

HOBBIES WEEKLY

JANUARY 1st 1958

VOL. 125

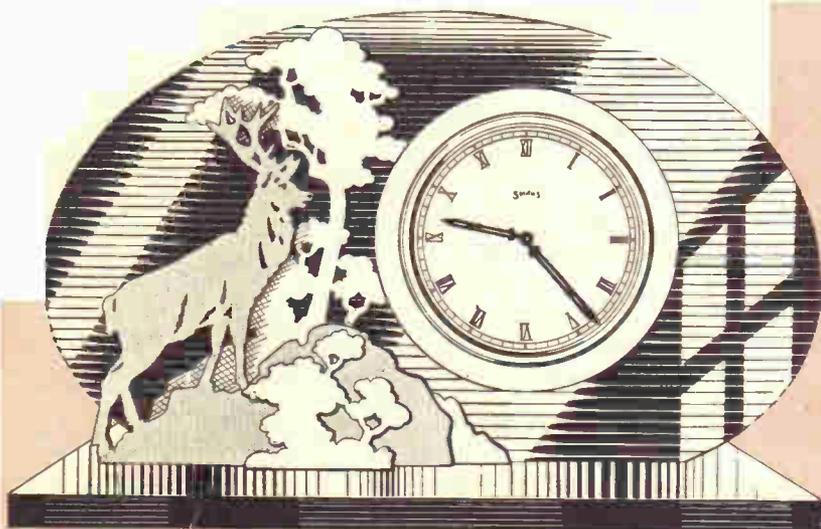
NUMBER 3244

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



A charming design to grace the home

ALL lovers of purely decorative fretwork which can be particularly applied to a practical and useful article, will welcome this design for a clock-case in which a stag scene is the prevailing motif. As an exercise in fretcutting, the subject is ideal, and the complete design makes an attractive article for the home.

The decorative overlays are added one

on top of the other, giving depth to the overall picture, and allowing the keen worker much scope to obtain a 3D effect by carving or colouring.

As can be seen from the illustration, the standard of the fretcutting for this design has to be kept high, and the outlines adhered to as closely as possible. When cutting out the stag, for instance, the interior frets on the body should be

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FREE design inside for you to make A STAG CLOCK

drilled and cut first before completing the outline. Make sure, of course, to hold the fretsaw upright and take extra care when going round sharp outlines, such as for the antlers.

If preferred, workers can omit some of the interior frets and obtain a similar effect by chip carving. Similarly for fine detail, the edges can be carved, and the tree trunk and foliage, etc., shaped.

The design is intended to incorporate a Hobbies 30-hour movement. This is an alarm, the mechanism of which is, however, not visible. This handsome movement is included with Hobbies kit, but

● Continued on page 226

FOR ALL HOME CRAFTSMEN
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4 1/2

The Cut and Shuffle Trick

DO you think you could find a card selected by a friend after the pack has been shuffled and cut? This sounds most difficult, suggesting some amazing sleight of hand, yet it is not so and with careful handling of the cards, you will find this trick quite easy to perform.

Ask your friend to shuffle the cards as thoroughly as he likes, afterwards

FIG 1



CENTRE PILE
FACE DOWN

FIG 2
DOVETAIL SHUFFLE



cutting the pack into approximately three equal heaps. If these do not appear to be of equal quantity, take a few from one of the heaps to balance. Now ask your friend to look at the top card of any heap he chooses, but without you seeing the suit or value of the card. You now instruct him to turn over the *other two* piles face upwards as shown in Fig. 1. Now ask him to place the pile with the selected card on top of one face upwards pile and finally place the remaining face upwards pile on top of both.

You now have the complete pack with the chosen card sandwiched face downwards between the two other piles face upwards, and it will be realised that approximately two-thirds of the cards in the pack are now facing upwards. You now ask for the pack to be cut in half.

The two half packs are now shuffled in the dovetail fashion, that is, the two halves are placed close together as shown in Fig. 2, the corners being rapidly flicked by the thumbs so that the two packs mingle at the corners. When closed together, the shuffle has been completed.

It will add to the confusion if you ask your friend to again cut the pack, so that the selected card appears to be

thoroughly mixed among the other cards.

Now pick up the pack from the table just as they are, and, by fanning out, you will find the chosen card.

Here is the solution.

Due to the method of shuffling adopted — and that is important — you



FIG 3
CARD AFTER
LONG RUN OF
FACE UP CARDS

will find there is a long sequence of face upwards cards somewhere in the pack. And the first face downwards card immediately following such a sequence is the chosen card!

There are occasions when this card

can be right at the top of the pack turned face downwards if the longest run of face upwards cards lies at the opposite end. In any case all you have to do is to pick out the card and present to your friend for confirmation.

This trick may require a little practice on your part to satisfy yourself that it works so easily, and to enable you to recognise and judge the longest run. There will be about thirty-four face upwards cards divided into several groups, but there is bound to be one sequence longer than the others, and as stated, the selected card is the next one as shown in Fig. 3.

As near as possible, take care that the three piles are almost identical in number at the start, although there is no necessity to count. You must also see that the pack is cut in half — that is, centrally, and given a good shuffle by the dovetail method. If your friend is not good at this, or inclined to fumble, shuffle the cards yourself. (S.H.L.)

● Continued from page 225

Making the Stag Clock

the design can, of course, be adapted to suit any available clock or barometer, provided suitable amendments are made when cutting the circle in piece 1.

Trace the various pieces from the design sheet and transfer them to their appropriate thicknesses of wood by means of carbon paper. Next cut them out with the fretsaw, and clean up well with glasspaper.

The first step in assembly is to glue the tenon in piece 1 into the slot in piece 2 (Fig. 1). Now glue piece 3 to piece 1, then piece 4 to piece 3, and finally piece 5 to piece 4. The relative positions of all these shapes are clearly indicated on the design sheet.

Piece 6, which forms the front rim of

Kit No. 3244 contains the necessary panels of wood for making the Stag Clock. The handsome 30-hour clock movement, with alarm mechanism, is fully recommended. The full kit costs 42/6 from branches or Hobbies Ltd., Dereham, Norfolk (post free)

the clock, is rounded on the outside edge only, and glued to the front of piece 1.

The two pieces 7 are glued together, and then glued to the back of piece 1 (Fig. 1). The cut-away portion of pieces 7 is at the top in order to accommodate part of the alarm mechanism.

To fix the clock, remove the plate from its back and insert the clock from the front of the design, finally replacing the back plate.

For those accomplished in finishing with paint, this design would look very attractive in colour. Alternatively, the application of stain in various degrees of shade, and a final finish of brush polish is recommended.

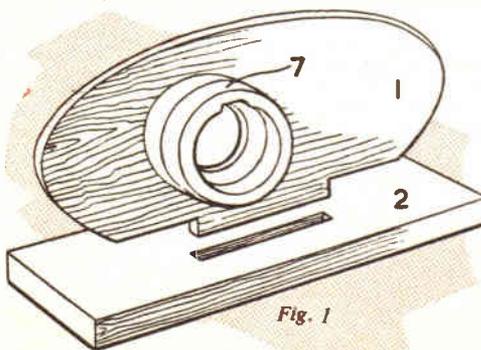


Fig. 1

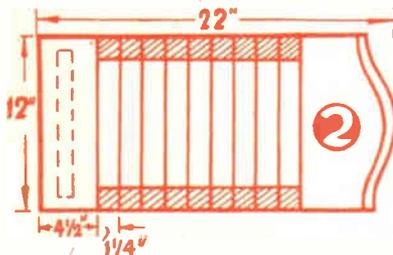
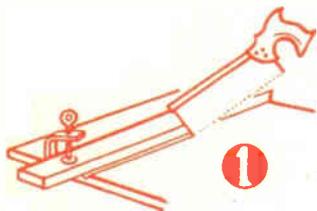
SHOVE HA'PENNY BOARD

SHOVE Ha'penny has much to recommend it as an indoor table game, and until one has actually tried his hand at it, it is difficult to appreciate the degree of skill required to slide the coin into the desired scoring space. Not only is it ideal family fun for the winter evenings, but it can prove to possess the additional claim to cheapness if it is home-made. And the making of the board is well within the scope of anyone.

