax polish. The colour of the stain will depend upon the finish of existing furniture in the home, and the taste of the individual.

When the finish is complete, screw the handles into position on the top tray, and tap the castors home into their respective sleeves. The job is then complete.

#### ABOUT ALABASTONE

## A Useful Modelling Material

MANY of our readers will be familiar with Alabastone, the material used for repairing damaged walls and woodwork, etc., and will be interested to learn that the manufacturers have now produced a useful modelling material.

Called Alabastone, it is a pale cream powder which, when mixed with water, becomes a paste not unlike clay. It can then be used in the same way as clay for approximately 30-45 minutes, after which it begins to set hard, finally becoming like stone. Alternatively the product can be mixed to a wetter consistency, and be painted on to any surface, and modelled or textured.

#### Seal with Varnish

A word of warning. Any porous surface to which this material is to be glued should be sealed to stop suction. If this is not done, the water will be rapidly drained from the Alabastone, preventing natural setting action and affecting the final hardness. The sealing may be done with thin varnish, and the sealer must be allowed to dry before the Alabastone is applied.

Provided the surface is reasonably non-porous, the material will adhere permanently without any preliminary sealing, and when thoroughly dried it can be painted with water-colours, poster



construction of a range of buildings and scenery, and the task is quite easy if the instructions are followed.

In the case of a building, first make a rough model to the desired shape, and if

thatched-roof cottage illustrated. For the roof, apply a thick layer of Alabastone and drag a small stiff brush from roof to eaves to provide the thatched effect. Now cut a criss-cross patterned stencil from thin card, hold this in position on the roof and paint thinned Alabastone over the stencil. Remove the stencil at once and the roof will then have an old-world decorated effect as shown. For the walls, simply paint all over with a thinner mixture and 'stab' with a brush to obtain a roughcast effect. Use the stencil technique to apply the timbers to the walls. Such a model, if painted in suitable colours, is quite effective.

#### Decorating Pottery

Another useful application for the material is the decoration of pottery. Here again, if the surface is a porous one (a flower-pot, for instance), seal it with a coat of thin varnish. Glass bottles, being non-porous, need no treatment.

Mix the Alabastone to a soft buttery consistency with cold water, and apply it to the pottery with a brush or by scraping it on with a knife. Pattern or 'texture' it by 'doodling' in it with the finger tips (Fig. 1), dabbing it with a sponge or piece of rag (Fig. 2) or combing it with a piece of celluloid or cardboard in which small saw teeth

● Continued on page 213

#### FOR INLAY ENTHUSIASTS

## Another Attractive Inlay Picture

HERE is another design which will be welcomed by all fretsaw inlay and marquetry lovers. The picture is shown full size on page 223 and can be cut in four basic colours—light, medium light, medium dark and dark—using a No. 1 set of inlay panels as supplied by Hobbies Ltd. at 3/6. These panels, which also allow for a border not shown on the design, measure  $10\frac{1}{2}$  ins. by  $7\frac{1}{2}$  ins.

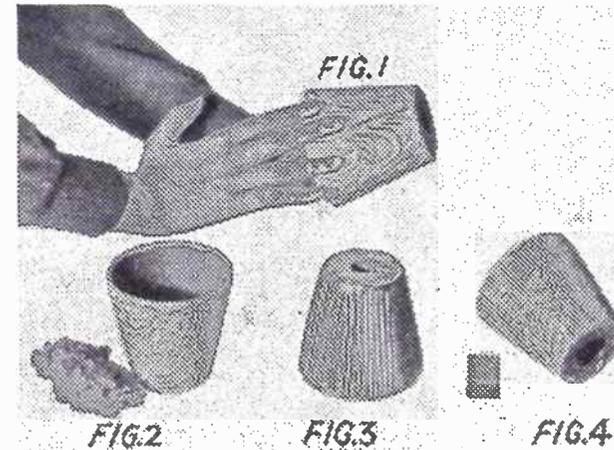
The picture could, of course, be carried out in knife-cut veneers, and in this case the reader could adapt the design to suit his own particular fancy, and incorporate a larger number of colours.

As enthusiasts will know, fretsaw inlay is a comparatively easy method of producing skilful inlay work, the only requisites being a fretsaw and some fine sawblades. The most important thing to remember is to keep the saw upright when cutting.

For the benefit of newcomers to inlay work, the Editor will be pleased to supply, free of charge, a copy of our comprehensive leaflet 'Making Pictures in Wood'. Please enclose a stamped addressed envelope. (M.p.)



A full-size pattern is on page 223

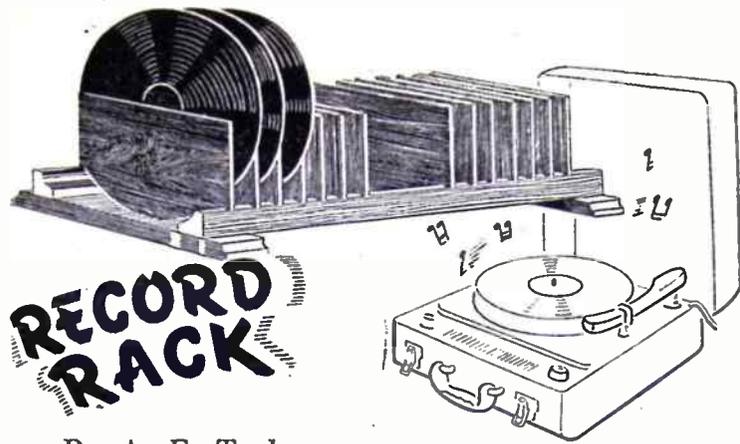


colours or ordinary household gloss paints or undercoats. The material will adhere quite well to glass.

For the modelmaker, the model railway layout enthusiast and others, this new material makes possible the

you have used wood, hardboard or cardboard, give the model a coat of sealer to stop suction. Cover the model with Alabastone, while still pliable, and model as required.

An example of such a building is the



# RECORD RACK

By A. F. Taylor

THE enjoyment of a gramophone programme can be greatly increased if the records have been arranged beforehand and are in the proper order for playing. Hunting among a pile of records and rustling the paper covers during the playing can be most annoying, not to mention the time that may be wasted.

The playing rack described on this page has been designed to hold a number of records out of their covers and all ready for putting on to the gramophone turntable. Besides being very useful for anyone giving a gramophone recital it also helps to keep the records in better condition.

### Two Sections

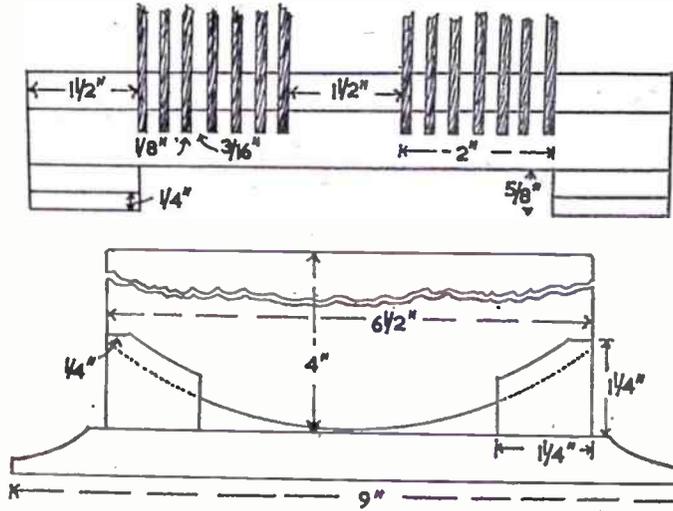
The rack is divided into two sections holding six records in each, while the centre space has compartments for new and used needles and a cleaning pad. When only a few records are needed they are placed in the first section and as they are played they are transferred to the next section. Should both sections be filled with records, they must, however, be returned to the same slots when finished with.

