

29th NOVEMBER 1961

VOL. 133

NUMBER 3442

THE ORIGINAL
'DO-IT-YOURSELF'
MAGAZINE

HOBBIES *weekly*

FOR ALL
HOME CRAFTSMEN

Also in this issue:

ONE TRANSISTOR
MORSE OSCILLATOR

COLLECTOR'S CLUB
CIGARETTE CARDS

RAILWAY MODELLING

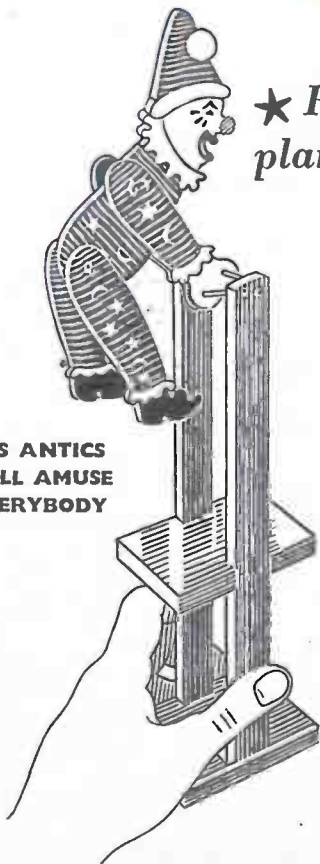
WORKING PROJECTS
IN LEATHER

CHRISTMAS CARDS
AND DECORATIONS

GARDENING HINTS

PIETSAW PLAN

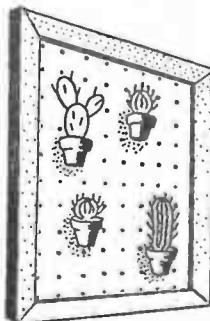
ETC. ETC.



**HIS ANTICS
WILL AMUSE
EVERYBODY**

★ **FREE**
plan for making

THE JUMPING CLOWN



**FOR OLD
PICTURE
FRAMES**



Up-to-the-minute ideas

Practical designs

Pleasing and profitable things to make

5^p



THERE were four sets of 50 in the series 'Do you know' issued by W. D. & H. O. Wills in 1922 (7s. 6d.), 1924 (5s.), 1926 (6s.), and 1933 (5s.). The illustrations show some of the most interesting cards.

CARDS IN CIRCULATION DO YOU KNOW?

Do you know why birds' eggs vary in colour and shape? (Card 8). The protective colouration of birds' eggs is determined to a great extent by their natural surroundings. The eggs of the plover are mottled, and so closely do they resemble the ground on which they are laid that it is most difficult to find them. The dark-hued eggs of the marsh-dwelling birds perfectly match their dark and damp surroundings. The tapering shape of the guillemot's egg makes it less liable to roll or be blown off the ledge of rock on which it is laid.

Do you know why coachmen and grooms wear cockades? (Card 11). The cockade was originally a knot of ribbons, worn as a badge. It developed from the button and loop, which 'cocked' up at the side of the broad-brimmed hats of that period. It afterwards became a political badge.

Do you know why we have Easter eggs and hot cross buns? (Card 14). Eggs were regarded by the Ancient Egyptians as emblems of creation, and were adopted in later years by the early Christians at the Easter festival, as symbols of the idea of the Resurrection. The buns now associated with Good Friday are traceable to a very remote period. The Egyptians, Greeks, and Romans offered marked cakes to their gods. The pagan Saxons ate cross-bread in honour of their goddess of Spring, Eostre, from which Easter is derived. The early Christian Church followed the practice, and marked their cakes or buns with the symbol of the cross, to commemorate the Crucifixion.

Do you know why the glow-worm glows? (Card 21). The glow-worm is not

a worm, but a beetle. The bright light is produced by the full-grown, wingless female. The luminous organs consist of cells, grouped into paired masses in the ventral region, containing a substance that is thought to undergo oxidation. The illumination is under the control of the insect's nervous system, and can be suspended at will. The light serves to attract the attention of the flying male. The male is about $\frac{1}{2}$ in., and the female about $\frac{3}{4}$ in. long.

What causes knots and grain in wood? (Card 24). For every year that a tree grows a layer of new wood is added immediately under the bark. These layers form the 'rings' which we see when the trunk is cut across, and the age of the tree can be ascertained by counting the rings. When the trunk is cut lengthwise the rings appear as wavy lines, and these cause the 'grain' in the wood. The rings vary a good deal in thickness, the widest part being usually on the south side. Wherever branches grow out from the trunk, sections of these form the well-known hard 'knots' that are found in timber.

Some of the more familiar motor signs are depicted on Card 29.

You'll find this series of great interest.

QATAR SERIES

A NEW series of stamps, which will replace the specially overprinted British stamps at present used at the British Postal Agency in Qatar, was placed on sale there on 2nd September.



This series is the third of the new issues of stamps which, as announced in November, 1958, are to be introduced in the British Postal Agencies.

The new series consists of eleven denominations. There are five designs, two for the four stamps with values in rupees and three for the seven stamps with values in naye paise.

WORKING IN LEATHER

ALMOST everyone likes the appearance, handling qualities, and often the characteristic scent, of personal and household articles made from leather. Although leather is not particularly expensive to buy as a raw material, the cost of making up to a reasonable standard, together with the addition of purchase tax, renders the finished products fairly dear.

So, if relatively simple leather goods are wanted, it pays to make them yourself and to your own specifications. Similarly, repairs carried out, in good time, to existing items will prolong their lives.

Leather is generally sold a complete skin at a time, the price depending upon the type of leather, the size and regularity of shape of the skin, and its consistency of thickness. Often, a comparatively inferior leather is surface-finished to represent a better material.

almost limitless. Remember that you do not need to use leather of the same kind or colour, particularly if it is fairly expensive, for internal parts of an item which are likely to be hidden all the time or, at any rate, for most of it. Offcuts of any leather, or parts of a cheaper skin, will serve just as well.

By A. E. Bensusan

For linings, where they are desirable for use in wallets, purses and similar articles, you can use either an imitation silk fabric or a very thin leather known as 'skiver'. Fabric is seldom satisfactory when stuck to the base leather; it is best just caught in with the edge stitching. On the other hand, skiver can be stuck down

purse, and the divider, are coated with latex adhesive and the latter is lowered into place, as shown in Fig. 1, and dried under pressure. The edges of the other side of the divider, and the purse, are then coated. The side of the purse is folded up and placed under pressure. The purpose of this operation is simply to hold the parts together while they are being sewn.

You can use a marking wheel to space out the stitches around the edges, or it can be done quite well by eye alone. The sewing lines should be at least $\frac{1}{8}$ in. from the edges of the leather, and the stitches the same distance apart. Perforate these holes, right through, with a fine awl.

Slip a stout needle on each end of a good length of heavy thread of the appropriate colour, and stab the trailing ends of the thread with the needles. Draw the needles tight, and each will be

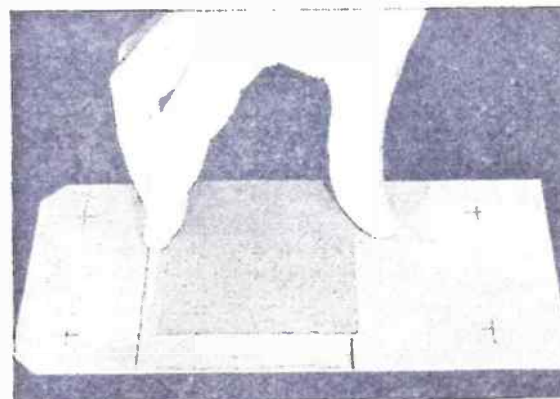


Fig. 1—Using latex adhesive to join leather parts prior to sewing

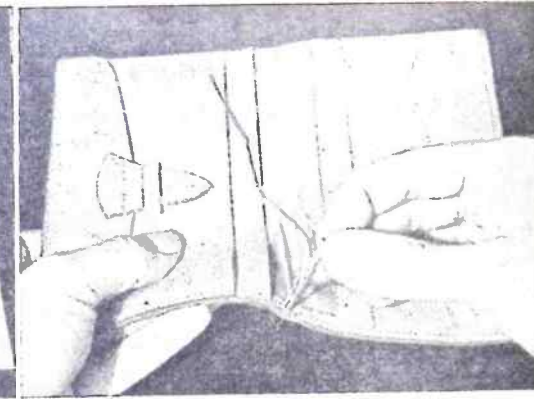


Fig. 2—Repairing a wallet by saddle-stitching

However, this is not an attempt to deceive the buyer, but is actually intended to provide a skin which has a distinctive appearance at very low cost. Mock alligator and crocodile skins are the favourites in this class, but the high glaze, variation in colour and lack of thickness at the crests of the markings give ready identification.

Leathers with a high glaze should not be selected for articles which are to be constantly folded and unfolded, for they will tend to form minute cracks along the fold lines in a very short time. Once that has happened, the surface will flake away from those points and the item will have a correspondingly short life. The softer and more flexible leathers are better suited to this purpose.

Skins are supplied ready-coloured with fast dyes, and the varieties of shades are

all over, using a latex adhesive, as well as being sewn.