Mahogany or ply

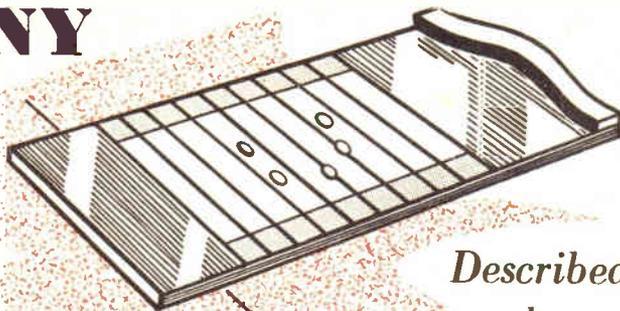
The ideal material for the board is, of course, a piece of $\frac{3}{4}$ in. or 1in. mahogany, but unless one is fortunate enough to procure an old table leaf or similar piece of timber, this is difficult to come by. An excellent board can, however, be made from $\frac{3}{4}$ in. resin bound mahogany ply obtainable from most dealers at about 4/- per square foot.

With a fine tenon saw cut a piece 12ins. by 22ins., with a good straight grain running lengthwise. Square up and clean the two sides and the base edge with fine glasspaper.



The grooves can be cut accurately and easily if the following method is adopted. Make a guide from a piece of $\frac{1}{2}$ in. wood (ply is excellent) something over 12ins. long and *exactly* $1\frac{1}{2}$ ins. wide. Cut dead true. With two 'C' clamps and suitable packing pieces to prevent damage, fix this across the board with its top edge $4\frac{1}{2}$ ins. from the base, and

*A game
all can enjoy*



*Described
by
G. Tighe*

exactly parallel to it. With this as a guide for the tenon saw, cut the first groove, using the heel and toe of the saw as necessary (Fig. 1). The groove need not be deep, nearly through the first ply is sufficient. When it is finished, remove the guide, place the saw in the groove, position the guide against it, clamp as before and cut the second groove. The other eight can be made in a similar way, making nine 'beds' in all.

Work with grain

Next, with a razor blade or sharp knife and using a steel rule clamped as a guide, cut two light 'V' grooves from the top groove to the bottom one, $1\frac{1}{2}$ ins. in from the sides to mark off the scoring spaces. Now clean the entire surface with the finest possible glasspaper wrapped round a block, working *ONLY* with the grain.

Draw a suitable curve at the top of the board with its centre $\frac{3}{4}$ in. from the top edge. Cut along this carefully with a fretsaw. Clean the inside curve of the cut-off, and either french polish or varnish lightly. Fix the cut-off piece on top of the board, overlapping $\frac{3}{4}$ in. throughout, with $\frac{3}{4}$ in. screws countersunk from beneath (Fig. 2). Turn the board over, and using the curve as a guide, cut off the waste portion. Clean up and polish all edges and the top of the curved stop.

Screw a piece of hard wood 1in. by $\frac{3}{4}$ in. by 11ins. to the underside of the board, 1in. in from the base, as a table stop.

Five brass discs

Give a final clean to the entire playing surface with the oldest finest piece of glasspaper, remove all dust and black in the scoring spaces with indian ink. Two coats will give a good matt surface, and the 'V' grooves and polished edges will prevent running and give a neat result.

The playing surface will improve with

use, and no polish or oil is necessary.

Having completed the board, the only other equipment needed will be five ha'pennies or thin brass or metal discs of the same size. It is better to buy a set of discs, as filing down ha'pennies to make them smooth running (apart from being illegal), is a long and tedious job.

The game is played by two players, each of whom takes one of the sets of small squares at the side of the board to mark his score.

In turn each player takes his five discs, lays them one at a time at the end of the board (slightly overlapping the edge) and gives it a sharp tap with the flat of the hand to send it sliding up the board.

To score, a coin must rest in a 'bed' without touching either the cross-lines or the two long upright lines. At the end of each set of five shots (and not before) a chalk mark is made in the scoring space at the side of the appropriate 'bed'.

Scoring rules

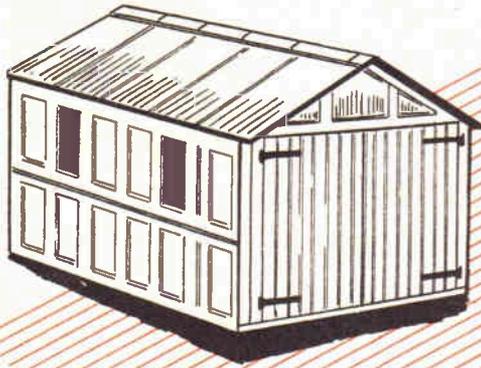
Each 'bed' has to be filled three times (i.e., twenty-seven scoring shots). If, however, a player has already filled his 'bed' with three shots and lands a fourth in that 'bed' his opponent can count it as a score for himself if he has not already got that 'bed' filled.

A hard shot which rebounds from the back rim into a scoring 'bed' is not allowed to count. If a weak shot, aimed at the first 'bed' fails to reach the first cross line, it may be replayed, but this can only be done three times with the same disc, after which the shot is forfeited.

A disc cannoning off another and landing in a scoring 'bed' counts as a score for the player, as it also does if a disc is pushed or nudged into a scoring 'bed' by a second disc. Coins going over the side of the board cannot be replayed.

The first player to fill all the 'beds' wins the game.

MODELS HELP SALES



This garage is a cement type and quite easy to make in cardboard.

READERS of this journal are mostly very handy and useful people, and they have the talent and the creative ability to make things. Making to amuse yourself is one thing, but keep your eyes open locally, and see where you can come in with an idea, and make some extra cash.

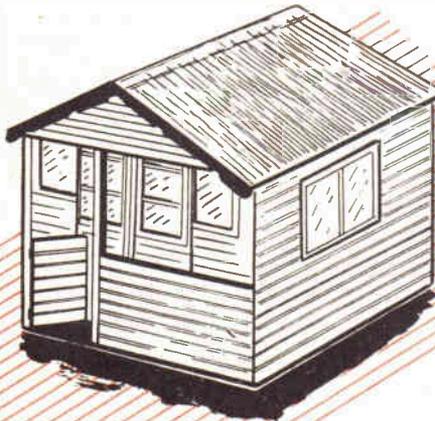
Models are coming into both advertising and shop window display more than ever. In my own case I am making quite large wooden models which are shown at exhibitions and from which orders are taken by the firm. In such cases the firm will only, perhaps, put up three large sectional buildings, and then have set out inside a range of good models in nice settings to make them attractive.

Many opportunities

It just depends where you live, but there are endless opportunities. You may have several firms near you who show sectional sheds. Some of these are shown in the open but such a firm has yet to think of a half-dozen models, clearly designed, fully detailed and just handy to put on a long table where the customers can see them. Greenhouses are not easy to make but the more common garden shed is mostly in match-boarding or shiplap. All your cut timber can be had from Hobbies and I find that Obечи is the best wood to get the correct results. Some hobby shops stock this up to 5ins. wide. I suggest this wood because you simply make the design by first scoring the board edges with a blunt knife and then scrape out with the top of a three-cornered file. In getting into the work, readers may think up better ideas than mine. Whatever you

do, have it correct, and if there are 18 board sections to the 6ft. 6ins. shed, then have 18, no less and no more.

Most structural sheds and chalets are very simple and this makes the job all the more interesting from the model angle. Supports, battens and purlins are simply model strip wood in a larger size. Where you might make a concrete slab building, then use a good stout white cardboard to make the joining strips. Such cardboard can be had at any shop where they specialise in photographic



The chalet is a simple and practical size to make up. A model 1ft square is useful for demonstration purposes.

materials, and is the matt surface required. Powder Temperra is the best painting medium, and is made by Reeves, and is a very fine powder which you mix with limited drops of water.