Although designed for 10in. records, the rack is capable of holding 8in., 10in. and 12in., either separately or as a mixed selection. It is a very simple matter to make the rack longer and insert more partitions if twelve is not thought sufficient.

Walnut, mahogany or a similar type of hardwood is suitable for the foundation of the rack, while the partitions are made of thin plywood. Cut two pieces of wood 8½ins. long and 1½ins. square for the main bars and these are planed to the shape shown in the drawing, leaving ½in. flat on top. The records will thus rest snugly on a wide surface instead of a sharp corner which might

tend to chip them if put down rather sharply.

The slots to take the plywood partitions are cut on these wide sides of the two bars to a depth of about ¼in. Each section will have seven slots ¼in. wide with a space of ¼in. between



them, the whole taking up just 2ins. The exact positions for them is clearly shown in the drawing.

A certain amount of care will be needed in cutting the slots on account of their closeness to each other. Use a fine-tooth saw with a light easy action so as not to break down the sides of the slots.

A piece of fine glasspaper folded over a steel rule will be about the correct thickness for cleaning out the slots and getting them to the correct size. It is very important to keep the saw perfectly upright and the same

applies to the cleaning up with glasspaper.

Now the two base strips can be cut and fitted to the ends of the slotted bars—make them 9ins. long, 1½ins. wide and ¼in. thick, and fix them with two screws in each end from the underside.

For the partitions fourteen pieces of nice ¼in. plywood 6½ins. long and 4ins. wide will be needed. These must be quite flat and smooth and the top edge and two sides of each should be well rounded with glasspaper, so that there is no roughness that will damage the records as they are put in and removed from the rack.

The ideal way to deal with this is to cover the sides and top of the partitions with velvet or thin felt lightly glued on. Ample room has been allowed for this. The two outside partitions in each section, however, will only need covering on one side.

Fix each partition firmly in its slot, using a minimum of glue and put a strip of wood the same thickness as the gap (¼in. or less if covered with velvet or felt) along the top and lightly clamp together while the glue is drying. This will keep all the pieces parallel and

## FOR THE HOME HANDYMAN

# An Improved Work-Table

THERE are frequent occasions when one feels a real need, if only temporary, for an extra little table or bench on which to do a particular job we are busy with at the time. In this respect, the work-table described in this article will be found extremely handy. It is easily made and can be set up or taken down in a few moments. As it is placed directly before the window pane, the maximum amount of light is possible—a point which hobbyists will appreciate.

The table top can be made quite simply from any suitable wood that one

down. There will, of course, be a similar bolt and nut at the other far corner of the board.

The second method of attachment will appeal to those who find the spoiling of the window ledge with the bolt hole an objection. In this method (Fig. 3), the bolt hole is avoided by having a projecting metal strip with a hole in the end for the bolt to pass through. The strip is fixed to the window ledge on the underside by a stout screw and washer. The screw is not driven home too tightly, as it must allow the metal strip to be turned back out of sight under the ledge, when the table is not in use. Incidentally, the board can still rest on the ledge when in use. In this case the bolt hole in the board will come further forward.

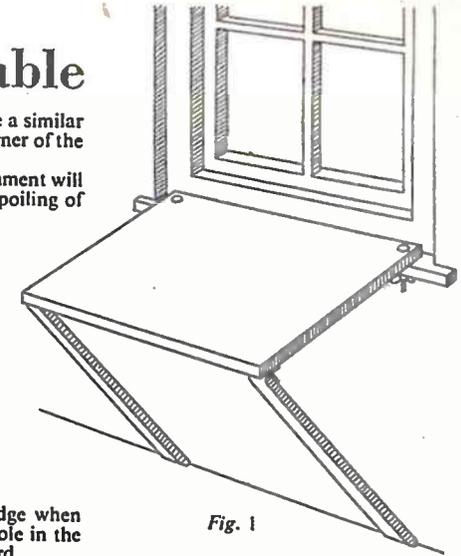


Fig. 1

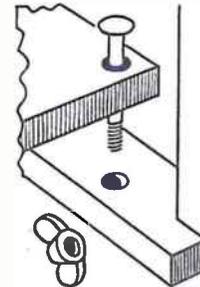


Fig. 2

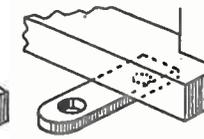


Fig. 3

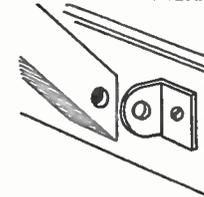


Fig. 6

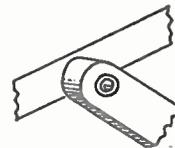


Fig. 4

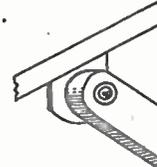


Fig. 5

has at hand. A few boards joined together at each end by battens will do fine. In the writer's case, a large drawing-board, Imperial size, was utilised, and was found to be ideal. The top of an old packing case or box might easily do, so it pays to look around and see what could be pressed into service.

The important thing is that the board which you use should fit nicely into the ledge of the window, for it is on this latter that the far edge of the table rests. This can be seen in the illustration (Fig. 1).

There are various ways in which the board can be fixed to the window ledge, but the two shown in the drawings are recommended. In the first method (Fig. 2) a hole is drilled right through the window ledge. This coincides with a hole in the table corner, thus allowing a bolt to hold the board to the ledge. A winged nut is advisable, as this can easily be undone when the table is taken

The front edge of the table top is supported quite simply by two struts. These are made from any odd batten or sparring you have about you.

These are fixed to the edge of the board by hinges, and when the table is not in use, the struts or legs fold back against the board, thus taking up a minimum of space. An alternative to the

hinges is to use a long screw driven into the side edge of the board, and use this for the strut to swivel upon (see Fig. 4). Or a bracket and nut and bolt can be used if the board is thin (see Fig. 5).

The bottoms of the struts rest in the junction of the wall and floor, and it is necessary to cut the struts the correct length to fit properly. This arrangement, without any fixing attachment, will be found to be quite adequate, but for those who prefer a more secure and dependable method, and have no objection to the shirting-board being interfered with, then the method shown in Fig. 6 is suggested. Here a metal bracket with a bolt hole in its projecting end is fixed by a screw to the skirting-board. A bolt through this and the end of the strut holds the table firmly. (A.F.)

● Continued from page 211

## Useful Modelling Material

have been cut (Figs. 3 and 4).

Flower-pots will be far more pleasant to live with after this treatment, especially if a final finish is given with a coat of gloss paint. Then again, such items as table lamps can be quickly and easily made from such beginnings as old bottles, clay milk coolers, wood oddments, etc., patterns being built up on them with the Alabastone.