One of the simplest jobs for a beginner is a purse with double press-studs, and a single divider which gives two internal pockets. The whole of the outside is cut in one piece, the shape being marked out on the wrong side of the leather. Fold lines are also drawn in; a ball-point pen is ideal for this, and crosses marking the centres of the holes are positioned.

If you have a steady hand, the cutting out can be done with scissors. Otherwise, it may be done by placing a steel rule along the cutting lines and running a sharp knife along them. A thick cardboard backing prevents the knife from cutting table or other underneath surfaces. The divider is cut from a spare piece of leather.

The extreme edges of one side of the

firmly attached to its end of the thread. Carry out the sewing with saddle-stitches, shown in Fig. 2.

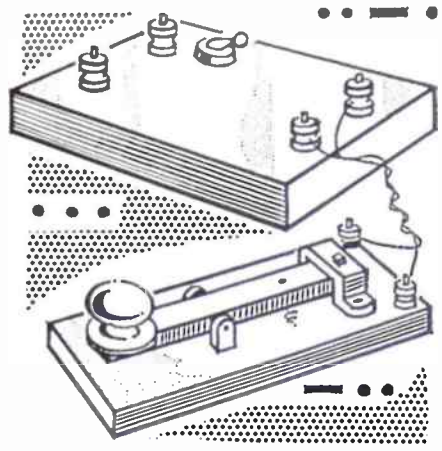
Pass one needle through the first hole and have equal lengths of thread hanging each side. Then, pass it through the next hole. Take up the other needle and pass it through the second hole, already used by the first needle, but in the opposite direction. Continue with this figure-of-eight pattern, working around the corners in just the same way and, when the last hole has been taken up, tie the ends of the thread into a firm double knot and cut off the surplus.

The fastener holes should be punched out, either with a piler-type punch or a length of steel tube sharpened at one end and struck at the other with a hammer. Press-stud parts can be bought at leather

Continued on page 137

TRANSISTOR OSCILLATOR FOR MORSE

Described by
'Radio Mech'



A TRANSISTOR oscillator is very convenient when learning Morse, as it is compact, provides a good note, and only needs a small battery. Almost any kind of transistor will work in oscillators of this type, so a cheap surplus transistor can be obtained, if no transistor is already to hand. If a transistor is to be purchased, a red-spot or other 'Audio Frequency' type will be satisfactory.

values of the components are not very important, but those shown will generally give a satisfactory note. This does not mean, however, that the note will be unsatisfactory with other values, because this is by no means the case. For example, if condensers a little smaller than 0.05 μ F were used, this would simply raise the pitch of the tone heard.

With this circuit it is essential to use phones with fairly large windings, be-

cause the phone windings form part of the oscillatory circuit. Phones of the usual type, as employed with crystal sets and other small receivers, of about 500 ohms to 2,000 ohms resistance, will be satisfactory.

The oscillator only functions when the key is closed, or the key terminals shorted. Tone and volume may also be adjusted to some extent by changing the battery voltage, but more than about 4.5V. should not be used.

The whole oscillator can be assembled on a small insulated panel, as shown in Fig. 2, with terminals to connect the Morse key and phones. The switch may be omitted, if one battery lead is disconnected when the oscillator is not in use.

In Fig. 2, Emitter, Base and Collector leads are indicated by E, B, and C.

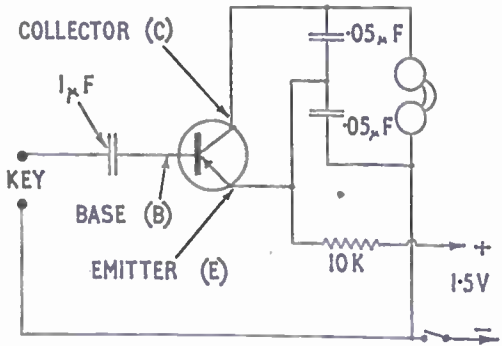


Fig. 1—Transistor oscillator

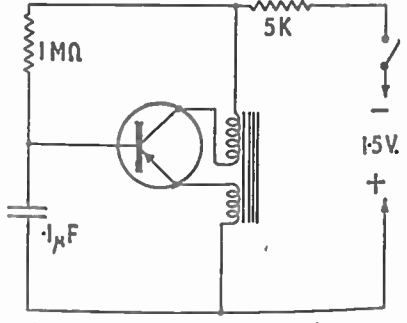


Fig. 3—Oscillator using a transformer

Transistors have three leads, which provide Base, Collector, and Emitter connections. These leads must be taken to the correct circuit points, or the transistor may be damaged. The way in which the leads are identified depends on the particular transistor, so the details given by the maker or supplier should be followed. Mullard A.F. transistors, for example, have the three leads issuing from the base in a line. The Collector lead is marked with a red dot. The next lead (centre) is Base, and the last lead is Emitter.

A very simple transistor oscillator circuit is shown in Fig. 1. The actual

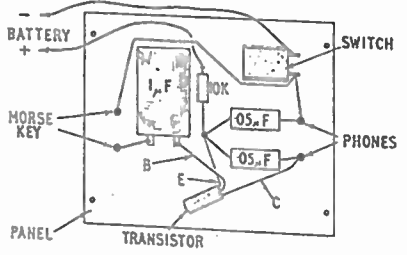


Fig. 2—Transistor oscillator wiring

These leads are left their full length, and can be attached directly to small terminals. If joints are soldered, the iron should be removed immediately the joint has been made, to avoid heat travelling up into the transistor. If each lead is held about half way along with flat-nosed pliers, this will help to prevent heat reaching the transistor, while soldering.

The whole oscillator can be placed in a small box, which will also take the battery. Current consumption is very low, so any small battery, such as one or two pen

torch cells, can be used. With batteries of this kind, the outer zinc case is negative, and the central brass cap is positive. Leads may be soldered directly to the battery, which should last some months.

Transformer oscillator

Another oscillator circuit is shown in Fig. 3, and it does not require phones. This means that it can be connected to an amplifier, for loudspeaker results.

Component values are again in no way critical, and the battery voltage may also be modified, to change the note, if required. Any audio type transistor can be used.

Various surplus transformers, or transistor coupling transformers, or old transformers from valve sets, etc, will frequently operate, with this circuit. The

smaller winding is connected from emitter to battery positive. The best type of transformer is one with fairly small windings. Very large transformers may only give a note of such low pitch that it is unsatisfactory. Any spare transformer which is to hand is thus worth trying. If no oscillation at all is obtained, the two connections to one transformer winding should be reversed, and the circuit tried again.

The Morse key is simply included in series with one battery lead. The on/off switch may be omitted, provided the key is always left open (or the battery disconnected) when the oscillator is not in use.

If headphones are to be used with this circuit, they may be wired in series with the battery, or in series with either of the transformer windings. Alternatively, they

may be wired in parallel with one transformer winding. Each method of wiring up will give a different note.

When the oscillator is used with an amplifier, join battery positive to the chassis, or earth line, of the amplifier. Connect a condenser of about 0.01 μ F to the amplifier input socket or terminal, and take a lead from the condenser to the transistor collector.

The oscillator may be used with a transistor or battery operated amplifier, or with a mains amplifier which derives both H.T. and heater currents from a transformer, and is thus isolated from the mains. It should not, however, be used with A.C./D.C. type amplifiers, or with the simple type of A.C. amplifier which draws H.T. current directly from the mains, and which may thus be alive with mains voltages.



DECEMBER

THESE NOTES REFER CHIEFLY TO MIDLAND GARDENS—DUE ALLOWANCE SHOULD BE MADE FOR CHANGE OF LATITUDE.

IT is almost certain that frost will occur during this month, but this need not deter the keen gardener. Take advantage of the hard ground to wheel your manure or compost on to the vegetable plot.

Continue with digging and forking over borders where practicable. This is particularly important where bulbs are established, if they are not to be disturbed too much.

It is a mistake to think that lawns need no attention at this time of year. On no account allow dead leaves to lie around, they will quickly kill the grass. Worm casts too must be swept off periodically

and the grass can be cut occasionally when dry enough. It is a good idea to cut the grass as late in the month as possible and then take the machine for servicing. It can quite well be spared for three weeks or a month at this time of year.

In the fruit garden, trees can be planted during mild spells up until mid-March. You can rely upon nurseries to despatch only when the weather is suitable.

Where pigeons are troublesome an effort must be made to protect winter greens during frosty weather. Strings with 'glitter-bangs' are widely used but there are of course other methods to try.

Reminders for work this month

- Cover Christmas roses with cloches
- Protect alpinas with glass
- Inspect vegetables in store
- Remove decaying onions, potatoes and carrots
- Pick over greens to remove dead leaves
- Mulch strawberries with old stable manure
- Spray fruit trees with winter wash

In the greenhouses

- Pay attention to ventilation
- Remove dead leaves
- Water sparingly
- Fumigate regularly

Continued from page 135

WORKING IN LEATHER

and craft shops and some chain-stores, together with the simple brass punch used to clinch each half to the leather.

Sometimes a block is supplied for holding the shaped head of the fastener while it is being assembled. If not, one can be made by wrapping a wooden block in several thicknesses of soft leather. When sewing would make access to one half of the stud difficult, this may

be fitted before the particular flap is folded and stitched in place. It is inadvisable to fit both halves before the final sewing-up, as they might not meet exactly.