A firm may have a range of several chalets, but it may only be able to show one in its full dimensions. Construction is important and this is shown by the

partially cut-away design as indicated. Wood stains are important and one will find that the handy little bottles of 'Colron' wood dyes will mostly fit in with great success. Try to get shades right and experiment with it too light rather than too dark.

There is a wide range in this work and motor garages may be seen in as many as twenty styles. All of these are quite within the scope of quite the youngest Hobby enthusiast. Not all sheds are lined with the common grey felt, and the

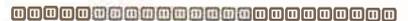
By V. Sutton

introduction of the new shades of blue, green and red can be shown by using poster paint on fine glasspaper. Cut-out tiles in quite a range of shades can be used, and these are simple to cut from stout cardboard.

Hinges and metal fittings I mostly manage with stout cardboard or thin plywood. Most shops stocking passe-partout also stock some splendid transparent material like 'Neerglass', and this is better and cheaper than glass. It is a Butterfly brand product and stocked at all Art and Craft shops.

Pricing the model

Pricing your model is difficult, but I find that any firm interested will pay quite well for a good model, and in any case, you are not working for a profit. Get a rough estimate of the cost of the material used and, perhaps, the first one will be the most expensive, because after that you will have a fair amount of material over. I built a new model of a pig-rearing shed with outer pens, and this was 3ft. 6ins. by 2ft. 9ins. Much of this material was scrap, but I did get paid 6 gns. for the model. It is a very good plan to work out the hours you spend on any particular project, as this makes a very good guide to cost. However, make up a small shed, turn it out well and try your hand at this hobby. One model shown at the County Shows last year has provided me with enough work for the next twelve months.



A Happy New Year To All Readers

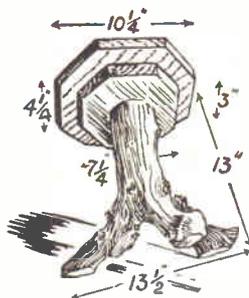
GARDEN STOOL

13ins. in height, and the leg span should be 13½ins. when trimmed. When a suitable piece is obtained, the bark should be removed.

The top of the larger main branch cutting is first cut straight. The three smaller cuttings or legs are stood upon a flat surface. They may be slightly different in length, and one will have to be blocked up in order to keep the top level.

Measure each leg about 1in. or less from the ground or just above the block under the short leg. Cut each leg at the measurement mark, and they will then stand even.

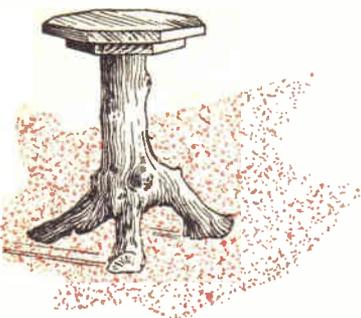
Two squares of wood to be cut into octagons are next required. One piece is 7½ins. square. Measure 2½ins. from each



corner along each side, and draw a line across each corner connecting these measurements. The four corners are sawn off, giving the octagon shape with 3ins. to each of the eight sides. This is nailed on top of the tripod.

The second piece is 10½ins. square, and the measurement from each corner is 3ins. After the corners are sawn off, the eight sides will each measure 4½ins. This larger octagon is placed on top of the smaller octagon so that the grains of the woods run in the opposite direction. Screws secure this second octagon to the smaller one and the tripod.

Two coats of a bright green paint complete the stool which will stand firmly, will hold the weight of an adult and can be easily moved. (H.M.)



A SMALL garden stool that blends in with the surroundings and yet is so useful can be made from a section of a tree branch that has the cut ends of three small branches.

If trees in the garden are removed or trimmed, such a shape is not difficult to find. The entire length should be over 13ins., so that when levelled off it will be

A Lampshade Making Tip

WHEN sewing or binding the covering material on the rings or frames for a lamp shade, difficulty is often experienced in keeping the rings in place. They have a most annoying habit of slipping down or jumping out. The trouble can be easily remedied by using spring clothes pegs to hold the rings in their proper position, while the covering material is being fitted on.

Another useful hint, worthy of notice, is when cutting the material, to allow a little extra length. When the sewing or binding is nearly finished to the rings, stop work about 2ins. short of the end, and tie off. The loose portion of the covering is then pressed flat over the opposite end and held against a light. The exact amount of surplus is then clearly seen, and can be cut off. When sewed down to the rings the whole will fit up close and show no creases, giving the shade just that extra finish that distinguishes the commercially-made article.

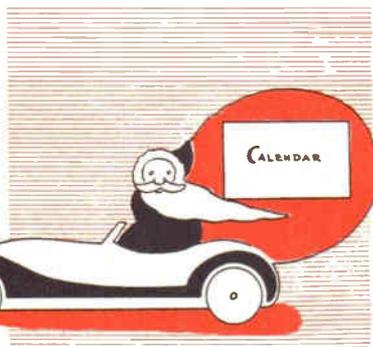
When the material is bound to the rings with thonging, and holes for admitting the passage of the thonging punched, employ the above method advocated for sewing. Then press the loose surplus down, lay on a table, and lightly run a pencil through the holes already punched through the starting end of the material, to mark their position on the flap or surplus. Punch holes where marked, and cut away surplus. When bound together, the same creaseless fit will result as above. (W.J.E.)



MAKE A CALENDAR

IF you have received a fretwork set for Christmas, and are looking for something novel and useful to cut out, it is not too late to make this attractive little calendar. The parts have been designed with a simple outline, but at the same time giving the desired effect.

The pieces should be transferred to



FULL-SIZE PATTERNS ON PAGE 239

½in. wood by means of carbon paper. Piece (D) is glued to piece (A), and the wheels are glued or screwed in position.

A strut (E) is either glued or hinged to the back, and a small calendar pad pasted to the sack as shown by the dotted lines.

There is nothing difficult in construction, but care should be taken with

cutting and painting. If you are not used to painting, it will be better to colour each part before assembly.

As a guide to colours the car should be cream, the mudguards red, the beard and moustache white (W), the face pink (P) and the hat red (R). The sack could be light brown and the wheels black.

(M.p.)

CHEMISTRY IN THE HOME

EXPERIMENTS WITH CELLULOSE

As you read this you have in your hands the subject of this article — cellulose, in the form of paper. If your shirt is cotton you are wearing cellulose, too, and your other garments almost certainly contain this form of cellulose. There is cellulose in the wood or fabric of your chair, in the flowers which may adorn your room, in the coconut matting on which you wipe your feet, in the cushions you lean on if they be kapok filled, and in your shoes-laces.

Though there are many more, just these few items show how widespread is the occurrence of cellulose. Its importance to man is obvious. He can

the copper sulphate, tip out the blackened cotton and heat it on a crucible lid. It burns away. The turning blue of the anhydrous copper sulphate indicates the formation of water from the cotton, the blackening and then burning away, the presence of carbon. Since water contains hydrogen and oxygen, it follows that cotton contains hydrogen and oxygen. Therefore cotton consists of carbon, hydrogen and oxygen.

There are many classes of chemicals which contain these three elements. Cellulose belongs to the carbohydrate group, the commonest examples of which are sugar, glucose and starch. The cellulose molecule is very large and, surprisingly, consists of many glucose molecules linked together. Indeed, it is possible to convert cellulose into glucose. One chemist even boasted he had sweetened his tea with an old shirt! By suitable treatment and purification he did in fact convert his cotton shirt into glucose.

the solution turning a red litmus paper purple.

A common test for glucose is to warm its solution with some Fehling's solution, when a reddish precipitate of cuprous oxide forms if glucose be present. Take a little of the neutralised liquid and boil it with a few drops of Fehling's solution in a test tube. The reddish precipitate appears, showing that the cellulose has broken down into glucose and that a certain waggish chemist made no idle boast! But do not try your product in your tea, for Glauber's salt is also present and the glucose would have to be extracted and purified by special methods.