Children, too, can derive much pleasure from this material by making simple models. A suitable project would be a model farm. All that is required is a suitable base such as a piece of hard-

board or wood on which a layer of Alabastone is spread about ¼in. thick. Into this is pressed a small mirror for a pond, and twigs to form trees and hedges. Sand can be sprinkled where required to form paths, and a few matchbox houses will complete the job when they have been covered with Alabastone.

The material is made by The Alabastine Company, of 18 Ashmole St., South Lambeth, S.W.18, who will be pleased to post a free booklet to any reader who cares to write and ask for one.

# Have You Tried Pattern Printing?

**P**ATTERN printing is a most gratifying occupation. Even to watch some one at work and to see the pattern grow is exciting. But to engage in it yourself is more enjoyable still. Moreover, it is a very cheap craft, and, what is even more important, it is one open to all. For, however poor you may be at pictorial drawing, this does not prevent you producing excellent work. The procedure is simple, and fine patterns can be made by anyone who has a mind to try it.

Usually, in pattern printing, special blocks are cut out in lino or wood, often involving a fair amount of skill. But in this article we seek to show that good patterns can be printed without these

The top of a Colgate's tooth-paste tube provides a flower-like motif. (This should be flattened off with a glasspaper block.)

Indeed, one could go on making an endless list of these things. The reader is advised to make a collection of all sorts of things, and then experiment with them, preferably on some scrap paper—even newspaper. The shapes should be combined together in various relationships. They will often make their own patterns, and the effects are sometimes quite surprising and unexpected, considering the simple units dealt with.

A few experiments will soon convince the reader that pattern design is not so difficult after all. Trying new arrange-

The bottom border form was originally a square sparring. A hole was bored in the end and then the wood was split in two with a knife. One of the pieces was printed alternately upside-down (Figs. 3 and 3a).

### Three-block Pattern

A simple pattern, and a kind the beginner might well start with, is seen in Fig. 4. It is made up of three blocks. The square with the white round in it is simply a square piece of wood with a hole bored centrally. The adjacent form consists of a print from a screw-cap (to give the circle), and a print within this from a square stick.

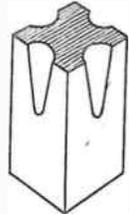


Fig. 1(a)

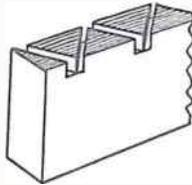


Fig. 2(a)

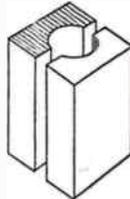


Fig. 3(a)

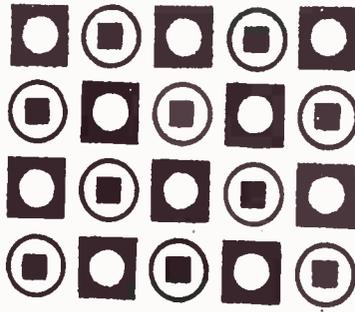


Fig. 4

ments will quickly become an exciting adventure of discovery.

Those readers with imagination will find that plenty of objects can be converted by a few slight alterations into much more intriguing shapes. And one should always speculate on the possibilities of a slight modification here and there. The interesting form in Fig. 1 is nothing more than the end of a piece of square spar with the sides filed or gouged out, as in the illustration (1a). In the centre a hole is drilled. The large dot in between the forms is printed from the sawn-off end of an old paint brush.

The border form of Fig. 2 is merely the edge of a piece of board sawn zigzag along its length.

specially-made blocks. It is suggested that there are all sorts of odds and ends lying around the house and workshop which can be utilised as ready-made blocks for printing straightaway quite often.

### The Pattern Blocks

The reader should try scouting round, and whatever his eyes light on, let him consider whether it could be used in a pattern. Go into the workshop and examine all the bits and pieces left over from woodworking. The end sections of sawn-off bits of sparring and moulding and so on are always full of possibilities. It will readily be seen that here are little blocks all practically ready to print. There will be squares, oblongs, lines from the spars, dots and round forms from dowel ends.

For circles of various sizes and thicknesses, tubing or piping may be used. But even better will be found the rims of plastic screw-caps off bottles and jars. For large circles, the lids off paint and other tin containers will be useful.

A brass hexagon-shaped nut may provide the foundation of a pattern. A piece of broken coarse file will give a broken, spattered effect, while the patterned corrugations on an old rubber hot-water bottle are often extremely useful. Embossed leather or fibre is also worth considering. Screw-caps of all kinds are always fruitful in possibilities.

the glasspaper block to give a better print (unless you deliberately intend a broken effect in the print).

### Printing

The reader is advised to practise printing on paper first, before tackling materials such as cotton, linen, etc. In either case, see that the paint can be 'taken' or absorbed to a satisfactory degree.

Cotton, etc., should first be washed and ironed out flat.

Place as many sheets of newspaper as possible on a drawing-board, to provide a soft pad that 'gives', and pin the paper or material down on this.

To help as a guide in keeping the pattern in line, a length of black cotton should be stretched from side to side by means of drawing pins. As each line of printing is finished, the cotton guide can be shifted further down for the next line.

Prints can be made with ink, water-colour, poster colour and oil-paint. For printing on materials the special fabric-printing colours made by colour manufacturers are best, as they resist normal washing. (Printing with aniline dyes is

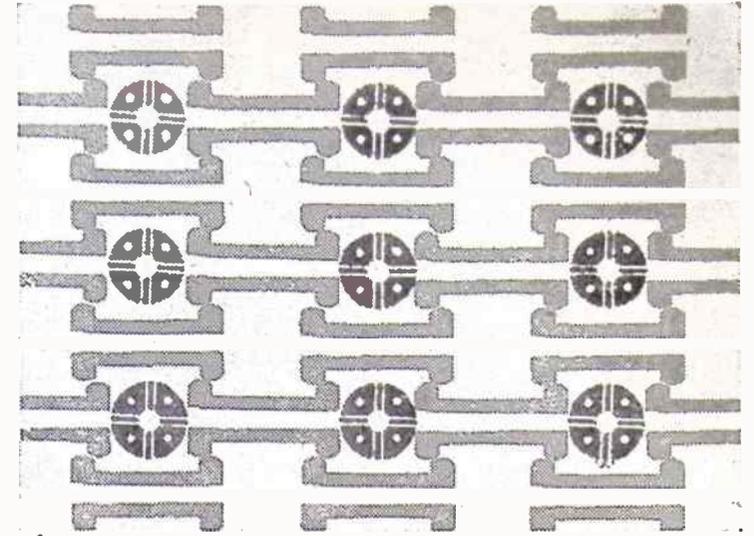


Fig. 5

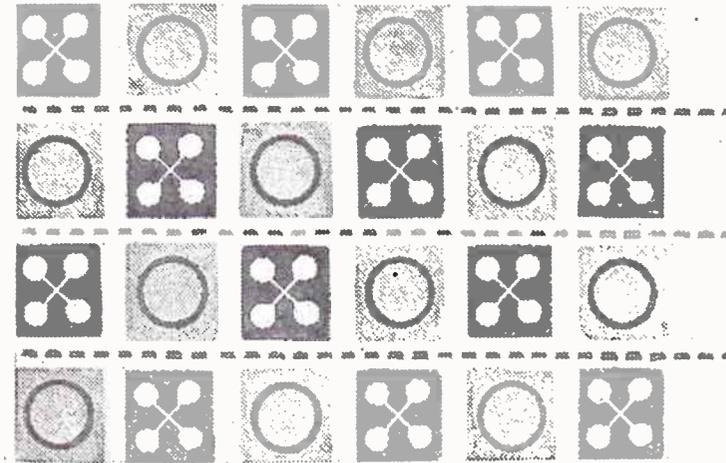


Fig. 6

not within the scope of this article.)