Straps needing to be fixed to newly made articles and replaced where they have previously broken, need a special type of fastener rather like one half of the press-stud. The holes are punched, the

two fastener components inserted from opposite sides, the larger is supported on a leather-covered block and the punch applied from the other side.

* Next week we shall show how to *
* make a charming padded stool with *
* handsome cabriole legs. Make sure *
* of your copy. *

Spatterwork Greetings Cards

By

S. H. Longbottom

GREETINGS cards of all kinds can easily be made by using the spatter method of applying colour in conjunction with appropriate stencils or masks. These cards look most attractive and original when a variety of colours are used.

spatter round the edges to produce the result shown in Fig. 2.

Apart from the trees already mentioned there are lots of other motifs you may employ for a Christmas greetings card such as holly sprigs, snowmen or robins.

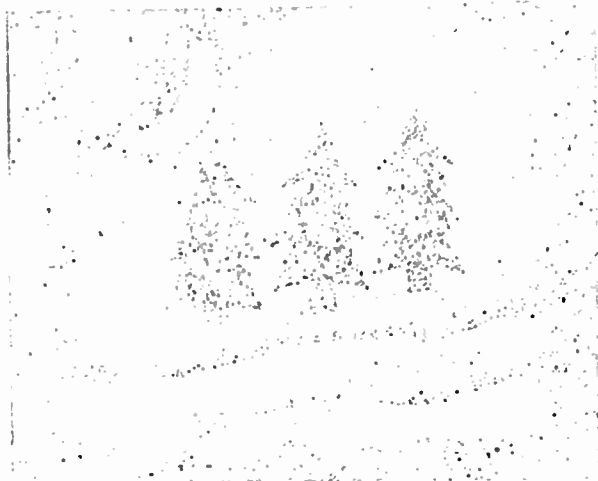


Fig. 1

First of all we require a suitable design for the front of the card and this may take any form. Seeing that it is not a long while to Christmas you may like to make some greetings cards and a symbolic fir tree may be appropriate since it can be repeated several times in colours. All you have to do is to draw the shape on a piece of stiff cardboard to make a template. Trace the outline of this on to a large piece of thin, strong card suitable

for preparing a stencil, repeating it several times until your basic pattern is completed.

Then cut out apertures of the trees with a really sharp knife to make clean cuts. This will provide a stencil and a set of masks, either of which may be used. If the stencil part is used we spatter through the apertures with the result as seen in Fig. 1. However, if we use the cut-outs, lay them on the paper and



Fig. 2

So far we have only considered the preparation of a stencil for the card but if you decide to work with more than one colour — and this is most fascinating — the best way is to make separate stencils for each. For example, assuming you wish to make a card with a holly sprig. The leaves would be in green while the berries would be in red. Here we prepare two separate stencils, one for the leaves and one for the berries, transferred to the stencil paper by means of transparent tracing paper. There is one rather important point to watch. This is that both stencils must be prepared so that they are in perfect register which must be maintained throughout the processing.

In this instance we cut two pieces of card to the same size (to fit the finished greetings card) and first trace the outline of the leaves on one. If the leaves are now cut out the shape can be traced with a pencil on to the second stencil card. Now lay the tracing on top in exact register and trace in the position of the berries. Cut out the berry stencil and you have two separate stencils ready for applying the colour.

It will be realized that when applying colour the stencil and blank card should also be in exact register but there should

be no difficulty here if both are prepared to the same size.

We should now examine the question of the size, shape and colour of the card itself. If you wish to apply a snow background with white spatter it will be obvious that the card will have to be other than white and we suggest pale blue. For most purposes, however, a white card will be sufficient. You will require a thin, substantial card, similar to that used for the commercial products and obtainable at most artists' material, shops. You may even be able to buy greetings card blanks. A piece of card $8\frac{1}{2}$ in. by $6\frac{1}{2}$ in. will make a narrow, vertical card $8\frac{1}{2}$ in. by $3\frac{1}{2}$ in. or if folded the other way $4\frac{1}{2}$ in. by $6\frac{1}{2}$ in., although you may make to any size you wish. Incidentally, the question of size should be remembered when making the stencil. The latter should be large enough to cover the entire piece of card although only one half is used for the picture and the back — which is ultimately folded —

must be protected from straying spatter.

We now come to the technique of spattering the colour on to the cards and for which you will require some water colour, a tooth brush and a liberal supply of old newspapers to cover the table top.

Use a toothbrush

Spread the old newspaper over the table top, laying a card on same with stencil uppermost. You will probably need a small weight of some description to keep the stencil in contact with the card. Prepare a small quantity of colour to a fairly stiff consistency. If you use an old toothbrush the bristles must be of even height and trimmed to about $\frac{1}{2}$ in. Dip the brush into the colour, discharging the excess on to a piece of old paper by drawing a nail across the bristles. Then draw the nail towards you and a fine spray will be discharged in the opposite direction. Note that if you forget to discharge the excess colour you may

make a lot of unsightly blobs. Direct the brush to the stencil, spattering the area through the apertures. If two colours are being used, allow adequate drying time between the two applications and clean the brush before using the second colour.

Fold the cards after scoring and stack under heavy pressure for a time to ensure that they become perfectly flat. You can then add any other message on the inside in ordinary handwriting.

Fig. 3 shows the method used for preparing Fig. 2. The left half of the card is covered for protection and the three shapes of the trees laid on the opposite half. Colour is now spattered around the trees. The striped, shaded effect is produced by laying a strip of card over the area already spattered and another spattering made at the edges.

The wavy foreground and border in Fig. 1 are the result of cutting appropriate masks. The moon is made from a cut-out while the trees require a stencil.

Uses for old Picture Frames

OLD picture frames which have been relegated to the attic, or which can be bought cheaply from second-hand dealers, can be used in a variety of unusual ways in and around the house.

The first illustration shows a novel way of displaying a house number attractively and clearly. A fairly small frame can be used for this. The glass is removed and the frame fitted with numbers cut from $\frac{1}{2}$ in. thick wood or three thicknesses of hardboard bonded together with waterproof adhesive.

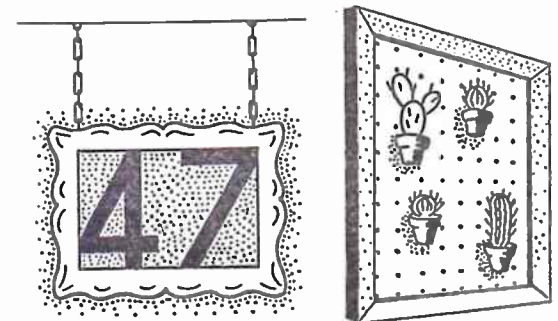
The numbers are pinned and glued to the frame, and two hooks are screwed to its upper edge to take short lengths of chain for hanging the fitting.

The frame should be enamelled and the numbers varnished if made from wood, or painted in a colour either matching or contrasting with the frame.

Below this is illustrated an extremely effective way of showing a house name. A strip of plywood or tinplate, high enough to take the name of the house, and with a cut-out house shape at one side and a tree at the other, is pinned and glued in a suitable frame. A shallow box shape, 2 to 3 in. deep, is made from woodstrip, plywood or hardboard, and pinned to the rear of the frame.

The most effective colour scheme is black, white, and grey, using shades of grey for a simple background painted

By
A. Liston



inside the box. This, together with a white foreground and black lettering, gives added depth to the fitting. It may be hung or mounted on a post.

Indoors, too, picture frames can serve many purposes. Fitted with a plywood back and a pair of handles, an ornate frame makes a smart tray, or backed with a sheet of pegboard as shown it

makes a living picture when pots of cacti are wired to it. Here, too, greys and white make the best background for the plants.

A serving hatch can become a decorative feature if surrounded by a suitable frame enamelled in a bright colour, or a dull hall window can be transformed as shown by one of the larger ornate frames.

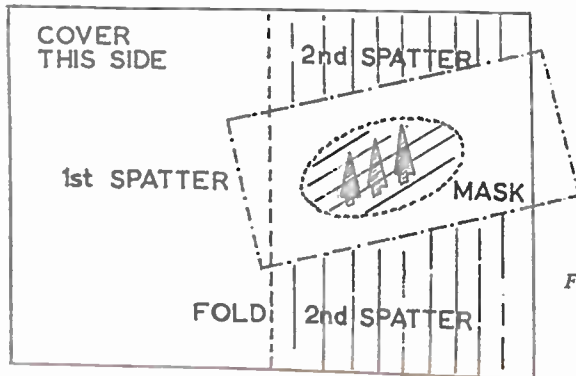


Fig. 3

NEW Thoughts on



RAILWAY MODELLING

wood sheet with the centre made up of blocks of wood, in sandwich fashion. It does not warp. It is rather heavy and rather expensive, but is ideal for the person who wants to make a portable layout, one that could be made up and laid on the table or a couple of trestles when in use.

Hardboard

This is not of great use to the railway modeller for baseboards unless it is well supported. It is cheap, but it has the distressing habit of sagging unless the under frame of the baseboard is closely made. One cannot drive pins or screws into it unless there is a block of wood underneath to receive them. It is perfectly good for scenic work, and useful for making models of houses and buildings. It does not readily warp if used correctly.

Plywood

This is good material if used in the thicker grades. Provided it is well supported by a rigid framework it is ideal. Has a habit of warping.