By acting on paper with a diluted sulphuric acid we have a quite different result. Pour 20 c.c. of water into a beaker and stand the vessel in a pan of

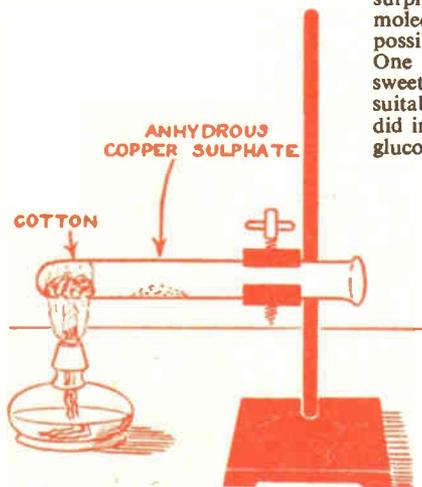


Fig. 1—Analysing cotton

afford to be lavish with it, for, unlike minerals, it is not an expendable raw material. Nature keeps on manufacturing it for us as trees, grasses, cotton and flax plants, straw, jute, hemp and other vegetable matter.

What is the chemical nature of cellulose? Arrange a dry test tube as shown in Fig. 1. In the closed end place some cotton thread or cotton wool which has been dried in the oven to remove adhering moisture. About 1 in. farther up the tube place a little anhydrous copper sulphate.

Heat the closed end. The cotton blackens and the anhydrous copper sulphate turns blue. Remove carefully

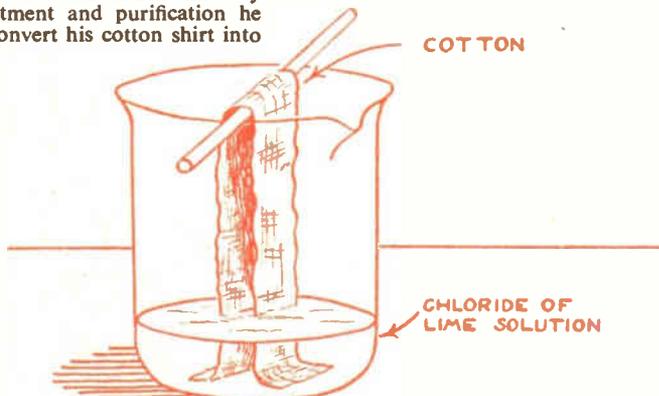


Fig. 2—Why does cotton rot?

There is no need for us to go as far as this, but the breakdown of cellulose into glucose can readily be shown. Tear up some filter paper into small shreds, put it in a dry test tube and, stirring constantly, add strong sulphuric acid drop by drop. Should you accidentally get any of the acid on your fingers, flush it off at once with water and dab on a paste of sodium bicarbonate. The cellulose dissolves in the acid. Pour this into several times its volume of cold water in a beaker, boil the mixture for thirty minutes or so, replacing water lost by evaporation, and then stir in sodium hydroxide little by little until the acid has been neutralised — shown by

cold water. Very slowly run in 40 c.c. of strong sulphuric acid, constantly stirring with a glass rod. If the beaker grows warm, halt the acid addition until it has again become cold, otherwise the acid will 'spit' when added to the warm liquid. It is best to wear goggles while doing this dilution.

Take a piece of filter paper, immerse it in the acid and leave it for a quarter of a minute. Lift it out with a glass rod and drop it into a large volume of cold water. Wash it in several changes of water and then hang it up to dry. You will now find the paper has become tougher and stronger. This is parchment paper, or

● Continued on page 231

WINTER PHOTOGRAPHY



A snow scene in the garden showing how the bare shrubs are transformed.

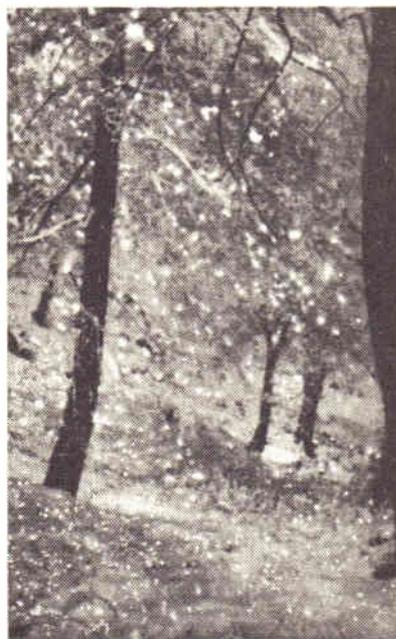
proportion of the sunlight which does not reflect back on to our photographic negative. In winter, when snow makes a white carpet, there are layers of snow on trees and shrubs, and there is a tendency for all this brightness to reflect from one part to another, multiplying the light values.

If we would normally expose $1/50$ second at $f11$ for our summer picture, we should halve this for the snow picture, to be precise, $1/100$ second, with the same aperture, or $1/50$ second with the stop decreased to $f16$.

We have also said that cross lighting should be used. This means that we choose a viewpoint where the sun is shining at right angles to the camera position, producing two effects. Interesting shadows are not only thrown across the picture, but this oblique lighting reveals the texture of the snow by emphasising all the slight undulations of the surface, adding touches of shadow here and there.

You may assert that snow is white in colour, and, up to a point, you are correct, but we are considering this material when reflecting the glow of weak winter sunlight. Without cross lighting you would produce only a dead white foreground, lacking form and detail, so you must wait for the sun to bring the right conditions and the shadows.

You will find that the best time for perfect results is in the early morning or late afternoon, when the shadows are



The falling snow has been faked here by preparing a special negative.

THERE is no reason why your photography should cease during winter for this is the season when a clothing of snow gives an entirely different appearance from the views you know so well. Pictures abound in your own garden, the parks, streams and ponds, and if you wish, you can always add a little falling snow. Keen frosts bring frozen grasses, cobwebs, skating, tobogganing and the usual activities worthy of the photographer's attention, but unbroken snow should be made interesting by a line of tracks leading to the main subject.

Unfortunately, many find that snow photography is disappointing, because of mediocre results, but this can be due to the lack of full appreciation of the technicalities involved. In brief, the secret is short exposures with cross sunlight.

To support this statement, let us imagine the effect of summer and winter conditions on one particular subject. We are in the woods and propose taking a photograph of a picturesque rustic bridge. It is surrounded by trees fully clothed with green leaves, shrubs and the like, while grass carpets the foreground. It must be realised that all this surrounding vegetation absorbs a great

longest, and, while cross lighting is essential, you will also find that back lighting is equally good, but do not forget that a lenshood is necessary in such circumstances.

The delicate gradations of tones will be missed if you overdevelop the negative after taking careful precautions as mentioned, for these fine shadows composing the texture will become clogged, making it difficult to obtain a correct rendering.

Should you use a filter? What kind of film is the best for snow scenes? These are two important questions requiring an answer.

You may not have noticed it before, but those shadows in the snow incline to blue, and if you use a yellow filter you will only make them darker, and increase the contrast. You will be well advised to use no filter whatever. And oddly enough, any orthochromatic film will render snow tones quite faithfully and beautifully, Selochrome films being quite suitable for this work.

Another odd feature about snow photography, is that the scenes are always changing, perhaps due to wind changes or heavy drifting. During the same winter, the same subject can take

SNOW
NEGATIVE



CLEAR
CELLULOID

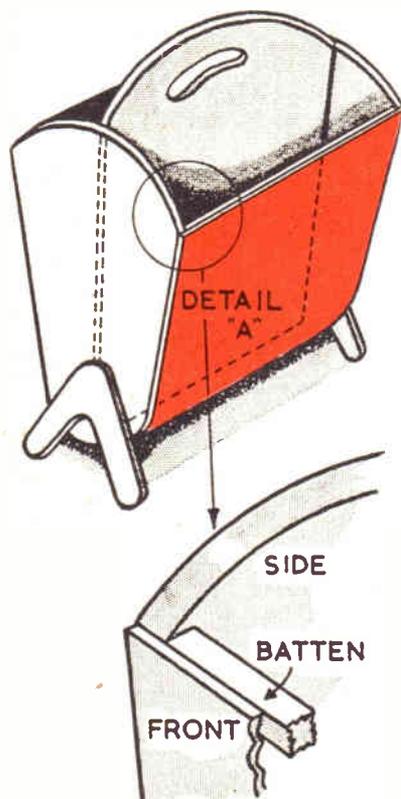


TRUE
NEGATIVE



Completed in a few hours

Graceful Magazine Rack



GRACEFUL curves, offset by angular legs, make this magazine rack a 'must' for the modern-day home. An afternoon will see it completed.