The best way to charge the blocks or sticks with pigment is to use felt pads (or flannel) to hold the paint. These pads are placed on glass or tiles, and the paint spread over them and allowed to soak in. The sticks are then pressed into the pads to charge them and so printing can be started on the material.

The paint should not be too liquid or too stiff, nor should the stick be either too lightly or too heavily charged. Experiment will soon show the correct conditions.

There should be a separate pad for each colour, and print only one colour at a time. The block or stick will need to

be cleaned at intervals, as it is likely to get clogged up. A hog-hair brush is useful for this.

It is usually best to print the lighter colours first, as if there is any overlapping, the effect of dark over light is permissible, whereas the reverse is most unsatisfactory.

### Experiment First

The subject of colour and tone has not been touched on, but it is, obviously, one of major importance. Designs seen in monochrome can become transformed in colour. Variety in tone and colour should be studied, and trying out different colourings can be a most

beneficial pastime, and is recommended before finally choosing the colour scheme for the actual printing on the material.

When printing is finished, and all is dry, the material can be ironed lightly from both sides, to give it 'finish'. Sometimes pressing with a damp cloth and iron is used to steam-fix the colours. (A.F.)

## Title Strips



The title strips illustrated here are made by Samuel Jones & Co. Ltd., of Camberwell, S.E.15. Their use will give photographs added distinction in their place in the photograph album.

By R. H. Warring

# DOPING AND FINISHING MODEL AIRCRAFT

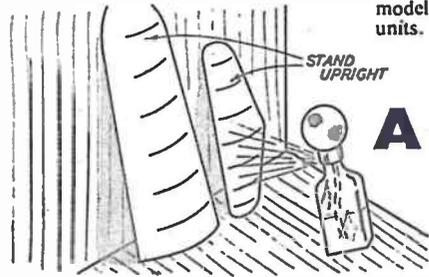
**M**OST model aircraft are covered with tissue paper. In an untreated state, this covering material is too soft to handle without damage and is especially weak if it gets wet. Hence the need for 'proofing' or doping. Normal practice is to clear-dope the surfaces on free flight models, as the use of colour dopes would add too much

## AIRCRAFT

are then applied to waterproof the covering and retain tautness. After doping, too, the tissue is much stronger. Definitely the best way to apply water is by spraying. Any simple form of spray or atomiser will do and most model shops sell suitable hand-spray units. Components to be water-sprayed

until the covering is completely dry. If you want to be absolutely sure that the components will not stick down to the board, rub over the surface of the board with a candle first.

Spraying is also the best means of applying dope, but small cheap sprays do not always give good results. Brush application is good enough for most purposes. Use a wide flat brush of the softest kind available. Spend a few shillings on a good brush—it will pay in

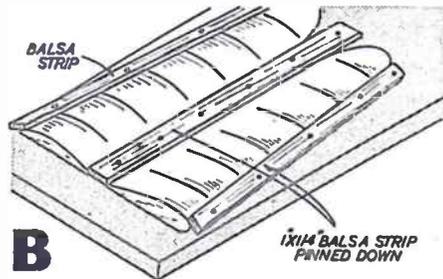


weight. If a coloured model is required, then coloured tissue is used in the first place. Instead of clear dope, very thin colour dope can be used in such cases. Use the same colour as the tissue and mix in the proportion of one part colour dope to four parts clear dope. Then dilute the whole mixture with an equal amount of thinners.

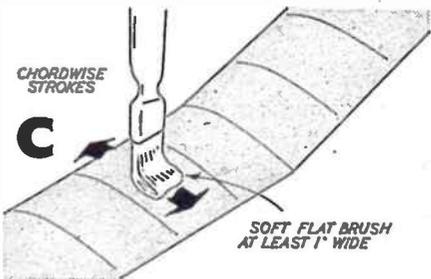
should be stood up against a wall in a near-vertical position and sprayed from a distance of about 12ins. (A). Just enough water thoroughly to saturate the tissue is enough.

Since tissue tightens considerably when drying after water-spraying, wings

the long run. If hairs show signs of coming out, clamp the ferrule of the brush in a vice to tighten. Then, provided you wash out the brush thoroughly in thinners each time it will last indefinitely and never drop hairs on the work.



**B**



**C**

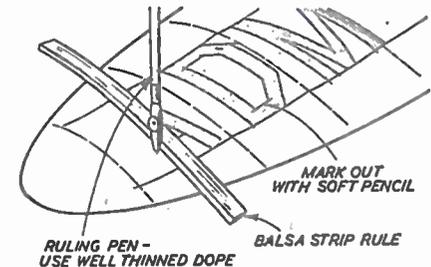
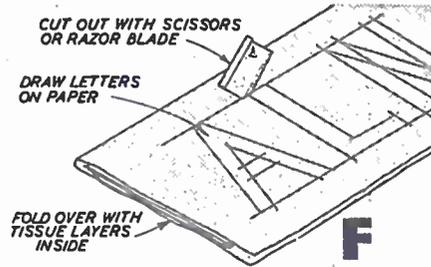
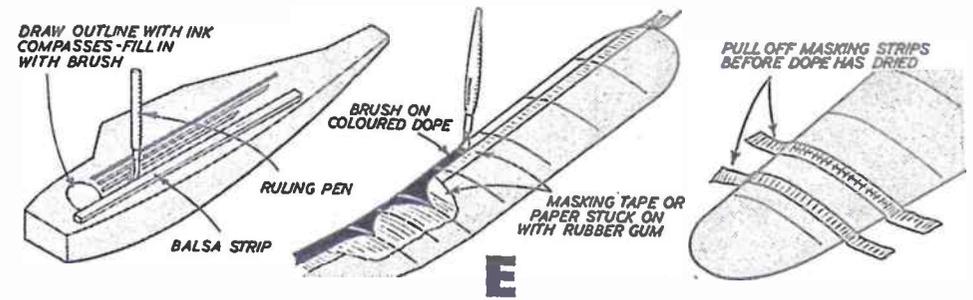
Tissue covering needs to be taut before doping. It is normally applied reasonably tight, but it is impractical to draw covering up really taut at this stage. Nor is it necessary to do so. Covering should be applied fairly tight and free from wrinkles. It is more important to get the tissue on without wrinkles than it is to have it tight.

Dope alone cannot be relied upon to pull up slack tissue covering. Hence all tissue coverings are treated with water before doping. When dry, wetted tissue pulls up really taut. Coatings of dope

and tailplanes should be pinned out flat on a drawing board to prevent warping. Wait until the covering appears reasonably dry, but not taut, before you pin out the components. Otherwise you may find that the tissue will tend to stick down to the board.