Weyroc

Here we have another ideal material for baseboards. It is strong, does not easily warp, but it is recommended that it is supported underneath with a rigid framework.

Building Board (Asbestos)

I do not like it. It is easily damaged by hammer blows etc, and breaks easily.

In my sketch I have shown a typical framework upon which to lay your foundation material. This must be made strongly. The material to use is 2 in. by 1 in. timber. The wood to use will depend on your own pocket. I have used ordinary deal and this is quite good enough. You will see that I have shown halving joints to give strength. These should be glued and screwed.

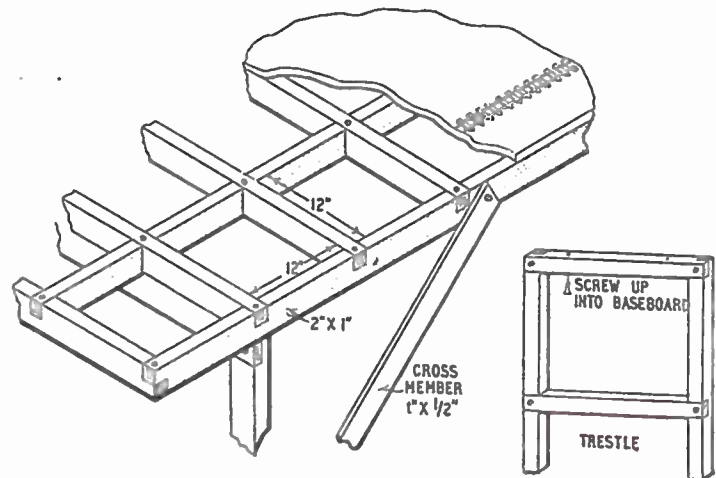
CONSTRUCTING A LAYOUT

By F. A. Barrett

If you are using one of the thinner covering materials, such as plywood, then you should see that the space between the cross members is not more than 12 in. I show also a trestle for supporting the baseboard. These are made up also of the 2 in. by 1 in. timber, and can be fixed to the baseboard with screws driven in from the underside of the top cross member. The screws should be 1 1/2 in. by 8 in. for the main construction, and 2 1/2 in. by 8 in. for holding the trestles on the baseboard. Two trestles should be sufficient. These should be placed about 12 in. in from each end of the baseboard. The cross ties, as shown on the drawing, should be screwed into the leg of the trestle and the edge of the baseboard to prevent the assembly from wobbling. These cross members should be made from a thinner material, say 1 in. by 1/2 in.

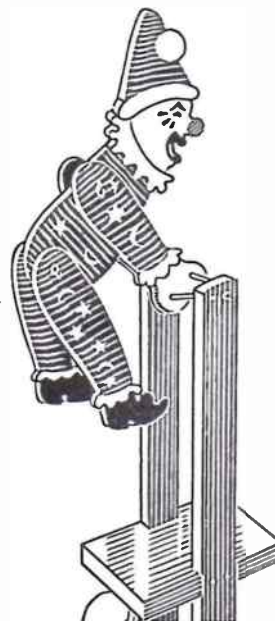
The main thing to remember when building baseboards is to plan them according to the work they have to do. In the main you will find that it is far easier to work on a good sound foundation than one that is constantly rocking all the time. It does not matter what type of track you are laying — it needs a firm base upon which to rest. Half of the trouble with derailments is due to an uneven track.

Continued on page 146



Instructions for making

THE JUMPING CLOWN



CHILDREN, and indeed adults, never fail to be fascinated by the antics of an acrobatic figure such as the jumping clown which is the subject of our model. The loosely jointed figure jumps about in all kinds of attitudes by pressure on the lower ends of the sticks to which he is attached through his hands by means of a tight cord. Variations in finger pressure will make the figure stand on his head, dance about with glee, and in fact contort his body in a variety of ways to give a never-ending source of amusement. It is a strongly made toy which should be decorated in bright colours and will last for years.

All the parts necessary are shown full size on the design sheet. These should be traced and transferred by means of carbon paper to the appropriate thickness of wood, cut out with a fretsaw and cleaned up with glasspaper.

The two side pieces (1) are cut from 1/2 in. stripwood. Between these, fix the platforms 2 and 3 in position with nails as shown on the design sheet. Note that one upright is fixed firmly to the platforms, and the other is movable to allow of a pivoting action in order to provide tension on the cord when the bottoms of the uprights are pressed inwards.

 * Hobbies Kit 3442 for making the *
 * novelty Jumping Clown contains *
 * plywood, stripwood and wire. Kits *
 * from branches price 3/8 or by *
 * post (9d. extra) from Hobbies *
 * Ltd, Dereham, Norfolk *

Piece 4 should be glued and pinned in position, again allowing piece 1 to work freely in the groove in piece 3.

The pieces which make up the loosely jointed clown should be painted in bright colours adding stars and moons as a decorative effect as suggested on the design sheet. When the parts are dry, the legs and arms are pivoted to the body by means of wire which goes through holes bored in the wood where indicated by crosses. The ends of the wires are turned over, but the limbs should be allowed a loose fit. Piece 8 is positioned between the outstretched hands and a piece of cord is threaded through the appropriate holes from the sides and tied, as shown in the detail.

GOOD NEWS FOR HANDYMEN

— WARERITE PRICES REDUCED

BAKELITE Limited, manufacturers of Warerite Laminated Plastics, have made substantial cuts in the prices of many of the patterns in their standard range while maintaining the extremely high quality of the material.

As readers of Hobbies Annual will know, Hobbies Ltd have added to their list of materials available to home handymen, a range of 18 popular patterns and colours of Warerite veneers in four handy panel sizes. Now, following the recent price changes, 11 of these patterns and colours are available at substantially lower cost.

The range available from Hobbies' branches or direct from Hobbies Limited, Dereham, Norfolk, embraces Moresco Scarlet, Lemon, Sky Blue and Ivory; Floral Lotus Pink, Brown and Blue; Blue-Grey Check; Royale; Gold Dust on White; Zig-Zag White 500; Tessuto Primrose, Coral Pink, Biscuit, Pearl Grey and Azure Blue; and two Woodprints — Australian Walnut and Sapele Mahogany.

Of this range, the Tessuto and Woodprints remain at 5s. per sq. ft. in the handy cut sizes available, while all the remainder are reduced to 4s. 4d. per sq. ft.

The sizes available from stock are 36 in. by 18 in. (4 1/2 sq. ft.), 36 in. by 24 in. (6 sq. ft.), 27 in. by 48 in. (9 sq. ft.), and 36 in. by 48 in. (12 sq. ft.). In addition, pieces 60 in. by 36 in. (15 sq. ft.) can be supplied to special order. Taking the 36 in. by 24 in. size (a popular kitchen table size) as an example, the price of the complete piece at 4s. 4d. per sq. ft. is now 26s., and at 5s. per sq. ft. the price is 30s.

Orders sent to Hobbies Ltd, Dereham, Norfolk, are despatched carriage and packing paid, complete with comprehensive instructions for bonding the veneers to produce worthwhile, lifetime-lasting surfaces for the home. A coloured leaflet to facilitate choice and ordering through the post is available on request.



For festive decorations

MAKING PAPER SNOWFLAKES

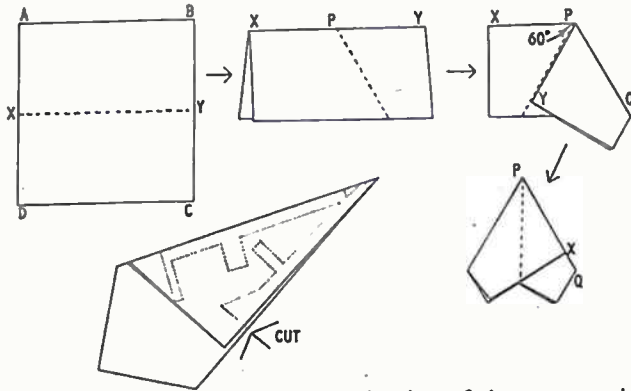
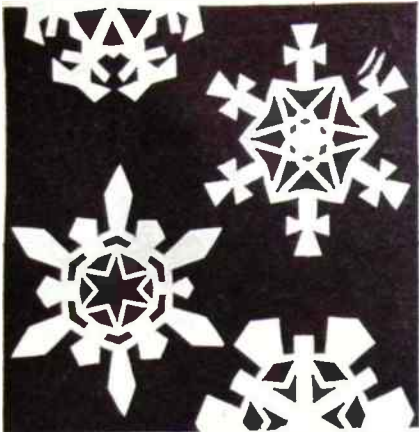
CHRISTMAS without snow is unthinkable, although in England we rarely have a snowfall on 25th December. Nevertheless we are determined that we shall have snow in some form for our celebrations, so we buy greetings cards depicting snowy landscapes and decorate our Christmas trees and mantelpieces with fluffy cottonwool 'snow'. It is all a charmingly romantic spell that we weave about our surround-

Note that the main 'arms' of the pattern are shaped inwards from the two long edges. Let one set of arms be somewhat longer than the other set. Cut out the ends of the arms, embellishments to the arms and the centre of the shape, in any way you please. Unfold your paper gently afterwards and press it flat. It will be uncanny how infinite is the variety of your achievements.