The two side and leg pieces and the central dividing piece, are made of $\frac{3}{8}$ in. plywood. The continuous front piece is made of 3 mm. plywood.

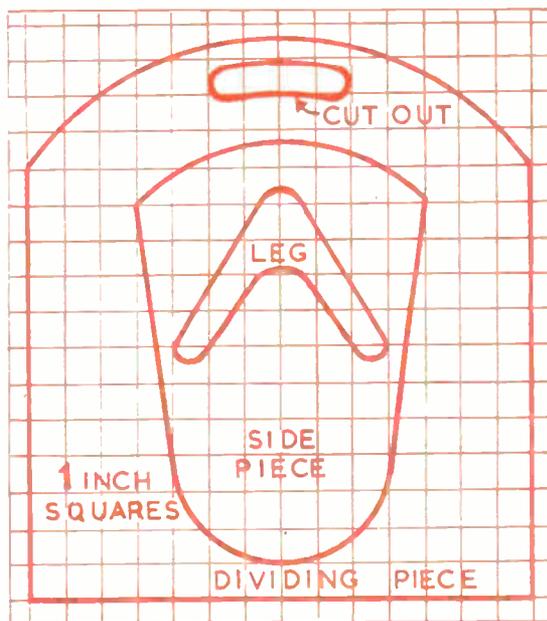
Cut out the shapes as indicated on the squared diagram. Glasspaper well all the leading edges. Cut out the holdhole with a fretsaw. The 3 mm. plywood is $14\frac{1}{2}$ ins. wide and 25 ins. long — the latter allows for trimming.

Nail with panel pins and augment with tube glue, the 3 mm. plywood all around the leading edges of the side pieces, starting at the bottom arc and working outwards and upwards towards

the top arc. To support the top edge of the 3 mm. plywood, fix a length of 1 in. square battenning between the side pieces, holding it by screwing through from the outside of the side pieces (see detail A).

Hold the dividing piece centrally in place with $\frac{3}{8}$ in. panel pins, nailed through from the outside of the side pieces on a pencilled vertical line. The leg units are screwed into place with $\frac{3}{8}$ in. counter-sunk-head screws.

When painting, do the inside of the compartment before fixing the dividing piece, as it is difficult to do after the unit is completely finished. (E.C.)



Continued from page 232

Winter Photography

on a different appearance, and trees assume an outline of snow on different sides, depending on wind direction at the time of the fall.

It is one thing taking snow pictures with the aid of soft sunlight, but quite another when the snow is actually coming down. At these times the lighting conditions are usually at their worst, so the easiest way is to resort to a little trickery.

We need a piece of clear celluloid or glass for our 'snow' negative, as large as

the original, yet small enough to fit in the enlarger carrier. This material is sprayed with opaque colour, such as red ink or indian ink, or it can be spattered to produce a covering of tiny dots. Damp a toothbrush with the colour, releasing surplus — which will make large blobs — on to a sheet of newspaper, by drawing a nail towards you across the tops of the bristles. This action, when applied to the clear celluloid, will make a finely spotted negative suggestive of snowflakes in the finished picture.

If you wish to produce another negative with larger spots, the two may be combined for the printing stage. In the actual printing the normal negative is laid in the carrier emulsion side downwards, with the snow negative on top. Note that it may be necessary to sandwich one or more pieces of clear celluloid between the two to produce a blurred effect of falling snow, but this depends on the aperture used for enlarging. Smaller stops will give a greater depth of focus with the enlarger. Printing proceeds as usual, but to make the snow realistic, darker printing will be necessary, or the background will require to be a little darker in tone. (S.H.L.)



Stamp Collector's Corner



STAMPEVISED HOMONYMS

WORDS similar in sound but different in meaning are often confusing. The significance of many of these 'Homonyms' may be recorded in the stamp album.

Here are some examples:

Ascent: a climbing up — New Zealand's 1½d. Health stamp of 1954 shows a young climber at the foot of Mt. Everest (3d.).

Assent: to agree — Great Britain, 1946, Victory, 3d., violet — Peace Symbols (3d.).

Bridal: pertaining to marriage — Aden, 1949, Royal Silver Wedding, 1½ anna, scarlet (5d. mint).

Bridle: headgear of harness — Hungary, 1951, 20 filler, purple and green — Horse and Foal (3d. used).

Cereal: an edible grain — Argentine, 1936, 25 cent, red — Sowing Grain (2d.).

Serial: relating to a series — Malta, 4½d. stamp of new series, now on sale (8d. used).



THE INSECT WORLD

YOU can keep an insect or plant alive by imitating very closely its natural habits and environment. For example, feed the caterpillar with some of the plant on which you found it. When it has changed into a butterfly, provide it with sweetened water which is the nearest you can get to nectar produced by the flowers.

You will be rewarded by seeing it unroll its long tongue, and with care, you will have it eating out of your hand by holding the butterfly in the hollow of your hand, and placing a little sweetened water on one of your fingers.



An easy way to secure Nuts

THERE are many ways of locking nuts on to the screw and the method depicted here, although not at all new, is very efficient, yet is quite easy to make.

The idea is to make a saw-cut half way through the nut and then to clamp that portion down, so that the threads are bound together. A lock-nut of this type cannot be made on the very smallest nuts, but so long as there is room to drill a hole near the edge of the nut, it may be used.

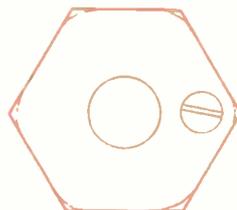
Drill a hole in the widest part of the nut, that is near one of the corners, and make it as large as you can without weakening the nut. With a hacksaw, cut half way through the nut as shown, but

do not go any further, as this will seriously weaken the nut.

Now we can fit the locking screw — first tap the bottom half of the hole we have just drilled in the edge of the nut, then open out the top half just sufficient to enable the locking screw to slip in easily. This is best done with a drill slightly larger than the tapped portion.

All that remains is to fit a locking screw with a smallish cheesehead, and when screwed down tightly, it should not be longer than the thickness of the nut.

A nut with a carefully fitted locking screw of this type should withstand a considerable amount of vibration and hold tight.





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PRODUCTS NOTED

OF special interest to railway modellers is the new range of enamels just issued by the Humber Oil Co. Ltd., of Marfleet, Hull. Twenty colours of correct railway shades are available in Humbrol model railway enamel on a semi-matt basis, providing a more realistic finish for model railway stock than that obtainable with high-gloss paint. The shades are authentic and British Railways have helped considerably in providing correct shade detail. The jars, No. 1 size ($\frac{1}{4}$ oz.), are 1/- each.

Model Painting Kit

THE new Humbrol Art Oil Plastic Enamel Painting Kit has been introduced to provide a complete colour range for the modeller or handcraft worker. The kit includes 7 intermixable colours, thinners, tube of flattening agent (for producing matt finishes), brush, 5 mixing palettes and blending chart. It is suitable for painting plastic, glass, woodwork, pottery, metal, etc. The kit retails (in Great Britain only) at 8/6.

Stripmaster Screwdriver

INCORPORATED in the handle of the Stripmaster Screwdriver is a unique wire stripper which severs and strips insulation from all types of flex in one easy action. An invaluable tool for the handyman, electrician, radio mechanic, etc., this screwdriver, which is 6ins. overall, retails at 3/6.

NEW MOULDS

Tom and Jerry, the amiable cat and mouse combination from M.G.M., are two new characters introduced into the Sculptorcraft flexible rubber mould range, for modelling in plaster.