Pliers, large files and similar heavy objects are quite useful for holding wings and tailplanes flat whilst drying, but the best plan is to use strips of large section balsa pinned down to the board (B). Make sure that these strips cannot spring up and do not remove

Two coats of clear dope are usually adequate for wings and tail surfaces. You can use three or four coats on stout wings, less on flimsy surfaces. Much will depend on the construction. One coat of dope will *not* waterproof. Two will provide 'fair weather' proofing. Three should prevent tissue slackening in damp weather. Clear dope should be mixed with an equal amount of thinners before application. Brushing is then done chordwise over wings and tail surfaces—and from end to end on fuselage (C).



When you have to dope large surfaces, using a brush takes a long time. In such cases dope can be applied with a cotton wool swab—either a lump of cotton wool held in the fingers, or in the form of a swab wrapped in gauze. Simply dip the swab into the dope and wipe over the covering (D). Take care not to let pieces of cotton wool rub off and stick to the covering. Remove these before the dope has had a chance to dry.

Tricky part is where two layers of covering are close together. These may sag after doping and stick together. If this happens, let the dope dry slightly, then pull the covering apart, lifting one layer with a needle or pin, if necessary. If not noticed until the dope has dried, soak the areas affected in thinners and repeat the above process.

### Use Ruling Pen

Colour dope is used sparingly, on account of its weight. A certain amount of colour trim can be used. Decorative designs on a fuselage, for example, can be outlined with a ruling pen and ink compasses, using thinned coloured dope to 'run'. Then fill in the pattern with a brush. Locate the design so that the centres of circles come on a spacer or similar part of the structure to provide an anchorage for the compass point.

Masking tape and masking strips make lining easy on wings, etc. (E). Stock masking tape can be used, or you can make your own by cutting patterns from thin paper and sticking in place with a rubber gum, like *Cow*. This adhesive has the property of sticking well, but never dries out. The masking

strips can easily be peeled off after use and surplus gum can be rubbed off with a finger. For best results, always remove masking strips before the dope has quite set.

### Lettering

The simplest method of adding lettering to a model is to use transfers. Alternatively you can cut letters out of coloured tissue and dope in place. Draw out the required letters on a sheet of paper and fold in half. Insert a number of sheets of tissue between the fold—depending on the number of letters required—and then cut out the letters to the drawn outline (F). You can use scissors for this, but some of the letters may get distorted if you allow the paper to bend. A razor blade makes a neater job of it, cutting over a suitable flat surface. The blade must be sharp to avoid tearing the tissue.

Anyone handy with a ruling pen can letter directly on to the model. This is rather difficult, especially on curved surfaces, but a little practice will soon give good results.

Mark out the lettering first, between guide lines, with a very soft pencil. Outlines are then ruled in with a ruling pen and coloured dope, going over lines twice if they appear too faint. Thin down the dope for running, so that it 'runs' nicely, but is not so thin that it spreads and gives an uneven line. Also be prepared to clean the pen at very regular intervals.

A strip of balsa can be used as a straight-edge (G). A thin flat strip will also bend around curves quite readily.

After outlining, fill in the body of each letter with a brush. Take care not to brush outside the ruled outlines, as it is very difficult, or even impossible, to remove coloured dope from tissue covering. Scratching with a razor blade is probably as effective as anything.

Finally you may want to give your completed model a coat of fuel-proofer. Strictly speaking this is only necessary on power models using a glow plug engine. Exhaust waste from such an engine softens and attacks doped finishes. Fuel proofer can be used on diesel-powered models as an additional safeguard. It is not required on rubber models or gliders, however.

## £100 CONTEST

There is still plenty of time to prepare your entry for Hobbies £100 Fretwork Competition. Full details appeared in the Sept. 1st issue last year, but if you missed your copy you can still get one by sending 5d. to the Editor. The subject of the competition is a simple trinket box that anyone can make. Don't miss your opportunity to win a grand prize.

# This Games Table will be Useful



Fig. 1

middle of the legs, as indicated by the dotted lines in Fig. 6, and as seen again in Fig. 3. It will be seen that the mortises are cut from the two inside faces of the legs. After the joints are cut they should be fitted together to see that the joints are true before finally gluing up.

The lower leg rails (B) are 1in. wide by 1/2in. thick, and they are framed diagonally as Fig. 1 shows. A flat bearing, 1in. long by 1/2in. wide, is cut in the inner edge of each leg, 9ins. up

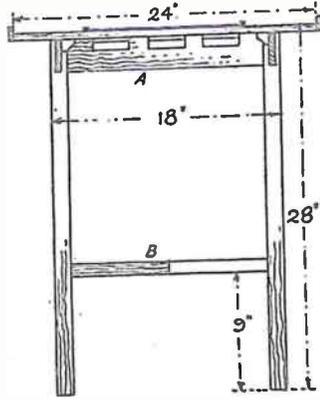


Fig. 2

from the floor end, and a mortise 1in. long by 1/2in. wide is cut in the middle of each end. (See Fig. 4.) Small tenons are formed at each end of the rails to fit the leg mortises. The rails are half-lapped in the middle as shown in Fig. 5, before

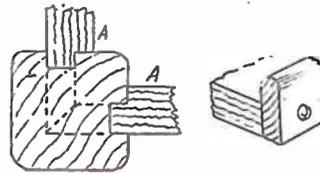


Fig. 3

Fig. 4

they are fitted and fixed into the legs. All joints are glued up.

### The Top

The table top is 24ins. square and 1/2in. thick. It is doubtful if deal could be obtained in one width, in which case two or more pieces may be grooved and tongued together. It may be possible to obtain a piece of stout plywood 24ins. square which would do quite well and simplify the matter of jointing. Small wood fillets, about 1in. by 1/2in., 1/2in. in section, are mitred and screwed round the edges of the top. (See Fig. 7.)

The playing board is 12ins. square, and consists of thirty-two dark squares and the same number of white squares laid alternately as the sketch shows. The squares of wood may be cut and arranged as shown in Fig. 8, four white strips of wood and four black strips, each 1 1/2ins. wide and 1/2in. thick, being first cut and arranged as Fig. 8 shows. On the panel thus formed, draw lines across at 1 1/2in. intervals and cut along with a fine fretsaw. Every other strip

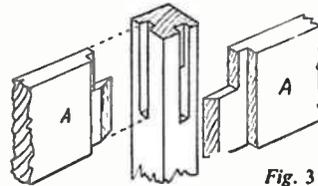


Fig. 5

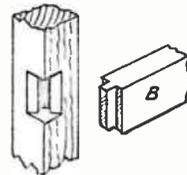


Fig. 6

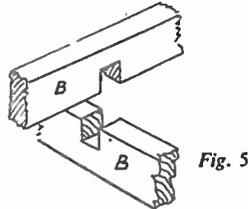


Fig. 7

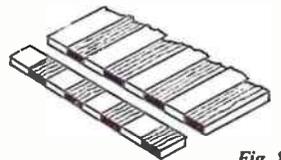


Fig. 8

portion may now be reversed to form the chequered design as the playing board. All the strips are glued to the table top and weighted down until the glue has hardened.

The sides of the finished panel can have a mitred edging of wood about 1/2in. by 1/2in. in section, glued and pinned through to the table top. The completed top is fixed to the leg rails by angle blocks as seen in Fig. 2. (S.W.C.)

HERE is an easily made games table, and when it is not required for that purpose, the top may be covered with a suitable cloth or cover, when it will serve as a useful occasional table.