Paper snowflakes may be suspended

flake patterns may be used to decorate home-made greetings cards formed out of upright rectangular cardboard folders in dark blue or jet black. Aim for a plain and simple effect to obtain real beauty of design.

Try hanging clusters of paper snowflakes upon wire rods, using black threads. Arrange the rods as mobiles and suspend these animated compositions from ceilings out of reach of tall heads.



Vary the sizes of the patterns within reasonable limits. Or merely enjoy yourself and cover a large sheet of black paper with a sizeable collection of snowflake patterns.

(A.E.W.)

ings. Sometimes we are inspired by the scientist and use the never twice repeated forms of ice crystals, or snowflakes, in our festive trimmings.

Every minute crystal of snow is a flat pattern, perfect in every detail, based on a six sided geometrical plan — the hexagon. Paper snowflakes are a pleasure to create. No great skill is required and every time you set to work, with thin white paper and sharp scissors, you can never be sure what the results of your efforts will be, and you will seldom be disappointed. The five diagrams will illustrate how your papers are to be folded before you commence cutting. Practise the art of cutting out snowflakes by first using very large squares of thin typewriter paper, then later on you may cut the shapes in any size you please.

Fold the square ABCD in half along the mid-line XY. Point P will be the middle of XY. Next, fold over PY so that the angle XPY is 60°. Fold across edge XP to edge PQ and press in the resulting creases. Fold the wedge-like shape exactly in half backwards. The method of cutting the paper is clearly illustrated by dotted lines.

from the branches of Christmas trees or from sprays of dark evergreen foliage overhanging pictures and mirrors. Snow-

A charming Ballerina



HOBBIES design No. 257 Spcl. for making a Ballerina Musical Box has been very popular. Mr L. Partington of Bristol made three boxes to this design in wood with which he was very pleased, and then decided to make

another in perspex. The result is shown in our photograph. Quite a pleasing effect has been obtained by the insertion of pearl acetate inlays for the dancers on the front of the box. It is a black case and the interior is executed in blue and white perspex.

The wood kit for this Ballerina Box, which includes all veneers, mirrors, paint, glue, etc. costs 22s. 6d. (post 2s. 3d. extra). A genuine Swiss ballerina movement is supplied for 24s. 1d. (post 9d. extra) and tunes available are 'Swan Lake' and 'I could have danced all night.' The dancing ballerina is reflected in the three mirrors, and rises up to dance when the lid of the box is lifted to take out a cigarette. With two compartments, it is also very suitable for use as a trinket box.

The present for the future!

Here's an inexpensive way to teach your son or daughter the fascinating hobby of taking photographs.



coronet



Presentation Outfit

A complete and perfect gift that will ensure sparkling results from the very beginning. The kit includes, camera, coro-flash gun with batteries and bulbs, roll film, close-up lens and anti-dazzle lens hood.

Price 69/11

The smart Triumph flash gun is for use with the Coronet Victor and Viscount Cameras and for any camera fitted with Compur-Prontor type synchronization.

Price 25/-

Supplied by Photographic Dealers, Chemists, Opticians, Co-ops, and Mail Order Organizations.

Prices, plus a surcharge of 3½d. in 20/-

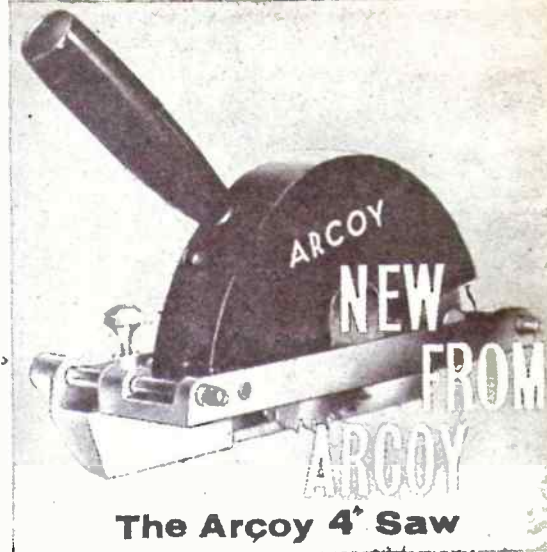
SEND FOR ILLUSTRATED

LEAFLETS TODAY!

coronet

cameras

CORONET LTD., 308-310, SUMMER LANE, BIRMINGHAM, 19



The Arcoy 4" Saw

This is a most versatile attachment for use with any make or size of electric hand drill. Due to its construction being basically all pressure die-cast it is exceptionally strong and robust. The cutter spindle is mounted on two ball-bearings which are sealed and contain an ample supply of grease to last the life of the tool. In fact, this new tool in common with all Arcoy products, is a precision made, fully engineered product, capable of prolonged and reliable life.

The adjustable and removable side fence slides on stainless steel guide rods to completely eliminate the bug-bear of rust. For a 4 in. saw it has a remarkable range of adjustment, being capable of rebating up to a 1½ x 1½ in. rebate. With the side fence removed sheet material such as plywood, hardboard, blockboard, etc. up to ½ in. thick, may be cut.

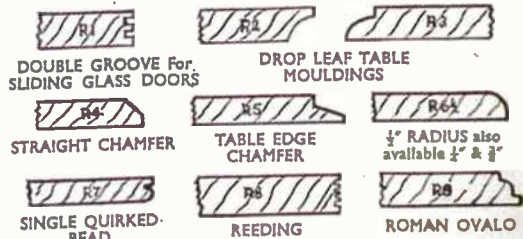
Wobble Washers to produce slots of ¼ in., ⅜ in. and ½ in. wide are included with the Saw as standard equipment.

The full range of Arcoy moulding cutters can be used in lieu of the saw at 23s. 6d. each.

As standard the tool is equipped with a Combination Saw, with both Rip and Cross-cut Saws available as extras at 12s. 6d. each.

Price of 4 in. Saw, complete with Combination Blade and set of three sizes of Wobble Washers, £5. 5s. 0d.

ILLUSTRATIONS OF MOULDINGS PRODUCED BY ARCOY MOULDING CUTTERS



THE DRAWINGS ABOVE ARE REDUCED SIZE AVAILABLE AT ALL GOOD STOCKISTS

Manufactured by

ARCOY PRODUCTS

KNOWSLEY ROAD, BOOTLE, LIVERPOOL 20

PAINTING FOR PLEASURE

HAVE you finished painting the house, the nursery wall or the kitchen cupboard? Are you about to relax with a sigh of relief that it's over? Have you thought of relaxing by painting for pleasure?

You can't draw? It hasn't deterred thousands of happy amateur artists, but once you start you may well be surprised to find you can.

By Edna Simms

Painting a picture in oils can be a rewarding and satisfying thing. If the first few are relegated to the attic, the disappointment will more than be compensated when the family look at your latest effort and say, 'That's interesting — it would brighten the landing or staircase wall.'

Aid to concentration

Even when the end product is not as good as you feel it should be, the painting of it will have improved your technique for the next one and painting is one of the most relaxing hobbies. A picture as it develops demands all your attention. One corner of your mind can't creep away to worry over the day's problems while you are concentrating on mixing just the right colour, and applying it brings the pleasure of creation.

Many Evening Institutes run classes under a teacher or professional artist for beginners and at these you will find other amateur artists, some better, some worse than yourself. A camaraderie exists that helps to bring out creative instincts. The guidance received helps to establish your own style, whether it is in abstract, semi-abstract, action, realist or what-have-you form. If you want exercises in drawing first you will be given this help and as you progress the feeling for form and colour will open your eyes to a new aspect of the ordinary things around you.

Keep it simple

Apart from evening classes, there are in many places afternoon classes or groups of amateur painters who meet regularly to work and discuss art. The local Town Hall or library will have details of what is going on in the district.

If no class or group exists nearby, don't be deterred from starting on your own. The materials need not be expensive and a book on how to do it will be helpful. Remember to keep it simple, no fussy detail. Stand well back to view and



Open Air Exhibition, Hampstead Heath 1961

don't be afraid to put plenty of paint on. If you make a mistake you can take it off with a palette knife and overpaint immediately, or let it dry for three or four days and then correct it.

A picture should be pleasing in itself, not a photographic reproduction. The final result is the only thing that matters. Sketch the outlines in charcoal first, dust off and get a first coat of paint on. The paint will hide the charcoal very quickly, but the picture will not look balanced until all the canvas is covered with paint.

Materials inexpensive

The materials needed to start are: Four long handled bristle brushes Nos. 12, 9, 6 and 4, and a No. 3 sable brush. A wooden palette, 10 in. by 6½ in. Palette knife, linseed oil, distilled turpentine, 1 packet of charcoal, plenty of rags.

Students' oil colours in white, lamp black, cadmium yellow, lemon yellow, yellow ochre, veridian green, alizarine crimson, cadmium red, ultramarine and Prussian blue.

All these can be bought for about £2 but don't buy the smallest size tubes of paint; they are uneconomical, and white is used so much for mixing with other colours that at least half a pound is needed to begin with. Later you can add more colours and perhaps someone will

give you an easel for your birthday.

Always clean brushes immediately after use with soap and water. The palette should be scraped, cleaned with turps and a little linseed oil rubbed in to preserve the wood.