WorldRadioHistory

Cling

CLING, a self-adhesive draught excluder, has many other uses for the handyman. Applied to the back of rugs, this plastic foam strip prevents slip.



while the motorist will appreciate its cushioning effect in the elimination of rattles in the car windscreen, bonnet, etc. Cling is sold in 20ft. rolls, price 3/11.

Sprayflock
SPRAYFLOCK, a new handicraft, has been introduced by Seamer Products (Sculptorcraft) Ltd. An interesting craft, it can be used to good effect for decorating such articles as doilies, chair backs, table mats, cushion covers, blouses, etc., and for all forms of embroidery and appliqué work. Included in the set are stencils for set patterns, but your own designs can be originated and used. An adhesive solution is brushed on to the material to

be decorated, and on to this flock of various colours are sprayed. All necessary materials are in the set, including sample cloths for making into small mats.



STRIPMASTER No. 636

More Power for the Home Handyman

WOLF ELECTRIC TOOLS LTD., of Pioneer Works, Hanger Lane, London, W.5, have just introduced a new home power equipment range, the 'Quartermaster'.

Based on a high speed power unit which is claimed to be the most powerful handyman model ever offered, this range of powered tools can be used for all the recognised requirements such as sawing, sanding, buffing, planing, etc., and among the extensive range of accessories is an interesting time-saving attachment for the gardener — a cultivator and weeder which can also be used for furrowing, earthing-up, etc.

The workmanship and materials of the 'Quartermaster' high-speed power unit, which retails at £9 9s., are unconditionally guaranteed by the makers from whom fully illustrated literature covering the complete 'Quartermaster' range can be obtained, or from tool merchants and electrical dealers.

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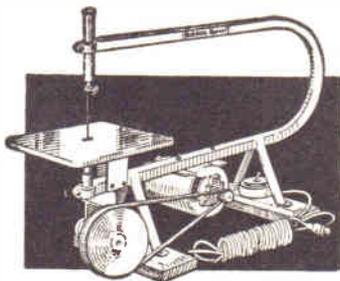
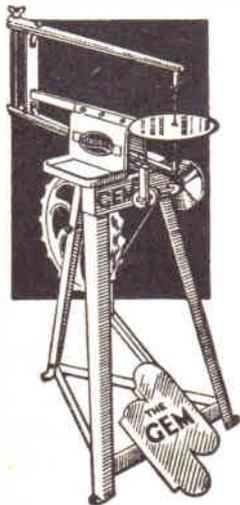
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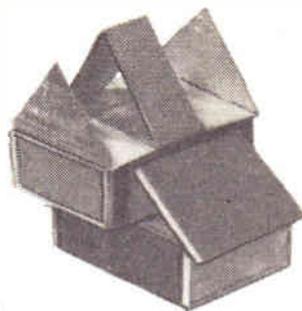
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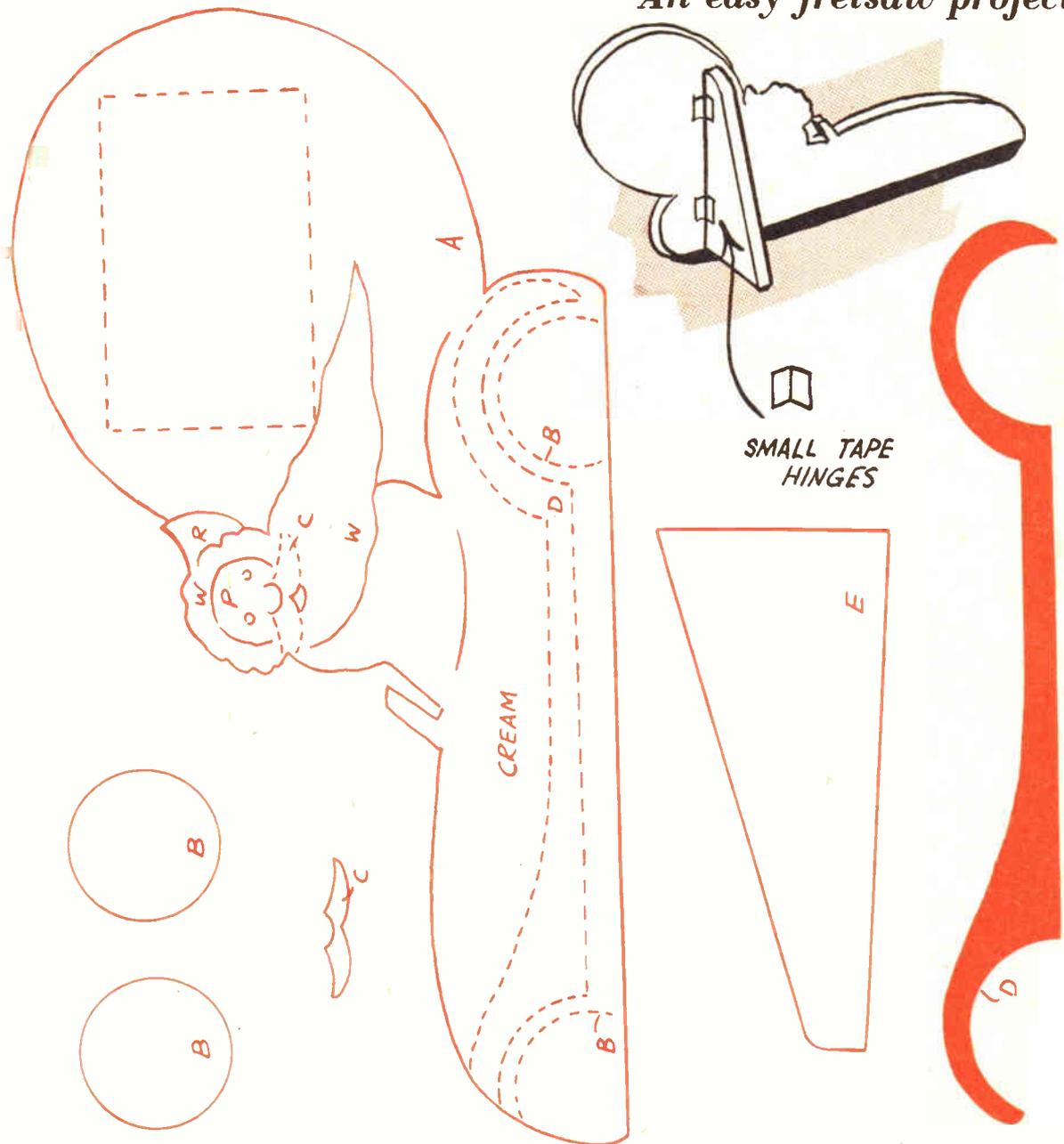