If expense is to be considered, then plain deal stained and varnished may be used, but oak or mahogany would be more attractive. Our sketch, Fig. 1, shows the completed table.

It will be seen from the sectional diagram, Fig. 2, that the actual playing board is added as a separate unit and glued centrally to the table top. The illustrations included here will make the construction clear. Fig. 2 is a sectional view through the table showing how the side rails stand in relation to the top, and how the latter is glue-blocked to them. Figs. 3, 4 and 5 give details of the joints used in framing the legs and the cross-rails together. Fig. 6 gives a plan on top of one of the legs after the rails have been framed in and glued, while Fig. 7 shows how the edging strips are added round the table top. Fig. 8 will help when it comes to the making of the playing board.

### Round Off Corners

The legs are 27ins. long by 1 1/2ins. square in section and all the sharp corners should be rounded off as seen in Fig. 6. The leg rails (B) which connect the legs at the top are each about 17 1/2ins. long by 2 1/2ins. deep and 1/2in. thick. These are framed into the legs by mortise and tenon joints as at Fig. 3. These joints are known as bare-face mortise and tenon joints, the tenons being kept level with the outer faces of the rails and the ends being cut to an angle of 45 degrees to meet in the

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## REPLIES OF INTEREST

### Paint Query

I HAVE painted my fireplace with Icream Brolac and have mottled it with brown graining paint, and then clear varnished it. But round the edges of the fire it has gone dark brown and is getting darker. Can you advise me of a paint that will not go dark? (D.A.—Sheffield).

YOU should try mixing your colours with stoving varnish, thinning down as necessary with linseed oil, best quality, and turpentine. This may stand the heat without discolouring, but it would, in our opinion, be better to cover the already discoloured part of your paint with aluminium paint, making it a border round the opening. It would not look unsightly and would not turn brown.

### Restoring Polish on Ebony

HOW can I repolish a pair of ebony carved elephants? I recently washed them in hot soapy water, which resulted in them losing their polished surface. (D.L.—Fakenham).

PROBABLY the best way to restore the polish on the ebony elephants will be first to rub and brush away any traces of dust or grease on the surfaces. Then rub thoroughly with a damp cloth to remove any traces of the soapy residue left from the washing. Allow to dry thoroughly, then with a linen (non-fluffy material) rag dipped in linseed oil, well rub the surfaces. This should somewhat restore the original colour.

Allow a day or so to pass, with the objects covered and out of the dust, so that the oil can penetrate and dry off. Then with some good french polish applied sparingly on a linen pad, work over the whole surface and if need be use a small brush to apply the polish to any incised parts of the carving. There is a certain amount of knack in polishing, but if you take time, apply the polish lightly and sparingly, with a brisk circular motion, so far as the object will allow, a glaze or polish will build up. If the polish works up 'sticky', add a few drops of linseed oil to the pad. For the final polish, use very little of the polish, rub very lightly and add a few drops of methylated spirit to the pad, and rub very lightly indeed, just like a fine 'dusting' or wiping. The resulting polish will be permanent, but can be enhanced by brisk rubbing with a clean dry cloth (non-fluffy material).

### Cutting Tiles

ARE there any special tools for cutting tiles? I have tried a glass cutter but without success. (R.B.—Gateshead).

THERE are no special tools for cutting tiles; the professional tiler sometimes uses a broad chisel known as a bricklayer's bolster, but the usual method of cutting is to grasp the tile in both hands and bring it down sharply on to the edge of a straight block of wood or the like. WHEN done properly, the

tile breaks cleanly and straight. One method for the amateur is to chip the surface with a sharp cold chisel and then break off as above. Tiles can also be sawn with a sharp hacksaw as used for metal work, keeping the saw well lubricated with cold water.

### Use Cobalt Chloride

I WOULD like to make some novelty weather cabins from plaster and wish to know the name of the chemical which is painted on the doors and steps which change colour with the weather. (E.T.—Kidderminster).

YOU do not mention the colour change but we expect you will mean blue in dry air and pink in moist air. This is effected with cobalt chloride solution. The strength of solution is flexible, but an average would be one ounce of cobalt chloride dissolved in four fluid ounces of water.

### Various Methods

HOW can I prevent glass from steaming up? (G.R.—Woodford Green).

THERE are various methods of preventing glass from steaming over. One is to wipe with a glycerine-dampened rag; another, to wipe the glass with the soaped finger, followed by wiping with a cloth when dry. Proprietaries usually consist of a coconut oil potash soap or an olein potash soap combined with glycerine and turpentine. One such is made by thoroughly mixing:

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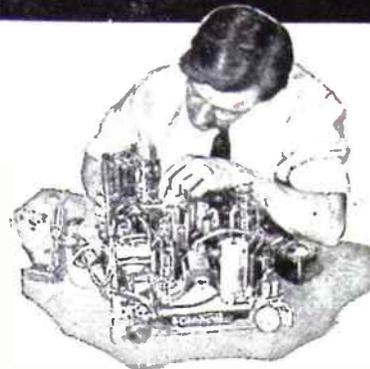
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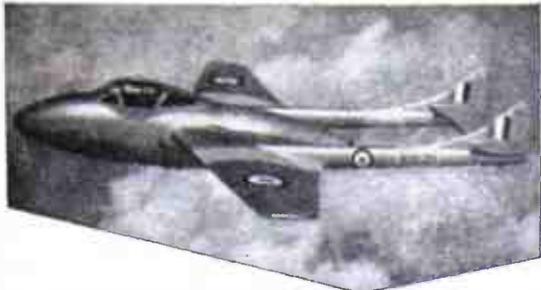
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- a ceiling height of
- 44,000 feet to the de
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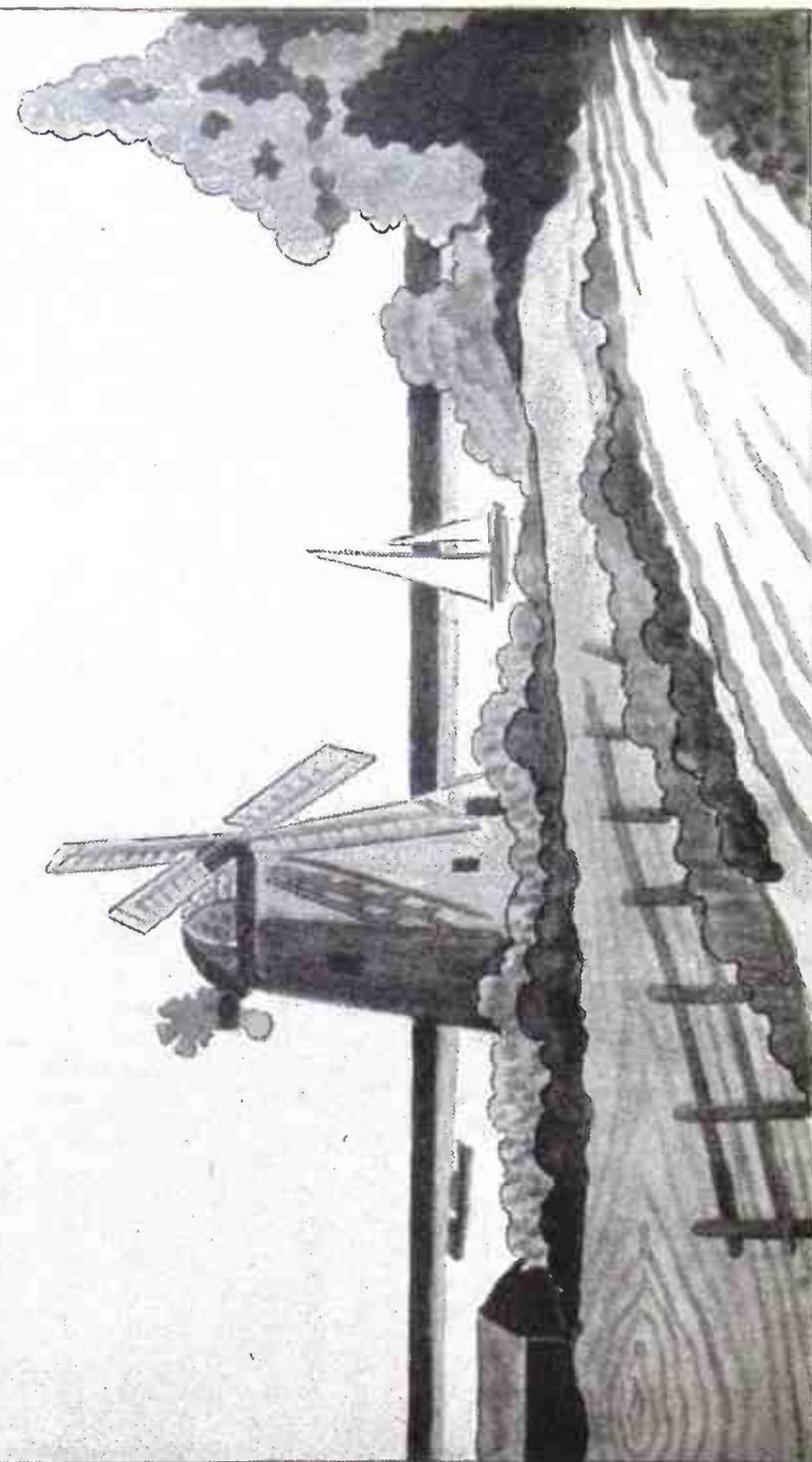
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Pattern for the Inlay Picture (see page 210)