Buy boards as you need them. Off-cuts of hardboard are cheap and can easily be prepared by painting with two coats of emulsion paint. Use up any odd amounts left over from decorating but if buying it specially, get white. Either side can be used but more paint is needed on the rough side. Cardboard can be prepared in the same way. This is cheaper for the beginner than buying prepared boards at an art shop and although prepared paper is cheap, to frame it a backing will have to be used whereas hardboard can go straight into a frame.

Study other works

Libraries, Town Halls and art societies sometimes put on exhibitions of local artists' work. Here there is a chance to see their work and meet your fellow enthusiasts; perhaps even to have your pictures hung.

Painting is a fascinating hobby either alone or shared with the family, and a decorative one too. Tensions of modern living can be relieved by uninhibited self expression. When you feel like kicking the cat, try painting for pleasure.

GRAND XMAS GIFTS

FOR
THE
LAD



AND
HIS
DAD

These fine presentation sets of Hobbies famous tools will prove ideal gifts throughout the year for any lad or adult interested in woodwork, modelling, etc.

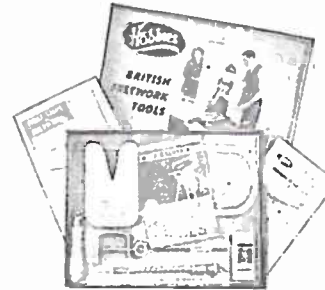
Available from all Hobbies branches, stockists, etc., or send coupon today for immediate delivery.

Hobbies have other outfits costing up to 70/-, suitable for all occasions and all pockets.

YOU MUST HAVE HOBBIES 1962 ANNUAL 180 pages crammed with woodworking projects, toys, novelties, furniture, etc. Free designs for making a grand model Zoo and a Whistling Bird Novelty Cigarette Box with each issue. Only 2/- from newsagents, etc., or by post 6d. extra.



THE POPULAR 'A.1' 42/-
The set most beginners demand.



FREE Ask for 20-page booklet of Hobbies tools and gift sets.

THE 'CROWN' With strong hand-frame, spare saws, cutting table, drill, instruction book, glasspaper block and design. 27/6 (post 2/3)



THE 'CHALLENGE' Represents real value. Contains 12 in. handframe saw, steel cutting table, bradawl, spare saw blades, design and working instructions. 14/6 (post 2/-)

To Hobbies Ltd., Dept. 992, Dereham, Norfolk. Please send free 20-page booklet, name of stockist and items indicated.

- 'A.1' Outfit 42/- (post free)
- 'Crown' Outfit 27/6 (post 2/3)
- 'Challenge' Outfit 14/6 (post 2/-)
- Hobbies 1962 Annual 2/6 (post free)

Name

Address

MAKING YOUR HOBBY MAKE MONEY

HOW, WHY any handicraft can make money for you — everything you should know.

40 pages of experience — 5/6 from

G. SEALE
Regent House, 26 Queen's Rd., Coventry

PRINT YOUR OWN CHRISTMAS CARDS

Many design combinations in shining embossed silver and gold + multi-coloured metallic stars, crescents, etc., gold transfer foil for drawing — coloured paper for 50 cards — printing materials for 100s. Fascinating — simple — unique. Complete outfit only 12/6 P.O. including postage from THE EMBOSSPRINT COMPANY LTD, Fleet Street, London, E.C.4.

MAKE FRIENDS ANYWHERE (17-70). Join our Unique Club. — S.A.E. for details. — Personal Column Ltd., Falcon House, Burnley, Lancs.

REMUNERATIVE, RELAXING. Paint redesigns on paper. Flowers, Abstracts. Anything YOU wish. Exceptional opportunities, beginners, others. Read exciting 'PROFITABLE ART' (free). Popular Art (HW), Chul, Shropshire.

WILL PAY worthwhile for one or more compass lens combination, sandwich type, stamped 'Made in England'. New, used. — Alexei Zardecke, 340 Bowery, New York 12, New York, U.S.A.

HOMEWORKERS required to make up and machine simple household goods. Experience unnecessary. Good pay. Regular work. S.A.E. for details to Dept. 28, Arnold, 10 Shelley Road, Worthing, Sussex.

100 DIFFERENT stamps free! Request 1d. upwards discount approvals. — Bush, 53 Newly Way, Parkstone, Dorset.

ENJOY WRITING? Then write for Profit. Send for 'Writers' Handbook' (free) detailing countless opportunities for beginner or experienced. — Writers' Ring (HW), 5 Edmund Street, Birmingham.

LEARN

RADIO & T/V SERVICING for your OWN BUSINESS/HOBBY

● by a new exciting no-maths system, using practical equipment recently introduced to this country, FREE Brochure from:—

RADIOSTRUCTOR

DEPT. 681, READING, BERKS. 29/11/61

IF you have taken a lot of care in making a musical box, be sure to make it worthy by including the best Swiss movement — a R.E.U.G.E. Prices from 13/9. Wide range includes a charming Dancing Ballerina. Many tunes to choose from. Send for details in free booklet 'Profitable Leisure'. HOBBIES LTD, DEREHAM, NORFOLK.

PYGMY TREES/MINIATURE GARDENS

Complete outfits of either 20/ — Stamp for lists over one hundred kinds of trees. Resale orders £4 for £3 — WREATH and BOUQUET MATERIALS. Outfits and instructions of either 20/- Artificial Flowers, Everlastings, Grasses, Ferns and Foliage. — Station Nurseries, (HW), Oakengates, Salop.

HEAR ALL CONTINENTS With H.A.C. Short-Wave Receivers

Suppliers for over 18 years of radio S-W Receivers of quality. One-Valve Kit, Price 25/- Two-Valve Kit, Price 50/- Improved designs with Denco coils. All Kits complete with all components, accessories and full instructions. Before ordering, call and inspect a demonstration receiver, or send stamped addressed envelope for descriptive catalogue. 'H.A.C.' Short-Wave Products (Dept. 22), 44 Old Bond Street, London, W.1.

LET **★ Plasticine** HELP YOU DO-IT-YOURSELF Regd. Trade Mark Special Trial Offer. We will send 4 lb. 'Plasticine' (any colour) with booklet 'Plasticine Modelling for Amateurs' Post free: 10/- U.K. only. Harbutt's Plasticine Ltd, Bathampton, Bath

Replies to Readers

New Handles

I HAVE an old bill-hook blade which I wish to sink into another handle. I have the same problem with a knife. In each case I cannot make it so that it stays in firm. I hope you can help me. (D.J. — Kingston.)

TO fix a bill-hook or other blade to a wooden handle, the first thing is to see that the tang is straight and true, also that it tapers nicely and is free from rust. Next, if the handle already has a hole in it that is larger than the tang, open it out and glue in an accurately fitting plug of tough wood which completely fills the hole. Leave for a day to allow the glue to set properly. Next drill out or form a tapered hole which conforms accurately to the shape of the tang. This is the really important part and some prefer making the tang red hot at the tip prior to driving it into the wood. Whichever way it is done, make sure the tang really fits the slot on all four sides, but leaves an inch or so to drive down.

Painting a Table Tennis Top

IS it necessary to use a special type of paint on the playing surface of a table tennis table? (W.M. — Liverpool.)

NO special paint is needed, but a dead flat surface is certainly desirable. Scrape off the remains of the old paint and glasspaper quite smooth. Apply a

suitable undercoat and then a finishing coat of good quality flat paint. Use a special undercoat for the green colour, and do not forget the $\frac{3}{4}$ in. white border.

Hollow Lead Soldiers

CAN you give me details how to make hollow lead moulds for toy soldiers? I have tried various methods and they still turn out solid, which makes them very heavy and also uses a lot of metal. (F.W. — Palmers Green.)

HOLLOW lead soldiers or other cast objects can be made by simply pouring the molten metal into the mould, then pouring out the surplus. The metal chills on the parts in contact with the mould much faster than the central mass — hence the 'pouring out'. A mixture of 65% lead, 25% antimony, 8% tin and 2% bismuth would make a good casting alloy.

Soldering Trouble

WHENEVER I take out my iron to solder, I clean it. When it is hot, however, and I dip it in the flux, it goes

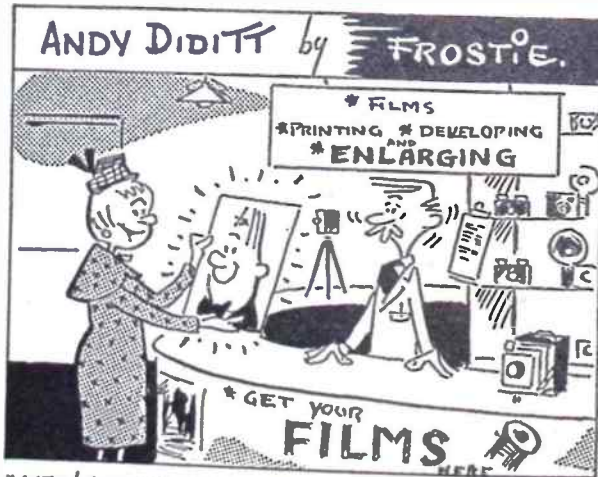
a black colour in less than a minute and I have to clean it again. Could you please advise me how to prevent this dirt collecting on the point? (E.C. — Glasgow.)