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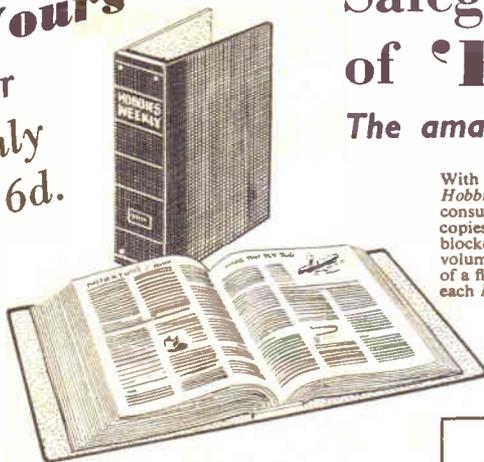
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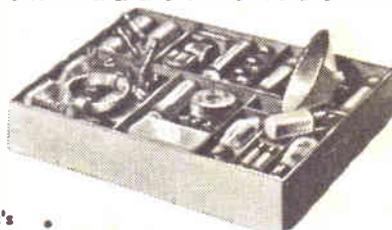
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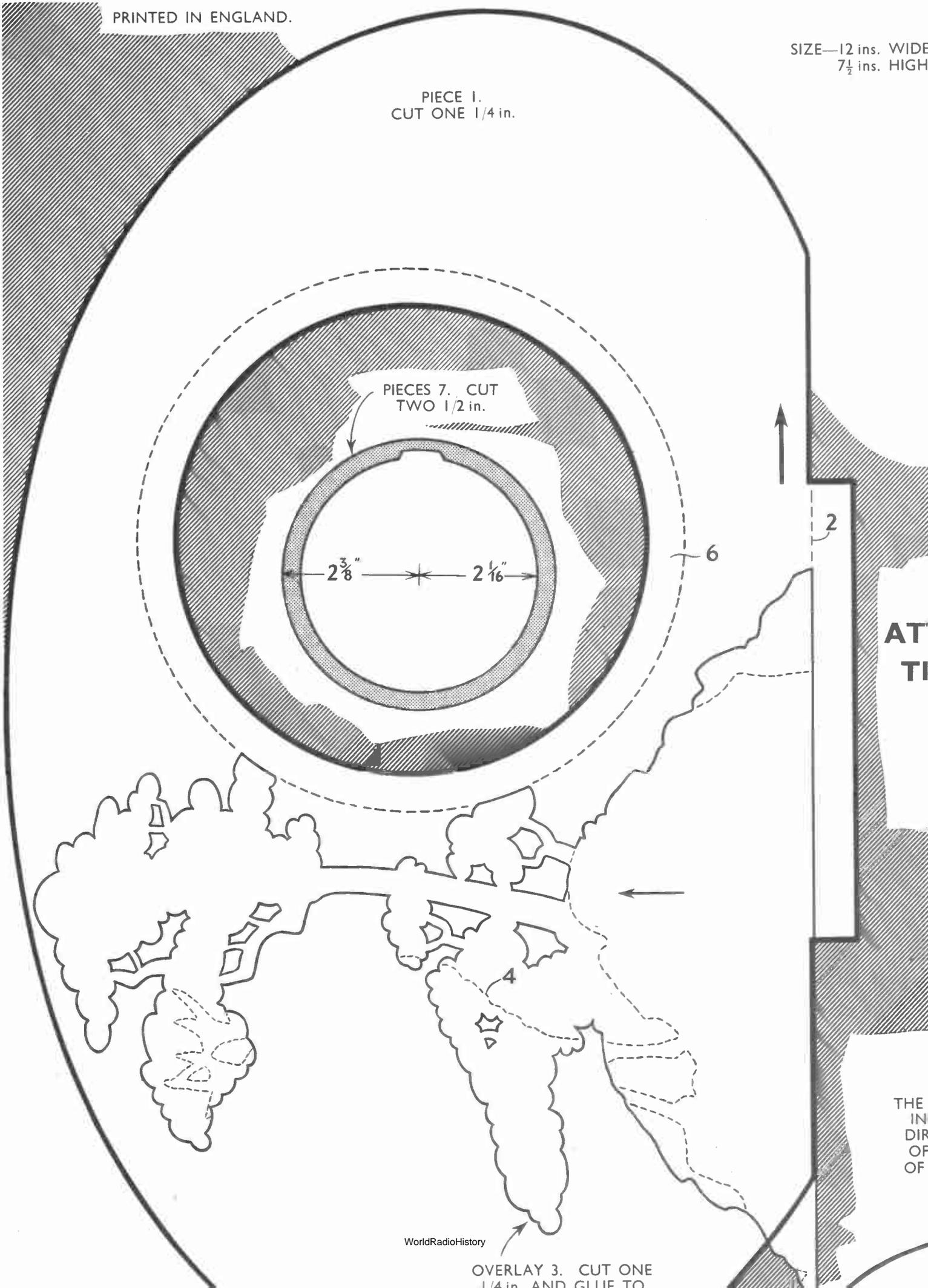
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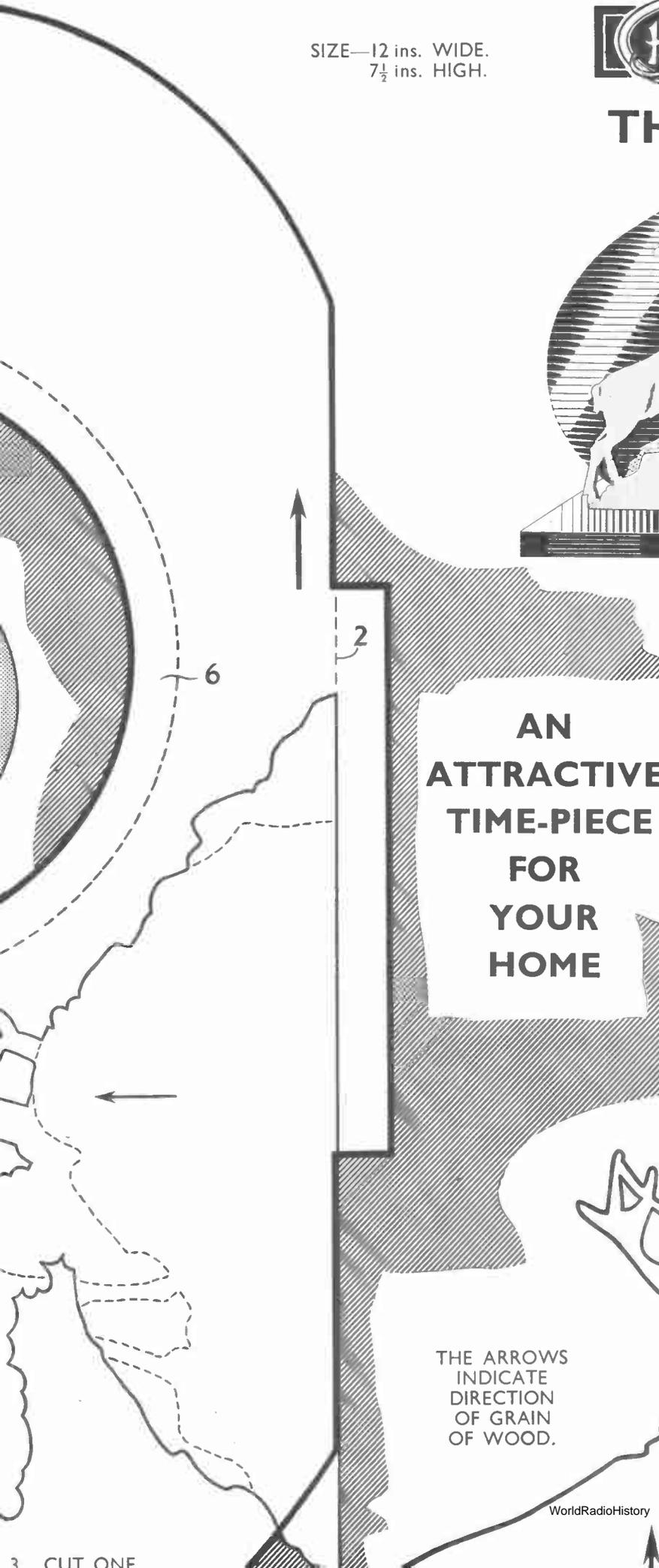
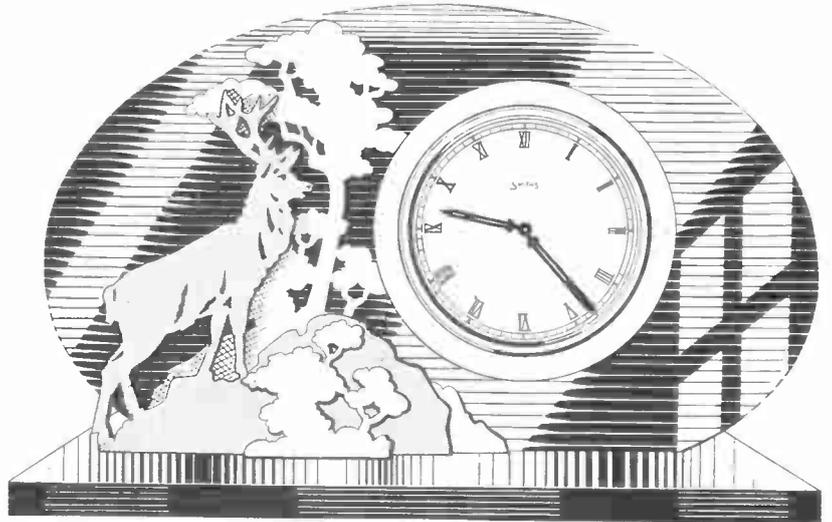
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strength. Clean to use, non-staining. In
polythene bottle with spreader 2/6.