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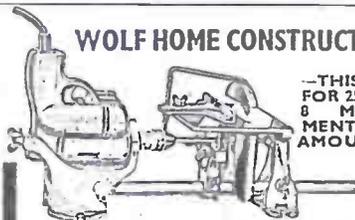
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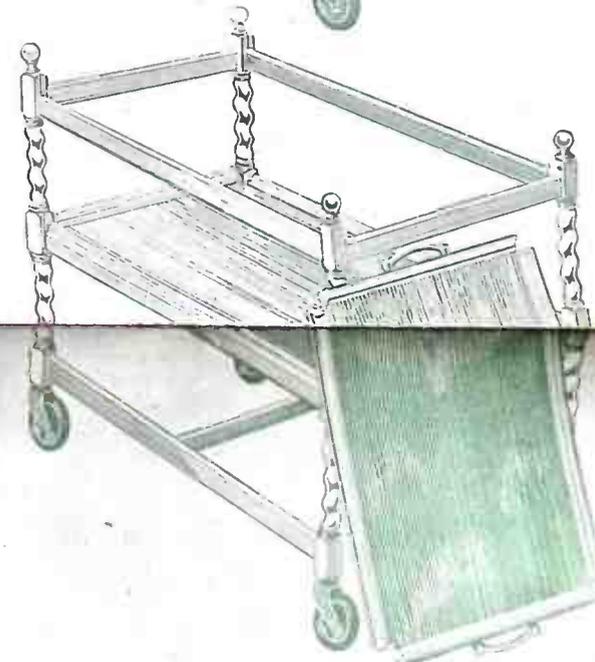
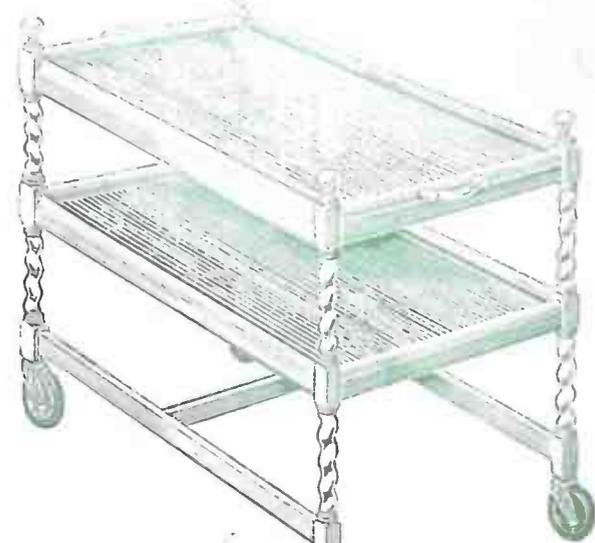
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Wolf 4" Electric Drill (built-in T.V. suppressor) ...	£5 19 6	or 14/8	and 14/8
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Drill Stand ...	£3 4 6	.. 7/11	.. 7/11
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No. 2 Drill Stand Pillar ...	6 6	.. 5/6	.. 5/6
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No. 5 Saw Set	£2 19 6	.. 9/5	.. 9/5
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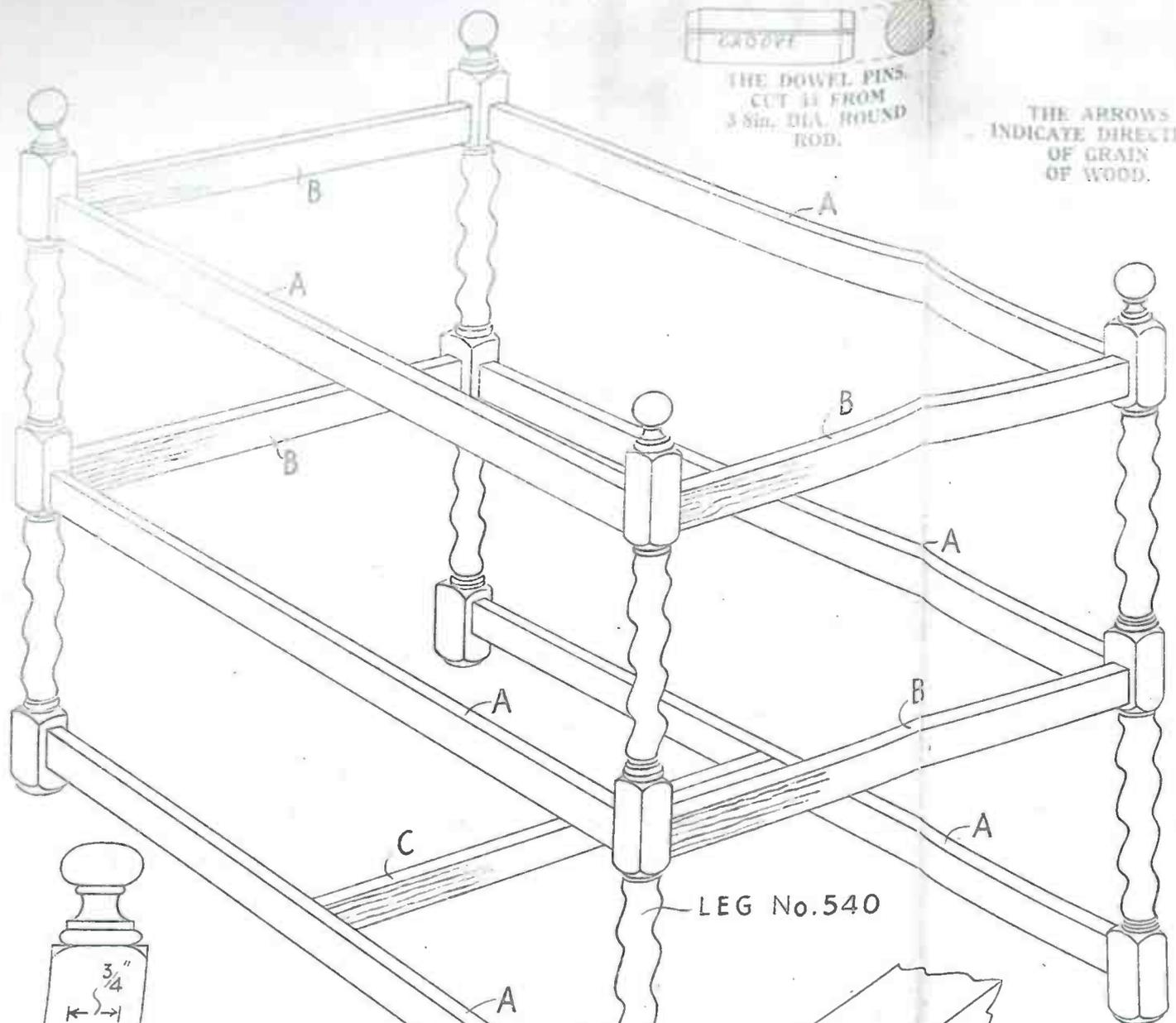
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**A LARGE SERVICEABLE  
TEA TROLLEY  
WITH DETACHABLE TRAY**

SIZE:  
23ins.  
BY  
17 1/2ins.  
BY  
2ft. 6 1/2ins.  
HIGH.

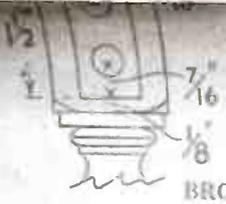
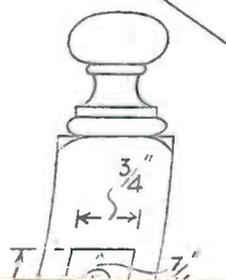


SHOWING TROLLEY WITH TRAY REMOVED.

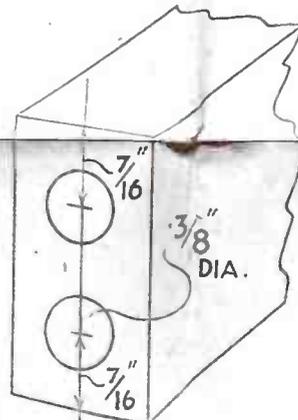


THE DOWEL PINS CUT 1/2 FROM 3/8in. DIA. ROUND ROD.

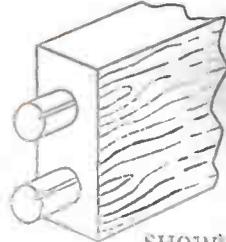
THE ARROWS INDICATE DIRECTION OF GRAIN OF WOOD.



BROKEN AWAY DRAWING SHOWING HOW TO MARK THE POSITIONS OF THE RAILS.

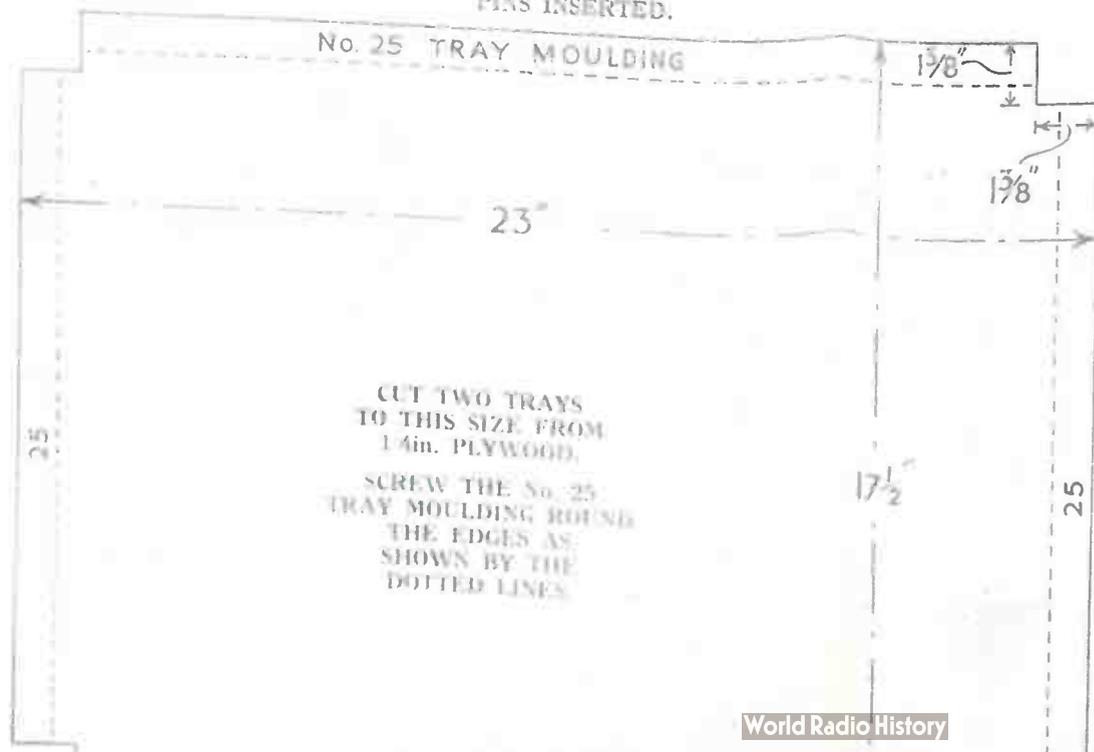


DETAIL SHOWING HOW TO MARK OUT THE ENDS OF THE RAILS FOR THE DOWEL PINS.



SHOWING DOWEL PINS INSERTED.

NOTE—This design sheet is only presented free with the current issue of Hobbies and not with back numbers. Further copies may be obtained.



CUT TWO TRAYS TO THIS SIZE FROM 1/4in. PLYWOOD. SCREW THE No. 25 TRAY MOULDING ROUND THE EDGES AS SHOWN BY THE DOTTED LINES.

LENGTHS OF RAILS (ALL CUT FROM 1 1/2in. by 1/2in. MATERIAL).  
A—20 1/2ins. SIX REQUIRED.  
B—14 1/2ins. FOUR REQUIRED.  
C—15 1/2ins. (SCANT). ONE REQUIRED.

**A KIT IS SUPPLIED**

Materials for making this design are supplied by HOBBIES LIMITED, Dereham, Norfolk.

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