THE trouble appears to arise from the materials used, or method of use. The iron should be filed bright at the point when hot, and flux and solder immediately applied so that the point is covered with a film of solder. This is referred to as 'tinning'. Once an iron has been tinned in this way, it does not require further treatment for long periods. Do not apply flux directly to the iron — this should never be done during ordinary soldering. It appears that you are endeavouring to use the copper, or untinned bit, and this is very unsatisfactory. See that the iron is not heated excessively. With attention to these points, the film of solder will remain on the iron almost indefinitely. Other parts of the bit will become dark, as the copper oxidises, but this will not influence the tinned point.

Repairing a Gramophone Spring

I HAVE a portable gramophone, the spring of which is broken. I shall be glad to know if there is any way I can repair it. (B.H. — Bath.)

IF the spring has broken near to the winding arbor, which often happens, the broken end should be softened by making it red hot and allowing it to cool slowly. It can then be drilled to fit the stud on the arbor, and be bent over to clasp it, as the old piece will show.



"YES! I THINK I WILL HAVE IT MOUNTED — ANDY WILL LOOK MUCH BETTER ON A HORSE."

146

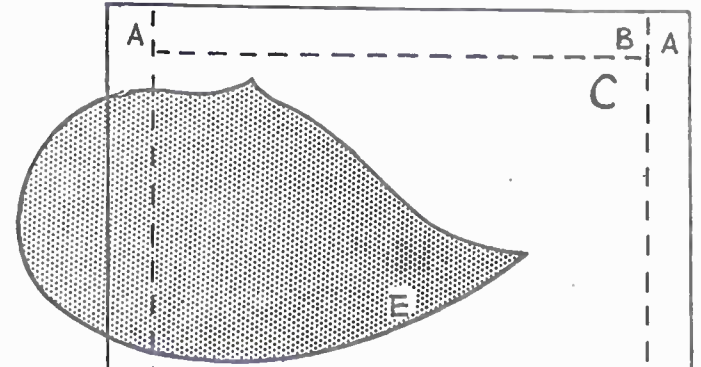
Full-size patterns

THE 'STORK' MONEY BOX

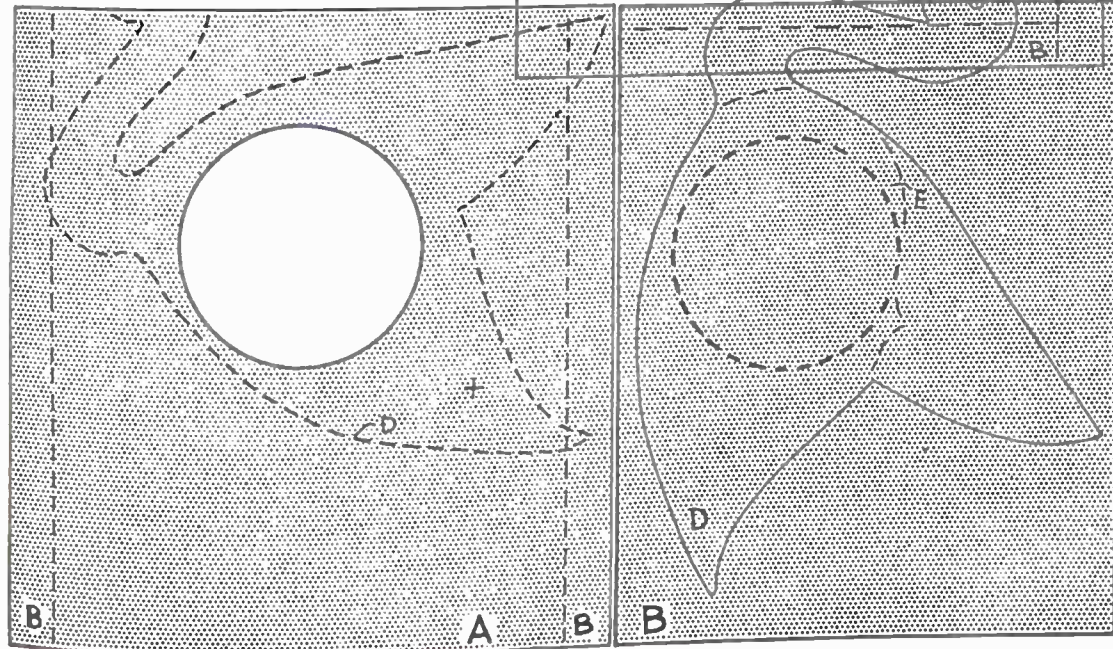
CUT two each of A, B and C from $\frac{1}{4}$ in. wood using a fretsaw. Note that only one side A will have the hole cut away. Glue sides B between sides A and glue the top C in position. The other piece C, the bottom, will be screwed in position and can be removed to extract the money.

Cut one each of the stork pieces, D and E from $\frac{1}{4}$ in. wood and pivot piece D to piece A in the position shown by the cross. Countersink the screw and tighten, then glue the wing E in position on piece D. The box may be finished with stain and varnish and the stork painted.

To insert the money the stork will be tilted to reveal the circular hole, (M.p.)



INTERESTING PROJECT FOR THE FRETSAW



147

Printed by BALDING + MANSELL, LTD., London and Wisbech, and Published for the Proprietors, HOBBIES LTD., by HORACE MARSHALL & SON, LTD., Temple House, Tallis Street, B.C.4. Sole Agents for Australia and New Zealand: Gordon & Gotch (A'sia) Ltd. For South Africa: Central News Agency Ltd. Registered for transmission by Canadian Magazine Post.

READER'S REPLY
NOV.
1961
HW

**BUILD YOUR OWN SUPER
MODELS WITH REAL
BRICKS AND CEMENT!**

Real bricks, real cement and a wide range of models to build with them. Designed to O-Gauge Scale by architects to look exactly true to life. Roofs, windows, doors, plans, full instructions—everything's complete. You can make permanent models or dismantle them and re-use bricks and other components. Kit "A"—20/6 Kit "B"—27/11

Kit "C"—53/6

CONTEMPORARY

BRICKPLAYER

WIN A PRIZE! £21.0.0 £10.10.0 £5.5.0

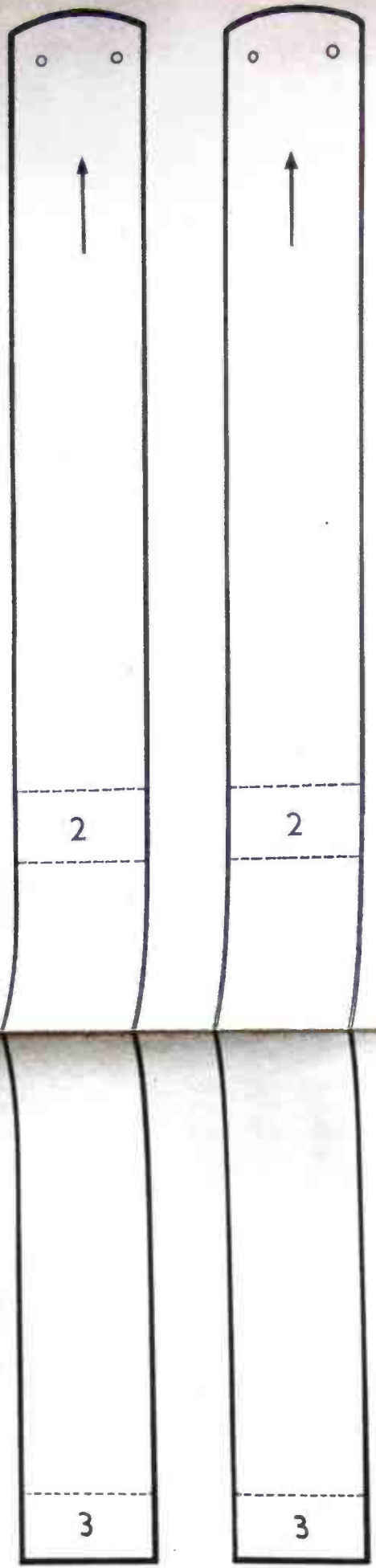
also consolation prizes are offered in the BRICKPLAYER contest

At good toyshops, hobby shops, departmental stores. Leaflet on request, together with name and address of nearest stockist if required.

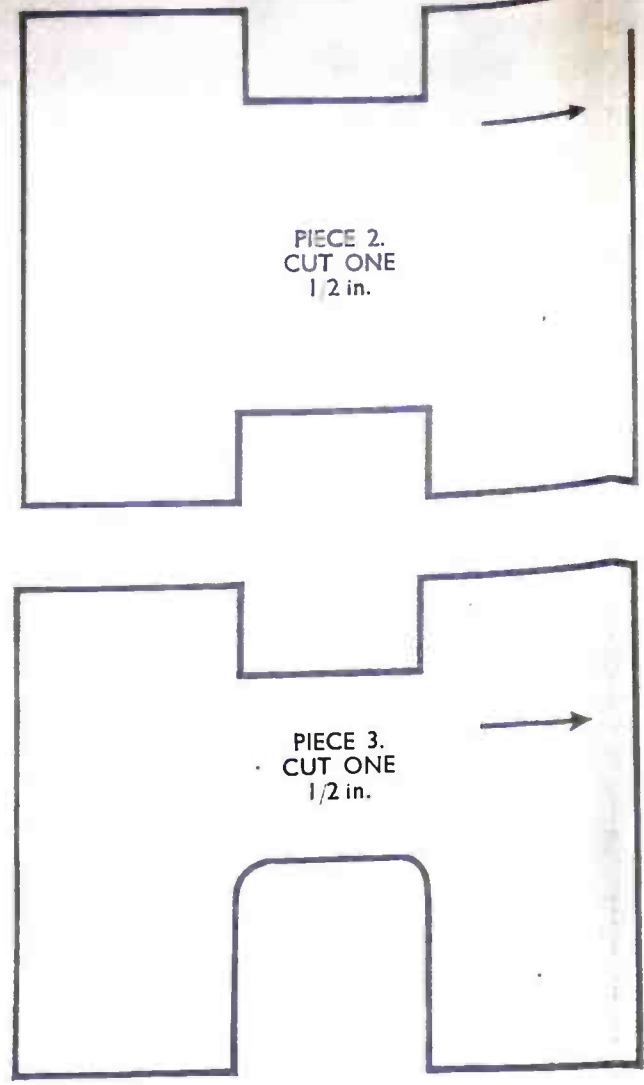
J. W. SPEAR & SONS LTD., (Dept.HW) Enfield, Middlesex



**NOVELTY TOY
JUMPING CLOWN**



PIECES 1. CUT ONE OF EACH 1/2 in.



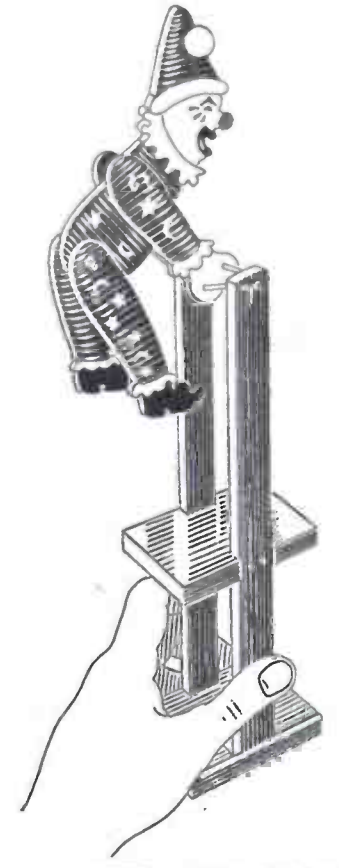
PIECE 2. CUT ONE 1/2 in.

PIECE 3. CUT ONE 1/2 in.

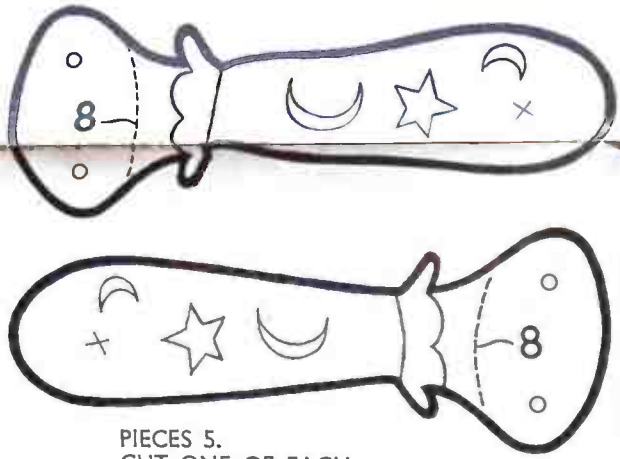


PIECE 7. CUT ONE 1/8 in. PLY.

SIZE: 12 ins. HIGH.



A KIT OF MATERIALS FOR MAKING THIS DESIGN IS SUPPLIED BY HOBBIES LIMITED, DEREHAM, NORFOLK. PRICE ON APPLICATION.

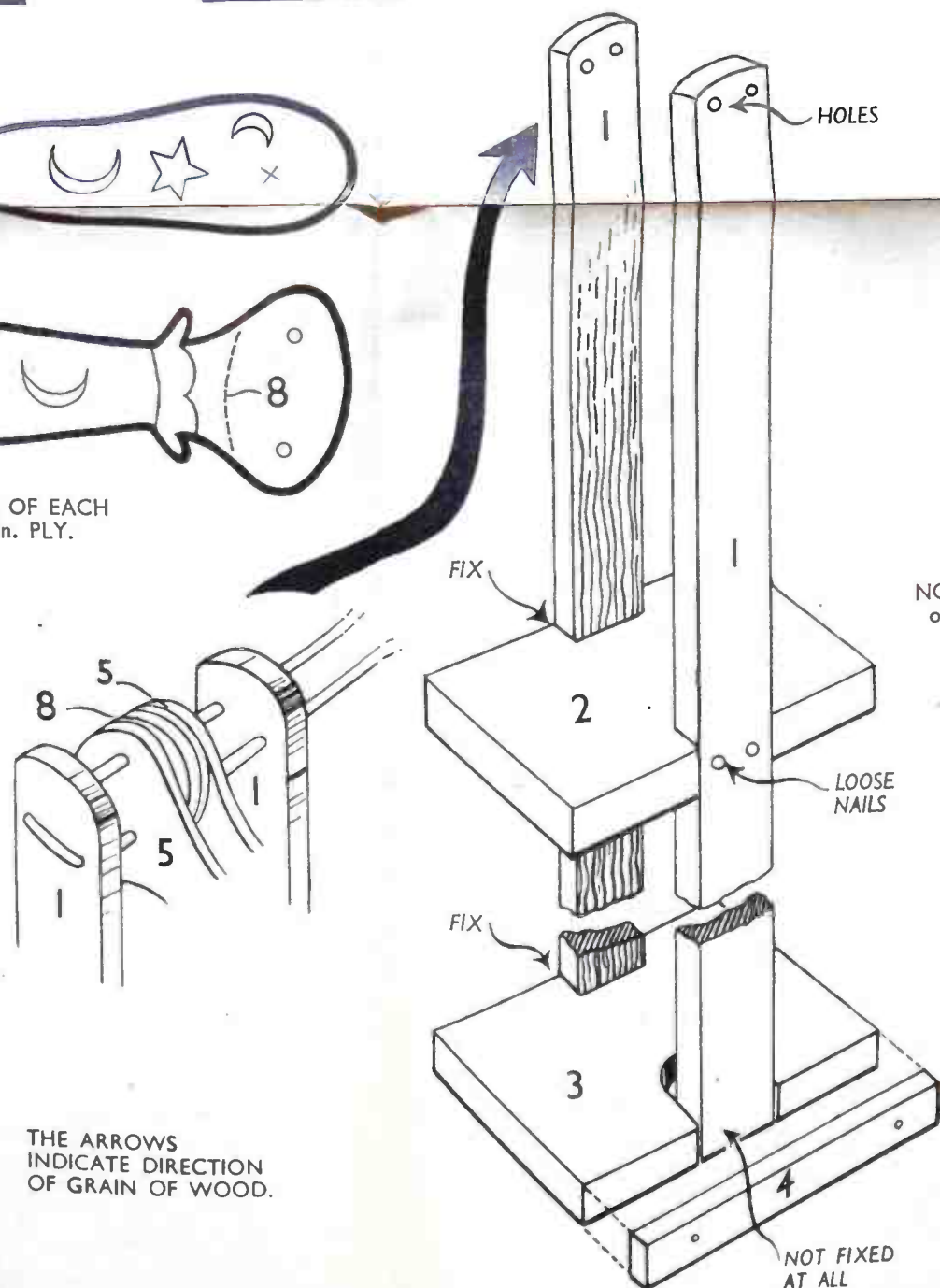


PIECES 5. CUT ONE OF EACH 1/8 in. PLY.



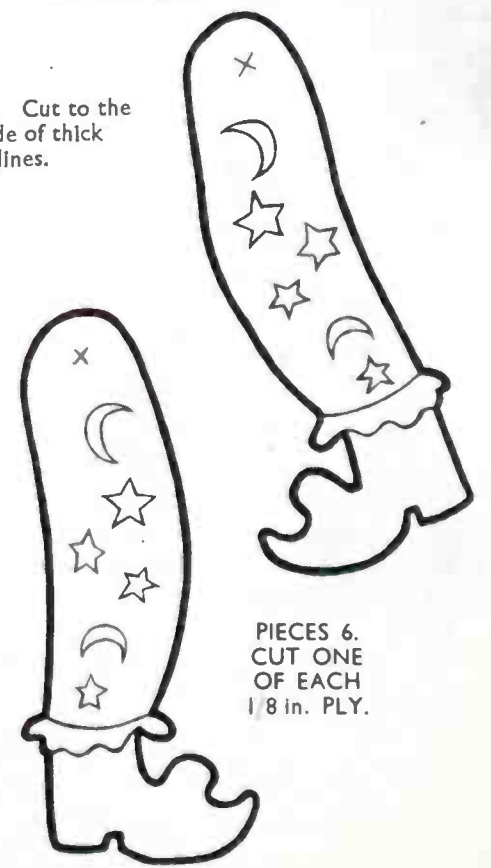
PIECES 8. CUT THREE 1/8 in. PLY. GLUE TOGETHER.

PIECE 4. CUT ONE 1/8 in. PLY.



THE ARROWS INDICATE DIRECTION OF GRAIN OF WOOD.

NOTE. Cut to the outside of thick lines.



PIECES 6. CUT ONE OF EACH 1/8 in. PLY.