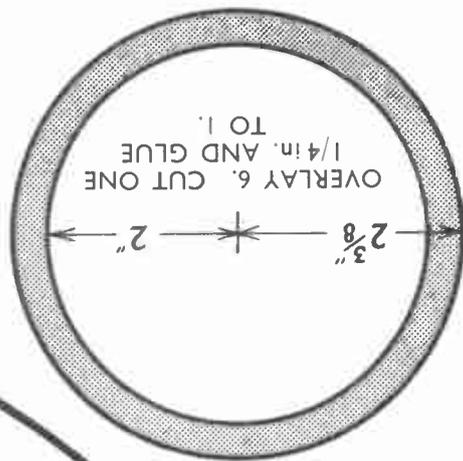
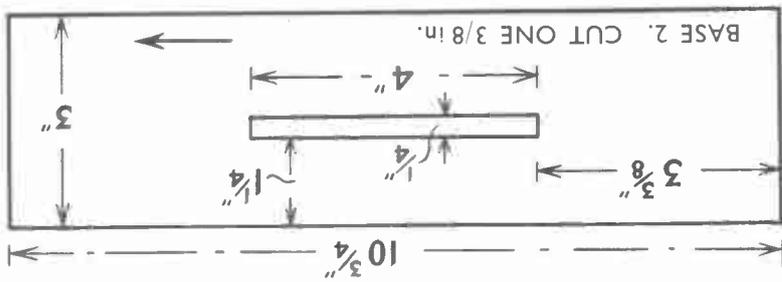
AVAILABLE FROM ALL BRANCHES OF HOBBIES LTD.



OVERLAY 5. CUT
ONE 1/4 in. GLUE TO 4.

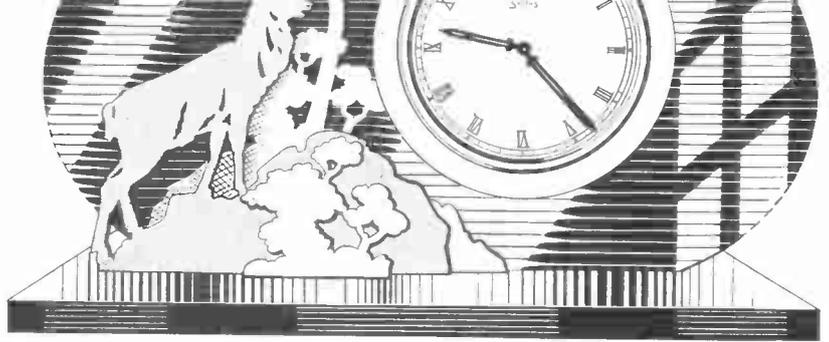
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OVERLAY 3. CUT ONE
1/4 in. AND GLUE TO
PIECE 1 IN THIS
POSITION.

PIECES 7. CUT
TWO 1/2 in.



**AN
ATTRACTIVE
TIME-PIECE
FOR
YOUR
HOME**

PANELS OF WOOD REQUIRED FOR THIS DESIGN

**ONE K4 ONE H4 ONE ND8
ONE LD6**

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



**Use
Croid POLYSTIK**

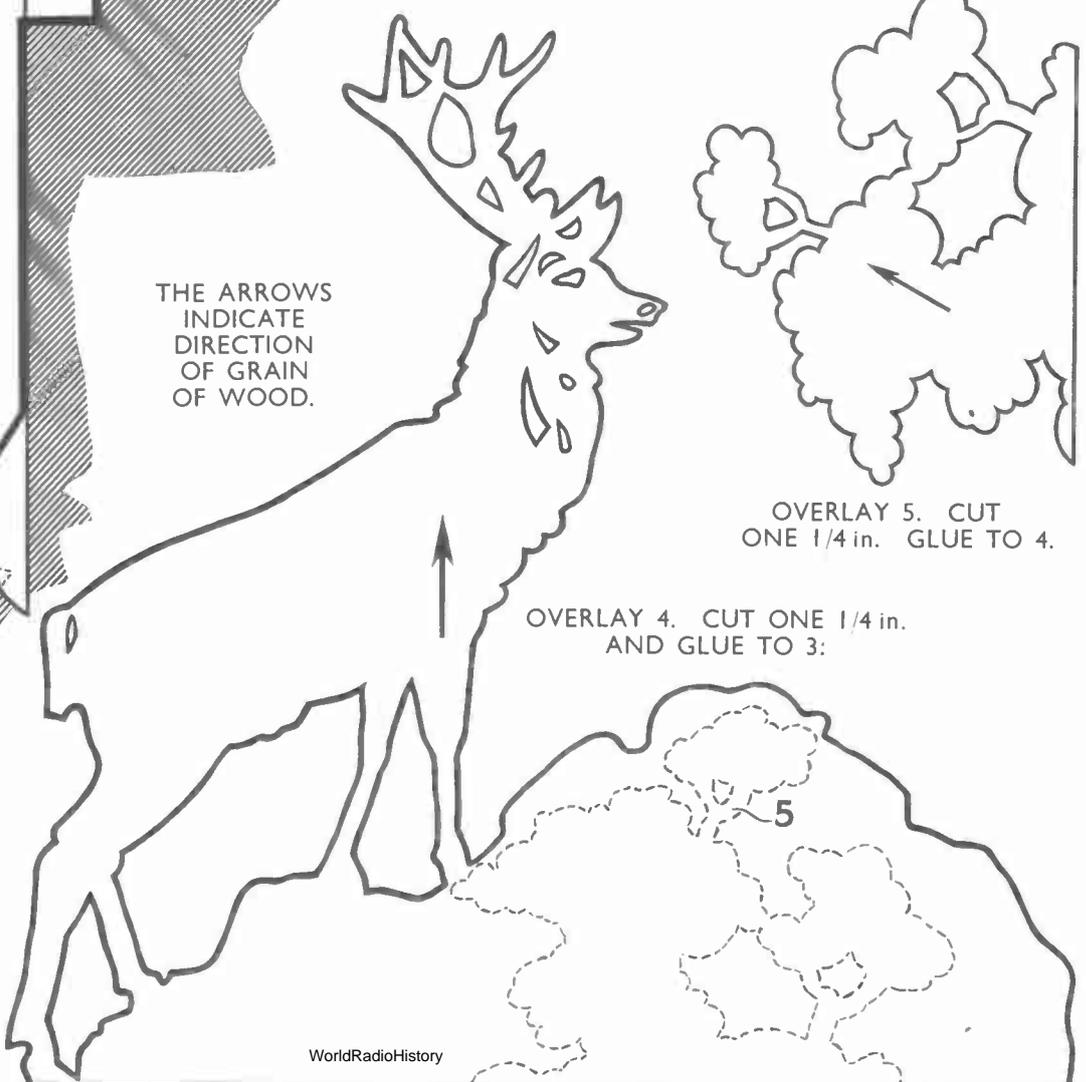
IT'S DESIGNED FOR THE JOB

A cold liquid PVA adhesive combining instant grip with immense and lasting strength. Clean to use, non-staining. In polythene bottle with spreader 2/6. AVAILABLE FROM ALL BRANCHES OF HOBBIES LTD.



3. CUT ONE AND GLUE TO 1 IN THIS POSITION.

THE ARROWS INDICATE DIRECTION OF GRAIN OF WOOD.



OVERLAY 5. CUT ONE 1/4 in. GLUE TO 4.

OVERLAY 4. CUT ONE 1/4 in. AND GLUE TO 3: