

HOBBIES WEEKLY

IN THIS ISSUE

	Page
A Garden Seat and Shelter in Rustic Wood	385
How to Measure the Height of a Tree	386
Wall Plaques from Snapshots	387
An Introduction to Leathercraft	388
A Lady's Powder Box	390
Replacing Water-Tap Washers	390
Experiments with Phosphoric Acid	391
Noah's Ark Pattern Sheet	392
Save Expense with Improvised Cramps	394
Replies of Interest	396
Patterns for the Powder Box	399



MARCH 23rd 1955

VOL. 119

NUMBER 3099

For the warmer days—

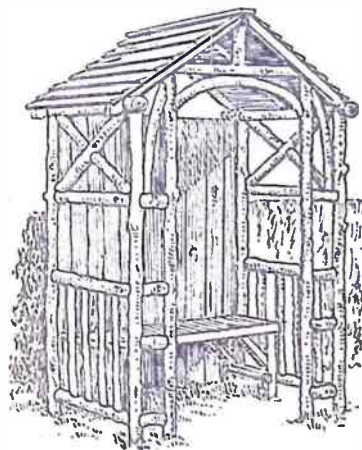


Fig. 1

A GARDEN SEAT AND SHELTER IN RUSTIC WOOD

given for the construction of the seat. Most of the essential measurements are given in Figs. 2 and 3, but these need not be adhered to very strictly, certain alterations being made to suit the lengths of wood available.

Use Deal for Rafters

The only cut and planed-up timber is in the six rafters, the three roof collars, the ridge piece and the capping. These are of deal. The rafters and collars could be about 2ins. by 1½ins. in cross-section, while the ridge and capping might be 3ins. by 1in. The rustic upright posts in the front and rear could be about 3ins. diameter and the rest of small stuff about 2ins. or 1½ins.

The six main uprights should go well into the ground, and be rammed down to keep them firm. The tops of the four corner posts must be chiselled to a hollow curve, so that the rustic plates

bearing the rafters may be securely held and nailed.

Cut the two posts A to the length shown, allowing for the length to go into the ground. Next cut the rafters and collars. The former will be 40ins. long and the collars 44ins. long. As the roof slope is 30 degrees it will be quite an easy job to mark and trim the ends with the aid of a 60- and 30-degree set square. Nail the collars at the back of the rafters as in Fig. 3, after the ridge has been nailed to the rafters.

The capping will be attached after the roof boarding has been nailed on. Here it might be advised that plain ½in. boarding with roofing felt laid over may take the place of the feather-edge boarding shown in Fig. 4. This diagram also shows how the top plate is notched out to take the lower ends of the rafters and how the smaller members are let into the uprights. They are secured, with long nails driven in from the side.

THE best timber to use for rustic work such as the garden shelter described here is larch or hazel, but care must be taken not to cut the trees while the sap is rising. The usual time for felling the trees is from October to March. If the wood is to be trimmed of bark, then a coat of preservative should be applied after erection.

In Fig. 1 the general appearance of the shelter may be gained, while Figs. 2 and 3 show the front and side views. Details of the joints, etc., are given in Fig. 4, and in Fig. 5 a suggestion is

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

*For Modellers, Fretworkers
and Home Craftsmen*

4^D

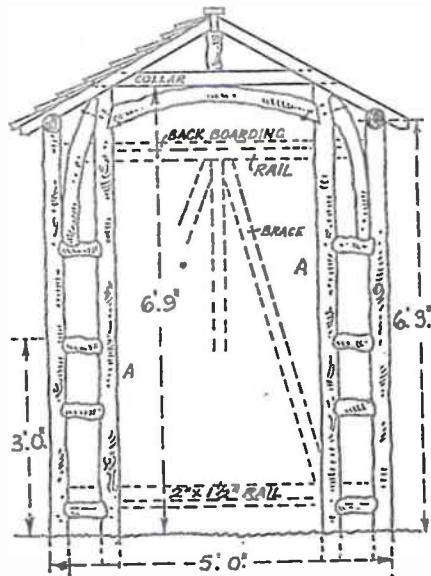


Fig. 2

The uprights are connected by first trimming and nailing in the crossmembers and afterwards filling in the smaller diameter uprights and those running diagonally above.

If it is desired to cover in the back as a shelter against wind, then two cross-rails of planed deal stiffened with one centre upright rail and two diagonals could be added. These five rails could

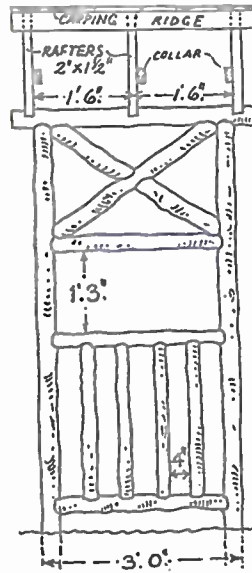


Fig. 3

then be covered with tongued and grooved matchboarding, nailed on. The whole rails and boarding would greatly stiffen up the construction of the shelter.

A coat of wood preservative should be given outside, while paint might be preferred inside.

A seat of light wood construction could be formed to go inside the shelter, and in Fig. 5 a suggestion is given for

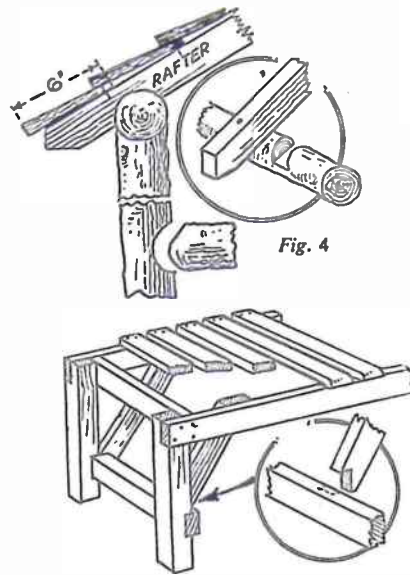


Fig. 4

Fig. 5

its construction. Two end frames are made with notched rails to the legs and two long front and back rails also let into the legs. Angle braces are then nailed to the long rails and to the lower frame rails, making a firm framework which is finally covered with slats as shown. All square edges should be rounded off before painting or otherwise finishing. (S.W.C.)

USEFUL INFORMATION

How to Measure the Height of a Tree

DO you ever stand and gaze at a magnificent tall tree and wonder what its height is? It is quite easy to measure provided the tree stands in an open space and the sun is shining.

Choose a sunny day; then all you have to do is to measure the shadow of the tree. Twice during the day it will be the same length as the height of the tree.

To find one of these times put a short stick in the ground—a cricket stump will do—and measure it at intervals until the shadow of the stump is exactly the same length as its height. Then measure the length of the shadow of the tree, and the figure will be its height. (G.P.)



You can make attractive Wall Plaques from Snapshots

By R. Dixon

ALL plaques are becoming increasingly popular for home decoration, and attractive examples can be made at small cost from holiday snapshots. Such plaques will have a much greater sentimental appeal than ordinary commercial articles, and here are particulars showing how a variety of novel effects can be obtained.

In most cases contact prints are too small for making into wall plaques, but workers who cannot make their own enlargements can have these done by any photographic dealer or chemist who handles developing and printing. Half-plate-size prints will be found large

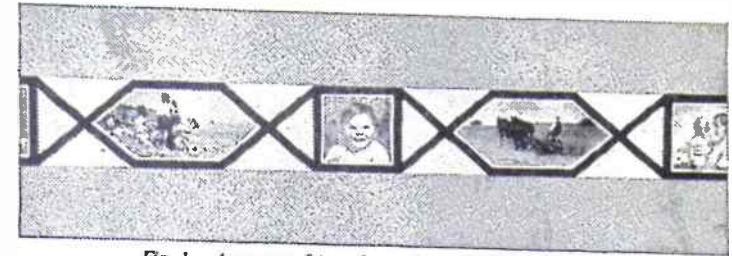


Fig. 1—A nursery frieze from photographs

and this does not require any great artistic skill if one knows the secret of how to do it. Our illustration (Fig. 3) shows such a sketch made from the same

chemists.) The picture was left in this solution until it appeared quite opaque when held up to the light. It was then transferred to a solution of 2ozs. hypo in 10ozs. water. The blue colour quickly disappeared, leaving the pen drawing with no trace of the original photograph. Finally the drawing was rinsed and hung up to dry, when it was ready for mounting in any form required. A simple and effective method is to frame it by the *passé partout* method.

Fig. 2 (left)—Attractive wall plaque made by sticking a photograph on to a tea plate



Photographic Barometer

For this an ordinary photograph is

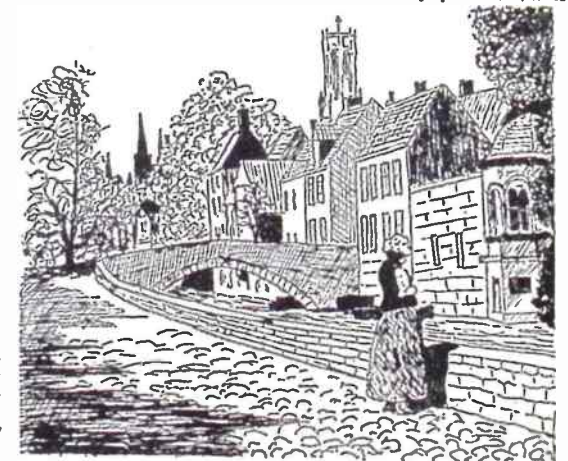


Fig. 3 (right)—A pen and ink sketch, made by inking over a photograph and then bleaching

enough for most purposes and these are not expensive. In some cases, such as a nursery frieze (see Fig. 1) post-card enlargements are quite suitable.

Wall Plates

The simplest form of plaque to make is a wall plate. For this all the worker has to do is to obtain a tea plate with some simple decoration round the edge and stick a suitable photograph in the centre. Although so simple to make, the result can be very attractive, as our illustration (Fig. 2) shows.

Pen and Ink Sketches

A more novel treatment is to turn the photograph into a pen and ink sketch,

photograph as used for the ornamental plate. The photograph was first made on matt paper. Then I went over the picture with waterproof indian ink, using a fine pen. After being hardened in a solution of 1oz. alum to 20ozs. water, the print was placed in a bleaching bath made by mixing 1 dram iodine flakes and 3 drams potassium iodide in a little water and making up the solution to 10ozs. (I had this prepared at the

hardened in a 10 per cent formalin bath and brushed over with the following mixture:—dissolve 90grs. gelatine in 3½ozs. of hot water and add 30grs. cobalt chloride, together with 20 drops of glycerine (water free). In the case of a figure study it is a good idea to paint only the clothing with the solution. Parts so treated will turn blue in dry weather and pink in wet weather. The

● Continued on page 396

An Introduction to Leathercraft

THE home-worker can derive a considerable amount of pleasure even in the early stages of working leather. The natural impulse of most beginners is to attempt complicated patterns or articles, with the result that sooner or later a 'hash' is made. Always remember that a very simple design well produced has much real charm. Only when the worker has gained more experience can he afford to elaborate. He will discover different leathers and the various uses he can put them to, be well acquainted with his tools, and have the necessary confidence to tackle more intricate work.

Leather has changed little in appearance through the ages, except for

become familiar with the art at very little cost. Admittedly, only small goods can be made from these scraps, but the working experience is invaluable.

This is the first in a series of articles on working in leathercraft written by J. MacIntyre. Hints on things to make will appear in subsequent issues.

Here is a list of leathers available for the craft:

Kid Goatskin: This is not suitable for embossing or incising. It takes paints and dyes very well and is mostly used for making gloves.

Suedes (Lambskin tanned): These can be obtained in many colours. Is easily stitched on an ordinary sewing-machine but cannot be tooled.

Pigskin: A tough leather suitable for many purposes: e.g., bookbinding, bags, purses. It is not very suitable for tooled work.

Skiver: Very thin leather obtained by splitting sheepskin or cowhide by machinery. Useful for thonging or lining. Can be purchased in many colours.

Sheepskin: Inexpensive and handy for beginners. Obtainable in many colours and thicknesses.

Lizard: Can be made into various articles. Not suitable for modelling.

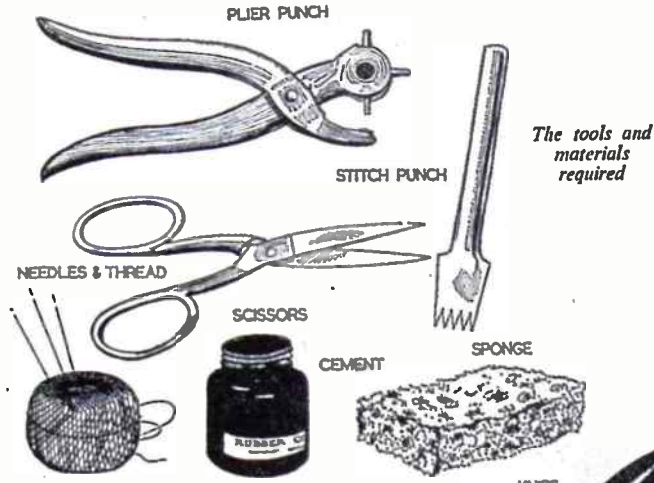
Crocodile: Used for bags and shoes. Very hard; cannot be tooled.

Usually thonging or lacing is cut from goatskin or thin calfskin.

Examine Carefully

When purchasing a skin be very particular. Select firm but supple, unblemished skins. Inspect by holding towards the light to see if there are any thin patches or minute holes. Handle your leather carefully, for it is easily marked or scratched. Keep it loosely rolled with the right side out. Before buying leather for an article make a paper pattern of the object and when you visit the shop fit the pattern over the chosen skin. This will eliminate waste and save money.

Tools for leatherwork may be bought quite cheaply. When you make your purchase go in for quality tools. Here is



the process of tanning, about which the home-worker need not be familiar, as most craft-work leathers are purchased ready for use. However, some knowledge of the various types of leather is useful, as it helps for selection and handling.

Bark-Tanned Leather

Various kinds of leather can be used in different forms of leathercraft, but for tool work the leather must be bark tanned; otherwise it cannot be damped and tooling will be difficult. It is important, then, when purchasing materials to state the purpose it will be used for.

Occasionally bundles of leather made up of small pieces of different types may be bought from leather shops. With these the beginner may practise the various processes of leather craft and so

a list of tools suitable for a beginner which can be added to as the worker gains experience and advances to more detailed work.

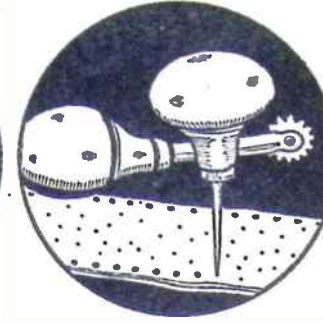
from a second-hand dealer at a moderate price and probably makes the best working board.

Cutting Knife: A wide knife as

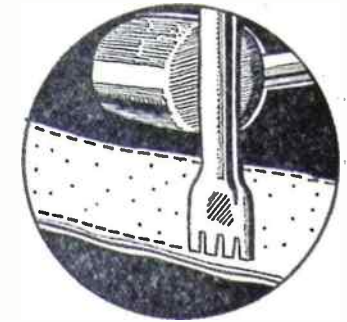
Metal Ruler: This is most essential, as it does not lose its edge or warp when the knife is used. Should be clearly marked with fractions and inches.



STITCH MARKER IN USE



AWL TO PUNCH HOLES FOR HAND STITCHING

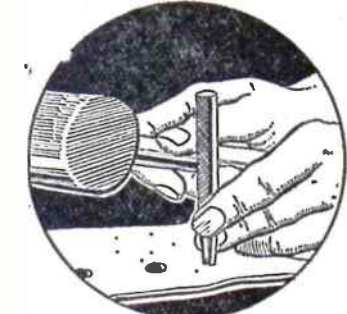
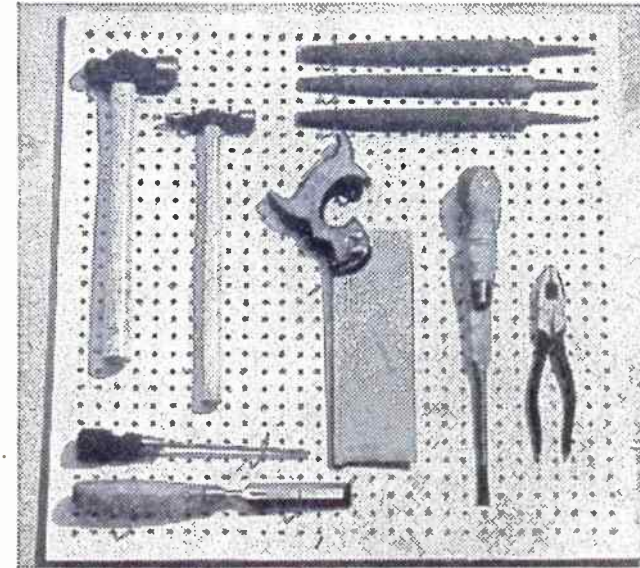


PUNCH IN USE FOR LACE STITCHING

Working Board: A solid working board for cutting the leather is needed, such as a piece of zinc, glass or marble. A piece of old marble can be bought

illustrated. It should have a broad handle, a flexible blade and be very sharp. The knife is used for skiving or thinning leather.

For the Workshop



PUNCH TO MAKE HOLES FOR RIVETS, SNAPS, EYELETS ETC.

Scissors: For cutting curved edges, etc.

Thonging Punch: For cutting slits for flat thonging.

Plier Punch: As a rule there are six different punches. (As illustrated.)

Stitch Marker: For marking stitch holes at equal distances.

Mallet: For flattening edges and striking punches.

The tools, as illustrated, are essential to the beginner. Other equipment for fitting attachments, like press studs and eyelets, etc., may be purchased later.

In addition to the tools listed some other items are needed such as thread, needles, paper for patterns, pencil and adhesives. Brown paper or strong white can be utilised for making patterns, and if the paper is new, so much the better. Strong thread is used for fairly large articles and fine glowing thread for the smaller ones. Adhesives can be bought ready for use. Cold water paste and cold vegetable glues are best.

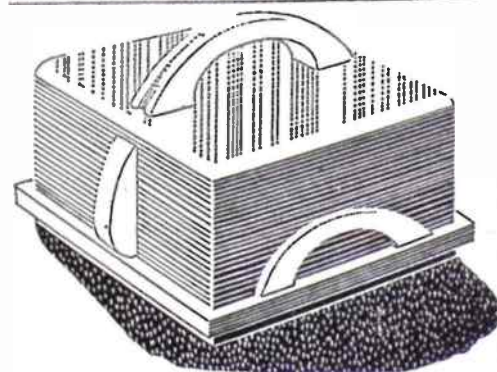
PRODUCED by Celotex Limited, one of the world's biggest fibre-board manufacturers, peg board is light and strong. Its hundreds of holes are spaced out at 1/4 in. intervals. From these perforations hang hooks, which can be moved about the board so that varying sized articles can be accommodated.

Made in two sizes, 24ins. by 24ins.,

and 30ins. by 18ins., the glossy finish is in white, cream and light blue. It retails at 13s. 9d., complete with 12 hanging hooks, four chromium-headed screws and four distance pieces.

As will be seen from our illustration, peg board can be used to good effect by the handyman for the neat storage of his tools.

A LADY'S POWDER BOX



Full-size patterns are on page 399

THIS modern streamlined box is intended to hold powder and puff. It is large enough to take a box of powder complete, with plenty of room to spare for the puff. Of course, the box could be suitably lined with silver paper or painted with plastic enamel. This would enable the powder to be emptied direct into the box.

The patterns are shown full size on page 399 and these should be traced and transferred to the wood in the usual way. Note that pieces H, of which there



Fig. 2

are two, are cut from 1/4 in. wood. The two pieces G are cut from 1/4 in. wood and the rest from tin.

Because of lack of space the pieces are overlapping each other. You will, however, have no difficulty in picking out the various pieces. There are four

HANDY HINTS

Replacing Water-Tap Washers

COLD water tap washers are made of leather or rubber, but for hot water taps special washers of vulcanised rubber should be obtained. They are stocked in all sizes by most ironmongers.

Before replacing a worn washer, the water supply must, of course, be turned off. With a spanner, preferably of the adjustable kind, unscrew the nut under the handle of the tap. The majority of modern taps have a shield to give the tap a streamlined appearance.

This must first be unscrewed to get at the nut.

The worn washer will be found at the end of the stem, secured by a screw or a nut. Removal of this screw or nut will enable the washer to be taken off, and the new one (which should be the same size as the brass plate) can be screwed in position.

Just under the tap handle will be found a brass bush with a milled edge. Loosen this with a pair of pliers, and the tap stem can then be pushed back

glued to the sides as shown in the picture of the finished box.

The lid (piece C) is rounded at the edges and four mitred strips are glued underneath to fit the inside of the box. This is shown clearly in Fig. 2.

After cleaning up with glasspaper, the box should be polished with white wax. With six or seven applications, and a light rubbing with glasspaper after

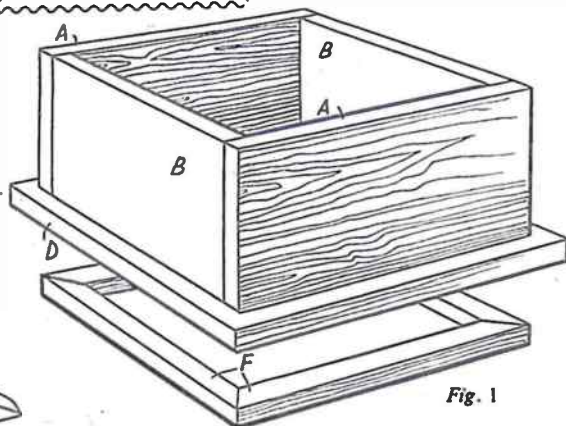


Fig. 1

each, a good result will be obtained. An alternative finish is plastic enamel with this. Contrasting shades can be used for the box and the overlays.

The final job is to fix the handle (No. 711). This can be obtained from Hobbies Ltd., Dereham, Norfolk, in cream or black and costs only 6d. (postage extra). Simply screw it direct to the lid. (M.p.)

Experiments with Phosphoric Acid

BONES and mineral phosphates are our principal sources of phosphoric acid and it is prepared from them by the action of sulphuric acid. The inorganic matter of bones consists mainly of calcium phosphate.

The acid and some of its salts are used in medicine. The acid provides us also with the basis of anti-rusting liquids.

The acid as bought from a pharmacist is a colourless, odourless syrup containing about 90 per cent w/w real phosphoric acid. The remainder is water. The signs w/w, w/v and v/v on a bottle label puzzle many people. They are simply abbreviations for weight in weight, weight in volume and volume in volume. So 100 grams of our pharmaceutical phosphoric acid contain 90 grams of real phosphoric acid. Any solution labelled, say, 10 per cent w/v would mean that it contained 10 grams of substance in 100 c.c. of solution, and 10 per cent v/v means 10 c.c. in 100 c.c.

Sodium Phosphate

To the home chemist, the salts of phosphoric acid offer most interest and scope for experimental work. Some of its metallic salts are soluble in water, but most are insoluble. The commonest salt met with in the laboratory is usually called just sodium phosphate. Yet phosphoric acid forms three important salts with sodium. The reason for this is that the acid contains three atoms of hydrogen which can be replaced by a monovalent metal like sodium. What we call sodium phosphate is really disodium hydrogen phosphate, only two hydrogen atoms having been replaced in the acid. The other salts are monosodium dihydrogen phosphate and trisodium phosphate, the former having replaced only one and the latter all the hydrogen atoms in the acid.

The preparation of these three salts gives us three interesting experiments.

First make up a stock solution of phosphoric acid by dissolving 15 grams of it in 80 c.c. of water and diluting to 100 c.c. There will also be needed a solution of sodium hydroxide, made by dissolving 10 grams in 80 c.c. and then making up to 100 c.c. with water.

Put 20 c.c. of the phosphoric acid solution into a beaker. Add sodium hydroxide solution little by little to the acid until a drop of the mixture shows a slightly alkaline reaction to litmus paper (red to blue). You have formed a solution of disodium hydrogen phosphate. Boil this down to the crystallisation point in an evaporating basin and set it aside to cool and crystallise over-

night. Remove the white crystals and dry them on a porous tile.

To prepare sodium dihydrogen phosphate we should only need half the sodium hydroxide. Therefore, take another 20 c.c. of phosphoric acid solution and again add sodium hydroxide solution as before until the mixture just turns red litmus paper blue. Then add a further 20 c.c. of phosphoric acid solution. Boil this down to the crystallisation point, allow it to cool and stand overnight and dry the white crystals on a porous tile.

To prepare trisodium phosphate we

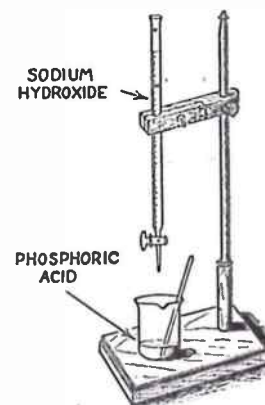


Fig. 1—Preparing trisodium phosphate

need half as much sodium hydroxide again as we needed to form the disodium salt. Take another 20 c.c. of phosphoric acid solution, but this time add the sodium hydroxide solution from a burette (Fig. 1) until the slightly alkaline point is reached. Read off the burette to find the volume added and then run in half this volume of sodium hydroxide into the beaker. We now have a solution of trisodium phosphate. Evaporate and crystallise as before. This, too, is a white salt.

These are typical examples of soluble phosphates. Most other metals yield insoluble phosphates and are prepared by double decomposition in the usual way. Lead phosphate, for instance, can be prepared by adding a solution of disodium hydrogen phosphate (which we will hereafter call sodium phosphate for brevity's sake) to one of lead acetate. A white granular precipitate of lead phosphate appears in the mixed liquid. Add sodium phosphate solution until no more precipitate forms.

You will notice that this precipitate is heavy and sinks readily. This lends itself to easy washing. Pour off the clear upper liquid and fill up with water. Repeat the operation several times. Filter off the lead phosphate and dry it in the oven.

Cobalt phosphate is beautifully coloured and is worth preparing for the sake of watching the curious changes it undergoes. Dissolve 4 grams of cobalt chloride in 30 c.c. of water and add a solution of 9 grams of sodium phosphate in 50 c.c. of water. Stir well. A bulky violet gelatinous precipitate of cobalt phosphate appears. Almost at once it will start to become pinker. In a few

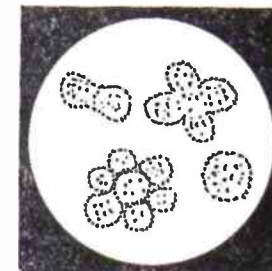


Fig. 2—Magnified cobalt phosphate crystals

hours it will be a full mauve, but still gelatinous.

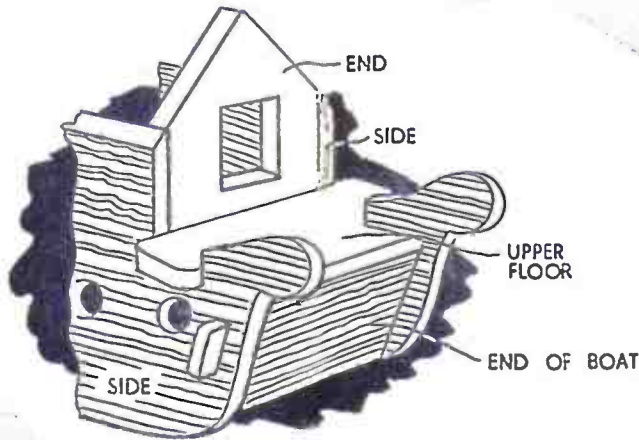
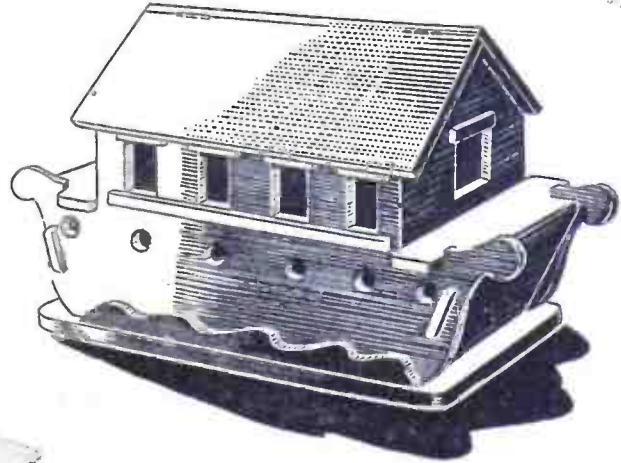
Set the vessel aside for about three days. During this time the precipitate will have lost its gelatinous nature and shrunk to a microcrystalline powder. Filter it off, wash on the filter until free from the sodium chloride also formed in the reaction. This may be ascertained by testing a few drops of each wash water with silver nitrate solution, which gives a white precipitate of silver chloride with soluble chlorides. When no silver chloride appears, the cobalt phosphate may be removed from the funnel and dried in a warm room.

The dry salt has a beautiful rose tint. Like many other cobalt salts, it owes its reddish colour to combined water. This you can prove by heating a little of it in a dry test tube. Steam is evolved which condenses on the cooler parts of the tube, while the cobalt phosphate itself becomes anhydrous and of a violet colour.

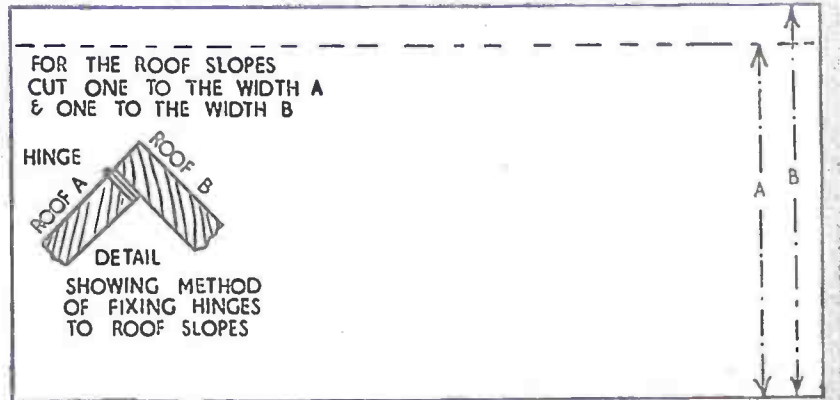
If you have a small microscope, examine some of the powder. Only a thin layer is needed and the best way to produce this is to rub your finger along a glass slide to give it a slight grease

Continued on page 394

HOBBIES PICTORIAL GUIDE TO MAKING A TOY NOAH'S ARK

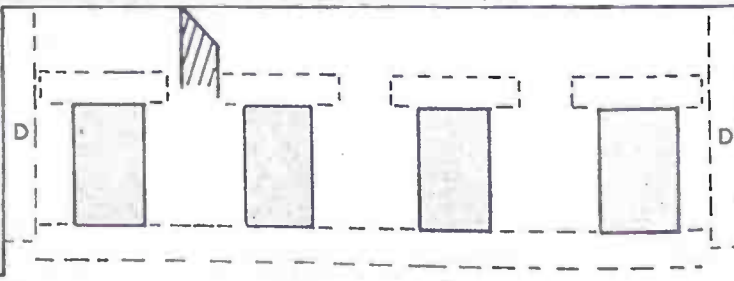


CUT TWO OF THIS OVERLAY & GLUE ON SIDES AS SHOWN $\frac{1}{16}$ " OR $\frac{1}{8}$ " THICK

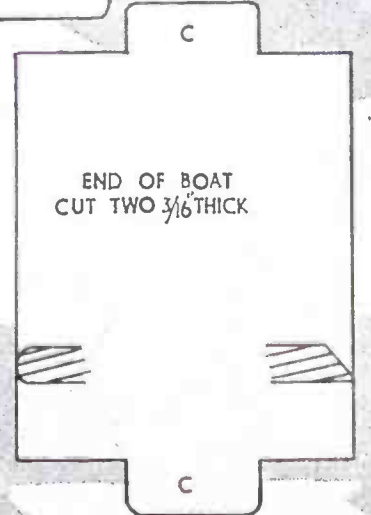
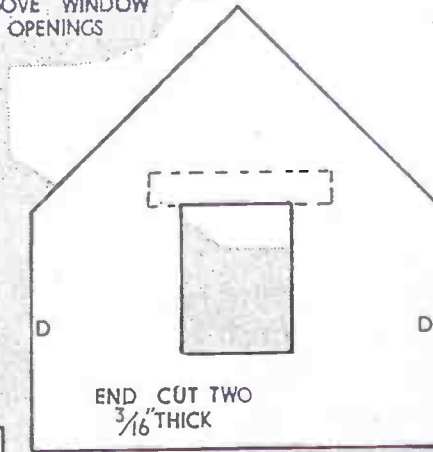
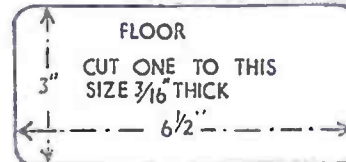


GLUE THESE OVERLAYS ABOVE WINDOW OPENINGS

ON ENDS



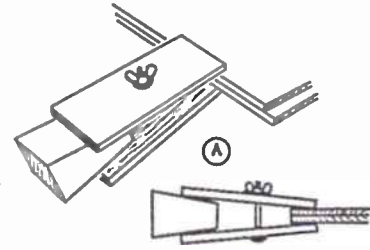
GLUE THESE OVERLAYS ABOVE WINDOW OPENINGS



GLUE THESE BELOW THE WINDOWS

Save Expense with Improvised Cramps

FOR some jobs the amateur woodworker finds that he needs an almost unlimited supply of cramps and holding devices. G cramps and sash cramps are not cheap—however desirable they may be—and if a job is to be cramped adequately, some make-shift method has to be devised.

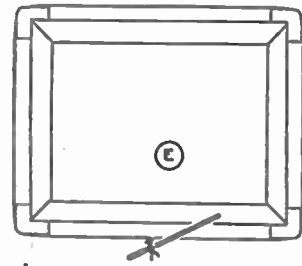
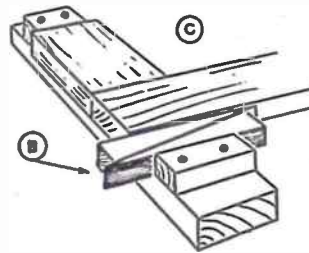


The screw of a cramp is really only an inclined plane or wedge wrapped around a cylinder. The simplest alternative means of applying pressure is to use a straight wedge. One method used by boat builders to hold planking is to have two boards loosely bolted at the centre. One end of the combination is put over the parts to be cramped and the other end is opened by driving in a wedge (A). The nut and bolt at the centre allow the arrangement to be adjusted to suit a limited range of thicknesses. If the bolt is nearer the job than the wedge, the leverage is increased, but sufficient power is usually obtained with the bolt near the middle.

A pair of wedges used together can exert tremendous pressure. These are called 'folding wedges' (B). If you have no sash cramps, screw two blocks to a plank or the bench top, a little further apart than the size of the job to be cramped. Make two similar wedges, and plane the tapers. The exact size

Cramps

does not matter—a taper of 1 in. in 8 ins. would do. Push these in one of the gaps, then tighten by hammering each wedge in turn (C). If the amount the joints have to be pulled up is more than



the wedges can give, drive them so far, then knock the wedges out, put a piece of scrap wood between them and the job, and tighten with them again.

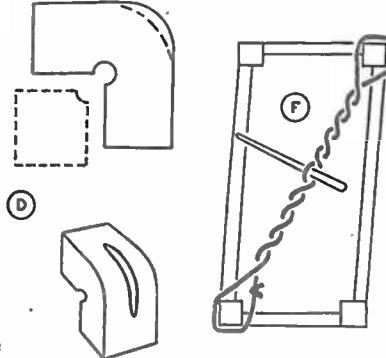
Picture frames and similar jobs are difficult to cramp evenly. Special cramps are costly and not worth while if they are only to be used occasionally. Mitred joints may be pulled up with blocks and string. The blocks are

thicker than the frame and made by drilling a 1/4 in. hole before cutting out a right-angled notch (D). This relieves the extreme corner of strain. The outside should be rounded and grooved for the string.

'Spanish Windlass'

To tighten a frame, put the blocks on the corners and wind several turns of string around them, then tie the ends together. Twist up the string with a stick (E). This is called a 'Spanish windlass'. Jam the stick against the frame to lock it while the glue sets. In all cramping arrangements where there is a risk of glue squeezing out on to wooden supports, put paper between the cramping devices and job to prevent sticking.

A Spanish windlass is useful where a



framework cramps up out of true. In pulling up the joints of a job such as a stool frame it may happen that although the sides are square there may be a twist in the whole structure. A Spanish windlass put across the widest parts may be tightened slowly until the framework is true (F). (P.W.B.)

3 grams of urea and 5.63 grams of phosphoric acid. Boil the solution down to low bulk in an evaporating basin. Halt the boiling when slight effervescence starts and transfer the basin to a water bath.

When a thick syrup has formed, let the whole cool. After some time, usually about two hours, the syrup solidifies to a shining, fibrous white mass of urea phosphate. This sticks hard to the basin, and can only be removed satisfactorily by gently warming the basin over a wire gauze. The block of urea phosphate will then free itself and may be removed. (L.A.F.)

Continued from page 391

Home Chemistry

film. Drop on a little cobalt phosphate and then shake the surplus off. The microscope will reveal curious compound crystals with strange corrugated surfaces. Fig. 2 shows some of the types to be found.

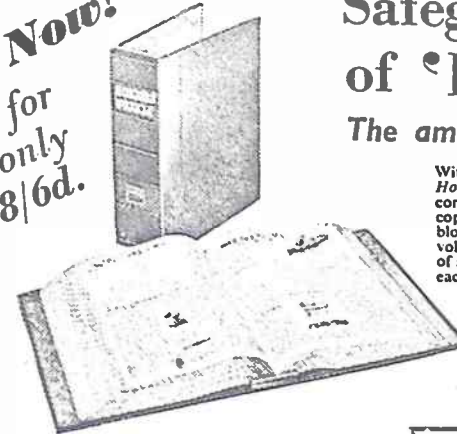
Phosphoric acid not only forms salts with metals, but also with organic bases, such as aniline and urea.

To prepare aniline phosphate, dissolve 3.75 c.c. of phosphoric acid in 30 c.c. of cold water in a beaker, and run in with

stirring 6 c.c. of aniline. A granular white precipitate of aniline phosphate forms at once, and the beaker will be found to have become hot. Such a reaction is said to be exothermic, because heat is given out. Filter off the precipitate and drain and dry it on a porous tile at room temperature.

Urea phosphate is very soluble in water. So evaporation of its solution has to be pushed a long way to obtain the solid. In .25 c.c. of water dissolve

Now!
for only
8/6d.



Safeguard your copies
of 'HOBBIES WEEKLY'
The amazing 'EASIBINDER' (Pat.) makes it simple!

With the new EASIBINDER, specially prepared for Hobbies, you can bind each copy of Hobbies Weekly as you get it, turning your favourite magazine into a permanent, easily-consulted library of immense value, and avoiding the delay and despair occasioned when copies are accidentally mislaid or destroyed. Carefully finished in black leather-cloth and gold-blocked on the spine, each binder is strong, serviceable and neat. It will hold two complete volumes (52 copies) and costs only 8/6. Each copy of the magazine is quickly inserted by means of a flexible steel wire, and can easily be removed if necessary. Easy-to-follow instructions with each EASIBINDER. Get one today and take care of your copies of Hobbies Weekly.

NOTE! For those who prefer to bind each volume (26 copies) in the orthodox way, the familiar red binding cases are still available, price 4/6 each, and indexes are published for each completed volume and cost 1/- each. To avoid confusion, however, these items should be ordered separately. USE THE COUPON ONLY TO ORDER EASIBINDERS.

A new volume of Hobbies Weekly (No. 120) commences with the issue of April 6th. Order your Easibinder NOW.

★ One 'EASIBINDER' holds two volumes (52 copies)

★ Easy to use

Post today



To: HOBBIES LTD., Dept. 99, Dereham, Norfolk.

PLEASE SUPPLY EASIBINDERS at 8/6 each. P.O. for is enclosed.

NAME
ADDRESS

PEDAL POWER MOTOR CAR
A HOLIDAY TOY FOR CHILDREN 2-6
START TO MAKE THIS MOTOR CAR NOW. METAL PARTS AND WHEELS AVAILABLE
PLAN, INSTRUCTIONS & LIST 2/6 post free.
ILLUSTRATED LIST For Toy Makers with easy plans of DOLL'S HOUSE, DOLL'S COT and TOY CRANE, 9d. Post free.

ZIMPLAN PEDAL TRACTOR
Easy to make. Set of Plans and list of available metal parts 1/6 post free

ZIMPLAN 182, WARE RD. HODDESDON

FLEXIMOULD
For PLASTER CASTING
The all-family hobby
WALL PLAQUES, GIFTS and ORNAMENTS, etc.
No special equipment needed. Adds pounds to your income.
'FLEXIMOULD'
Illustrated Leaflet from
DOHM Ltd.
Dept. H, 167 VICTORIA ST., LONDON, S.W.1

NEW! EXPERIMENTAL KITS
LEARN THE PRACTICAL WAY
Here is home study of the most effective kind under expert tutors. There is no better way of studying for an examination, starting a new hobby or for a career in industry. These special courses comprise the most modern methods of postal tuition, combined with a Practical Kit of parts (which remains your property).
COURSES FROM 15/- A MONTH
COURSES WITH PRACTICAL EQUIPMENT INCLUDE: Radio, Television, Mechanics, Electricity, Chemistry, Photography, Carpentry; also Draughtsmanship, Commercial Art, Amateur S.W. Radio, Languages, etc.

POST THIS COUPON TODAY
For FREE brochure write: E.M.I. INSTITUTES, Dept. 31X, Grove Park Road, London, W.4.
SUBJECT(S) OF INTEREST: _____
NAME: _____
ADDRESS: _____
23/3/55



E.M.I. INSTITUTES
The only Postal College which is part of a world-wide Industrial Organisation

REPLIES OF INTEREST

No Bleach for This
PLEASE inform me of a chemical or any liquid which will effectively remove printers' ink from paper. I have a few leaflets which I wish to bleach and remove the printing. (C.A.—Reading.)

THERE is no bleach for ordinary black printers' ink, which has carbon for the pigment. No known chemical will decolourise carbon. Owing to its cheapness, carbon is almost exclusively used. The most that can be done is to swab with an oil solvent such as benzene. This usually lifts the carbon, but leaves a misty grey effect. Coloured inks are not much more satisfactory to deal with, for chemicals which would bleach them also affect the paper. Some modern coloured inks will answer to a preliminary treatment with benzene and then, when dry, to a bleach such as Milton or a solution of bleaching powder (filtered) in water. After bleaching, a solution of hypo should be swabbed over, followed by water. Naturally, only fairly hard-surfaced papers will stand up to swabbing with any liquid—even plain water. Soft papers, such as newsprint, will undergo surface disintegration with consequent roughening.

Glass Polish
I REQUIRE the formula for making I window, eye-glass and mirror cleaner, polisher and anti-mist. Can you help me? (S.M.—S.E.5.)

A SUITABLE composition for your purpose consists of potash coconut oil soap 120 grams, glycerine 60 grams, turpentine 8 grams, solvent naphtha 3 grams. Heat the soap and glycerine in

a boiling water bath stirring until evenly mixed. Turn out the flame and work in the turps and naphtha. The mixture, of course, is used cold.

'Fog Patch' on Table
I HAVE a table that is marked by a white patch resembling fog marking on glass. I have been told to plane it off; however, in my opinion that would ruin it. Would linseed oil help, or can you suggest a better method? (E.M.—Strathlachlan.)
YOU should try removing the white patch on the polished surface by the following method. Dampen a clean, fluffless rag with warm camphorated oil and rub over, gently at first. This is often successful. If not, the only remedy will be to clean off the polish until the marks disappear, then to apply a coat of brown hard spirit varnish, in a warm room.

Brightening Moquette
OUR Chesterfield suite is of uncut moquette, in good condition, but dirty and faded on the arms. Is there a method to improve it and make it look like new? The colour is fawn. (F.W.—Plymouth.)
TO remove the dirt, first rub thoroughly with a dry cleaner, such as Thawpil or carbon tetrachloride. When all greasy dirt has been removed, brush on a warm soap solution with a nail brush. Several applications of soap may be needed. The fading cannot be restored, for chemical changes will have taken place in the dyes. Some brighten-

ing can be effected by sponging with ammonia in warm, but not hot water. Only enough ammonia should be added to the water to give it a perceptible smell.

Condensation on Cistern
I FIND it impossible to stop condensation on the lavatory cistern (the part that holds the water with the ball-cock in it). I have tested all joints, etc., and have found that there seems to be no reason for this condensation. I should like to know if there is any way I could stop the trouble. (E.M.—Finglas.)
THOUGH there may be no apparent leakage through the joints, these cisterns sometimes develop tiny holes through which water can seep. Make a careful examination. If you are satisfied no holes exist, treat the outside of the cistern with Macstet. You can obtain a small tin for 6/9 from Devon Commercial Arts, Church Lane, Barnstaple, Devon.

Wall Map to Cine Screen
I HAVE an old wall map that appears to be painted on linen. It would make an ideal cine screen, but I do not quite know how to treat the paint to remove it without damage to the cloth, so could you advise me on the subject? (F.W.—Salisbury-by-Sea.)
TO remove the varnish from the linen, mix 3 fluid ozs. benzene and 2 fluid ozs. methylated spirit and swab on with a clean rag. This will remove both top varnish (if present, as it usually is), and the paint medium beneath. Entire removal of the pigments will be difficult from cloth and no other safe method could be employed. Aluminium coloured screens are popular, and any pigment residue could be effaced by painting the whole with aluminium paint.

Papier Mâché Repair
PLEASE advise on a method of repair to a papier mâché bath in which a crack has appeared at the bottom. Will you also tell me how to fill small gaps between the planks of a shed which I built from old wood? (K.E.—Liverpool.)
WE consider that Cellophane tape, with the addition of Durofix, would be about the best stopping for your bath. This is waterproof and should prove effective. For the gaps in the walls of your shed, use strips of strong canvas, covered with a thick mix of Casco glue. Apply two coats of boiled linseed oil over the canvas, and then paint.

Continued from page 387

Wall Plaques from Snapshots

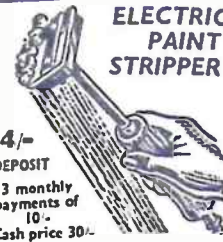
photograph should not, of course, be covered with glass.

Plaques from Figure Studies

Many figure studies taken by amateur photographers are spoilt by an unsuitable background, but these are quite suitable for making into plaques. The photographs are stuck on to a piece of thin wood and cut out in outline with a


fretsaw. After cleaning the edges with fine grade glasspaper the cut-out is glued in the centre of a panel of wood which has been stained and polished to match the furniture in the room. If desired, ornamental beading can be fixed round the edges of the plaque, or it can be cut in some fancy shape such as a diamond, heart, hexagon, shield or oval.

ELECTRIC PAINT STRIPPER




4/- DEPOSIT
3 monthly payments of 10/-
Cash price 30/-
Old paint peels off like magic with the Harvel electric paint stripper. Easy, even strokes remove paint, varnish, etc. Four-sided blade for angles and corners. A.C./D.C. mains—state voltage. Post & Packing 1/6. Send for leaflet

ELECTRIC PAINT SPRAYER




For 5/- deposit
Cash 75/-. Or 5/- deposit and 6 monthly payments of 13/6
Paint easily, evenly, twice as fast with the Burgess Electric Sprayer. Sprays paint, varnish, etc. Complete with sturdy glass container, flex, nozzle for ceilings spraying and extra nozzle discs for different liquids. A.C. mains only—state voltage. Fully guaranteed. Illustrated leaflet free.

DRILL FASTER
with a Black & Decker ELECTRIC DRILL 12/- DEPOSIT



A first-class tool, the Black & Decker U1 Portable Electric Drill saves hours on home and workshop jobs. Drills wood, steel, brick, etc. Steel capacity up to 1". Also drives sanding discs, polisher pads, etc. Weight 3lb. Fully suppressed. £5. 19. 6, or 12/- deposit and 6 monthly payments of £1. Sent on receipt of the deposit. A.C./D.C. motor, voltages 110 to 220. State voltage required.

This U.50 BLACK & DECKER KIT




for ONLY £1 deposit
CASH PRICE £9.17.6
With this Kit you can clean, buff, burnish, grind and drill. Comprises Sander, Polisher, Rubber pad, Lambwool bonnet, 3 sanding discs, one 1" chuck, Allen key, wax and polish. Cash £9.17.6, or £1 deposit and 6 monthly payments of 25/-. With chuck, becomes all-purpose drill. Can also be used as driving unit for lathe and saw attachments. Fully suppressed. State voltage.

Send for complete list of Tools
BARGAIN DISTRIBUTORS
(Dept. 124), 5 Silver Street, Luton


TOOLS FOR THE HANDYMAN

TOOLCLIP



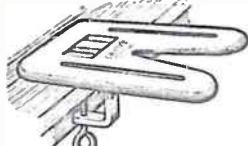
for holding any handled tool. Spring steel. Holes for hanging.
7 1/2d. each

BENCH STOP




3 1/2ins. by 2ins. — Spring loaded top.
6/6

STEEL CUTTING TABLE



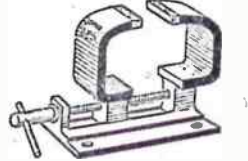
With clamp for easy fixing to bench. 6ins. by 4ins., strong and light. 3/6

SINGLE HANDED SCREWDRIVER




5ins. long. Ideal for small work.
1/9

MODEL MAKER'S BENCH VICE No. 1



Strong, light and rigid, 2in. opening.
6/9

FRETWORK HAMMER



8ins. long. Strong and light for small work.
1/5

Obtainable from Hobbies Branches in London, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Hull, Southampton, Bristol and ironmongers everywhere. Or postfree from Dept. 99, Hobbies Ltd., Dereham, Norfolk.

NOW! DO-IT-YOURSELF WITH ALUMINIUM KITS

You'll surprise yourself at the ease with which any of these and other beautiful things can be made. Newmman's 'Do-It-Yourself' Aluminium kits contain everything needed even down to the last nut and bolt. An easy to follow construction and pattern sheet giving step by step instructions is enclosed with each kit.

It's Light! It's Tough!

It's Easy to Handle!

NO SPECIAL TOOLS NEEDED

Post Coupon TODAY for FREE Illustrated Brochure



Newspaper and Magazine Rack



Plant Stand

To MEWMAN'S 'Do-It-Yourself' ALUMINIUM

86 HAMPSTEAD RD., LONDON, N.W.1

Please send me the FREE Illustrated Brochure

NAME.....

ADDRESS.....


HOB.1

IF YOU love music Play the Piano



Even if you do not know a note, I will quickly teach you from ordinary musical notation, without drudgery, fatigue or failure. Crystal clear musicianly training a child could follow; a teacher by your side always. Your assurance of success: My class is seldom less than 2,000 pupils. I have taught over 89,139 and I CAN TEACH YOU (in 12 lessons). Free book and advice. Say Beginner. Moderate. Advanced. (Name and address in Block Letters please.) (Dept. 98)

MR. H. BECKER, The Hall Centurion Rd, Brighton, Sussex



Hobbies LIMITED

MANCHESTER
10 Piccadilly
(Phone CENTral 1787)

BIRMINGHAM
14 Bull Ring
SHEFFIELD
4 St. Paul's Parade
(Phone 26071)

LEEDS
10 Queen Victoria Street
(Phone 28439)

HULL
10 Paragon Square
(Phone 32939)

SOUTHAMPTON
25 Bernard Street

BRISTOL
39 Narrow Wine Street
(Phone 23744)

BRANCHES: LONDON
78a New Oxford St., W.C.1
(Phone MUSaum 2973)

87 Old Broad Street, E.C.2
(LONDON Wall 4375)

81 Stratham Hill, S.W.2
(TULa Hill 8794)

GLASGOW: 326 Argyle Street
(Phone CENTral 5842)

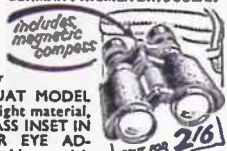
Head Office & Factories—HOBBIESTD., DEREHAM, NORFOLK

* GREAT CAMPING OFFER *

RIDGE TENT SENT FOR 4/-
 BRAND NEW de luxe Para. Tent. All colours. Complete. Ideal Cyclists, Campers. Length 7 ft. 3 in. sleeping base x 4 ft. 6 in. wide x 3 ft. 6 in. high x 12 in. walls, all approx. Weight 33 lb. £2.15s. or 4/- deposit and 6/- monthly. With fly-sheet £4.2s. 6d. or 10/- deposit and 9/9 monthly. Both carr. 1/6. Lists of other models. Terms. Send now for this really wonderful offer.



Strongly recommend this VERY LATEST O.G. lens x 40mm GERMAN PRISMEX BINOCULAR



Says Our Director
POPULAR SQUAT MODEL made of lightweight material. METAL COMPASS INSET IN BENDING BAR EYE ADJUSTMENT enables quick reading of bearing of view LUMINOUS TIPPED, VERY LATEST IMPROVEMENT. Size 5 1/2" x 4 1/2". Genuine day and night powerful prismex lenses give 3-D precision clarity. Centre focus. In case with lanyard, leather sling. Sent for 2/6 deposit and 7 days free trial. Balance 6/- monthly. Cash Price 59/6. Lists Binoculars, Watches, Tents, Terms. Headquarters & General Supplies Ltd. HOBW/44, 196/200 Colindale Lane, Loughboro Junction, London, S.E.5. Open Sat., 1 p.m. Wed.

EVERY CAR THAT PASSES—YOU WILL FIND THE INDEX MARK ALPHABETICALLY ARRANGED IN WHERE'S THAT CAR FROM? Price 9d. from all Booksellers or from the Publishers (1/4d. postage) RALEIGH PRESS, EXMOUTH

KUKLOS ANNUAL. Indispensable cyclist's handbook. Tours, resthouses, money-saving hints, 2/10, post free. — Burrow, Publishers, 2 Imperial House, Cheltenham.

STAMPS FREE — Empire Packet including Pictorials and Victorians with approvals. — Robert J. Peck, 7A Kemp Road, Bournemouth.

BUILD your own T.V. and learn about its operation, maintenance and servicing. Qualified engineer-tutor available whilst you are learning and building. Free Brochure from—E.M.I. Institutes, Dept. HW.58, London, W.A. (Associated with H.M.V.)

'PAINTSPRAYING' HANDBOOK (1954 Ed.). Covers Car, Industrial & Flock Spraying. 3/6, post free, including catalogue of our Cellulose and Synthetic Paints and all Allied Sundries and Plant Hire.—Leonard Brooks Ltd., 81 Oak Road, Harold Wood, Essex.

MAKE A RADIO SET

You can build the "Economy" 1-valve radio set with only a screwdriver and pliers. Complete set of parts, with valve, 33/- post free. Headphones and batteries, 27/- extra. Building instructions only 7/4d. Send now to—

BLANCHARD'S RADIO (H9)
 13 GAINFORD GARDENS, MANCHESTER, 16

PLYWOOD — HARDBOARD — at amazing low prices. Send S.A.E. for samples and prices to—N Gerver, 10 Mare Street, Hackney, London, E.8.

STOP SMOKING!! Quick guaranteed remedy. Free Testing Sample!! — Triumph Remedies (H.2), Exeter.

RUBBER MOULDS for plaster casting. Sample 3/11. Trade supplied. S.A.E. — Burleigh Supplies, 13 Burleigh Street, Hull.

ULSTER HANDICRAFTS. Downshire Place, Great Victoria Street, Belfast, supply craft-workers with Stanley tools, Handicrafts, Marquetry, Veneers, Aerolite, Musical Movements, Lamp Frames, Paints, etc.

SUPER Free Offer—Mint 1954 Spanish Morocco set; request approvals, enclosing 2/4d. stamp. — Foster, 37 The Worthing, Birmingham, 30.

Win Friends, Popularity With Little Tricks of Everyday Talk

A well-known publisher reports there is a simple technique of everyday conversation which can pay you real dividends in both social and professional advancement and works like magic to give you added poise, self-confidence, and greater popularity. The details of this method are described in a fascinating booklet, "Adventures in Conversation", sent free on request.

According to this publisher, many people do not realize how much they could influence others simply by what they say and how they say it. Whether in business, at social functions, or even in casual conversations with new acquaintances, there are ways in which you can make a good impression every time you talk.

To acquaint more readers of this magazine with the easy-to-follow rules for developing skill in everyday conversation, the publishers have printed full details of their interesting self-training method in a 24-page booklet, which will be sent free to anyone who requests it. The address is: Conversation Studies (Dept. HY/CS1), Marple, Cheshire. Enclose 2/4d. stamp for postage.

100 DIFFERENT stamps free! 1/4d. upwards approvals.—Bush, 53 Newlyn Way, Parkstone, Dorset.

TRANSFER Graining Paper—Oaks, Walnuts; Samples, 1/-; Complete range, 3/-; Roll, 16/10.—H. Decano Co., 20 Clarendon Rd., Jersey.

SHIPS in Bottles and Electric Light Bulbs. Plans and instructions 3/6. Toy plans included FREE.—W. Phillips, 47a Linden Gardens, Chiswick, W.4.

45 STAMPS FREE—send 2/4d. requesting attractive approvals.—Rogers, 31 St. Leonards Ave., Hove, Sussex.

The Model Railway Club

MODEL RAILWAY EXHIBITION

WORKING MODEL RAILWAYS AND TRAMS · LOCOMOTIVES · COACHES WAGONS · SIGNALS · STATIONS RAILWAY MODELS OF ALL KINDS

Model Steam Passenger-Hauling Engines

ADMISSION 2/6 Children under 14 1/3 Special terms for parties of 12 or more: Apply to The Model Railway Club, 60 Howard Road, South Norwood, S.E.25.

Easter Week Tuesday APRIL 12—Saturday APRIL 16 Tuesday 12 noon to 9 p.m. Other days 10.30 a.m. to 9 p.m.

Central Hall Westminster, S.W.1

A GRAND BOOK FOR ALL THE FAMILY. The "Kaylee Year Book of Bright Ideas". A really helpful guide to home planning, decoration, Hobbies, toys, etc. Showing famous Kaylee Transfers in brilliant colours, and most effective uses. From "Hobbies" stockists or direct. **1/-** KAYLEE TRANSFERS Postage 3d. LTD., (HW) Long Eaton Nottingham.

RADIO Enthusiasts.—A parcel of radio components, containing resistors, condensers, transformers, potentiometers, nuts and bolts and other useful parts, at only 5/-, post 6d.—VI-RAD, 6 Twyford Rd., Eastleigh, Hants.

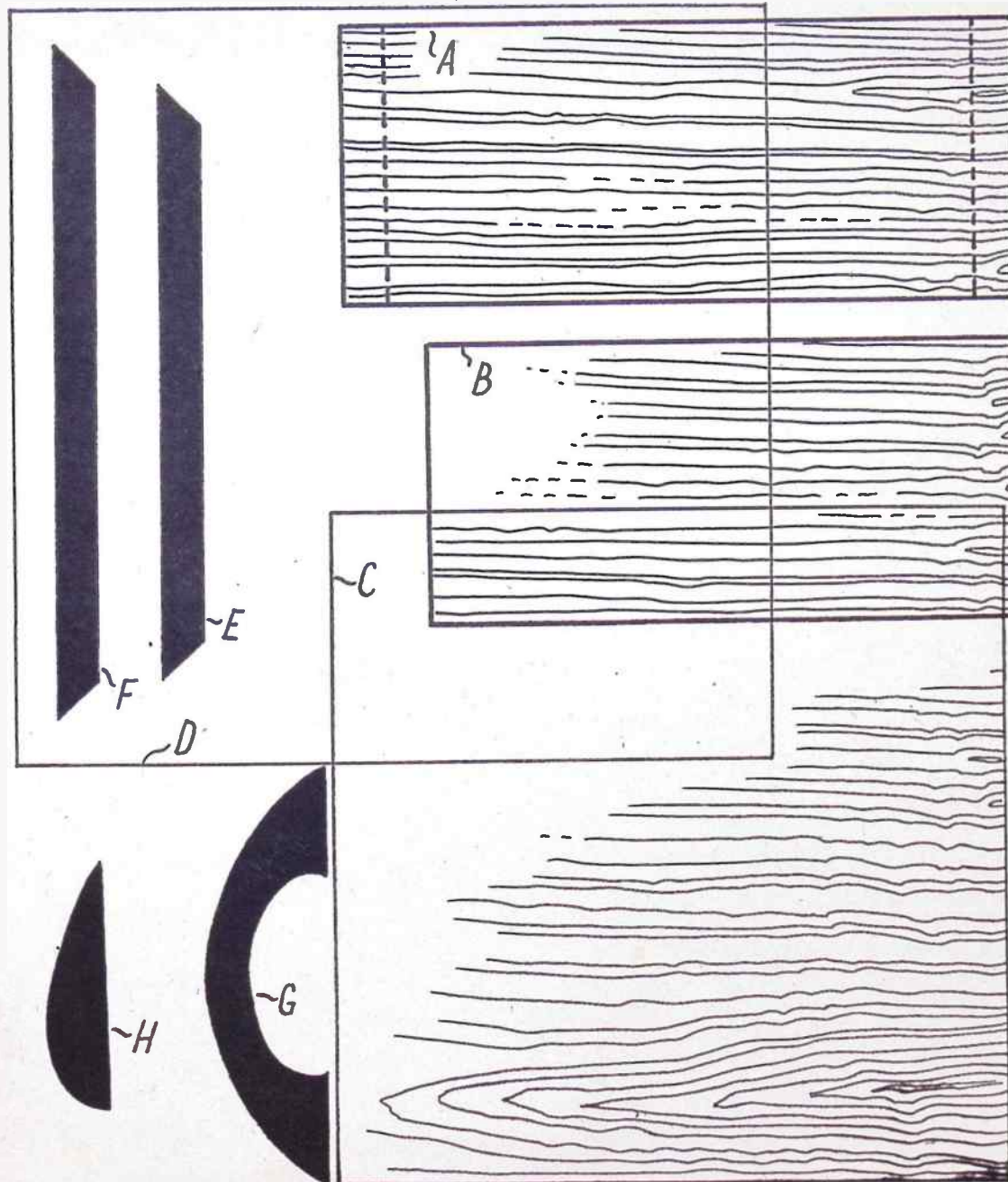
AMATEUR Woodworkers—why not turn your hobby into substantial income? S.A.E. for full particulars. — Goodwood Crafts, Cross Street, Leamington Spa.

PERFORATION gauge and 50 stamps free to all approval applicants enclosing 2/4d. stamp. — Cliffe West (H1), 61 Wynyard Road, Sheffield, 6.

SWISS MUSICAL Mechanisms for cigarette boxes, etc., 18/- post free. S.A.E. for illustration and list of tunes available.—Dept. HW, Metwood Accessories, Church St., Wolverton, Bucks. (Trade supplied.)

STOP SMOKING in 3 days or money back. Safe, pleasant, permanent. The only scientific way. No Will Power necessary. Conquered the habit in 24 days.—F.C. "Within 2 days I was free from the tobacco habit".—W.G. "Was a smoker for 2 years and broke the habit in 2 days".—F.N. "I used to smoke 20 a day... now I have no desire to smoke".—J.M. Recommended by 'Health and Efficiency Magazine'. Complete course 6/6 (or \$1.00 bill). Details 1/4d. stamp. Sent under plain cover. NATURE REMEDIES, 28 (H/41), Dean Road, London, N.W.2. Established 1928.

Patterns for the Powder Box





for every hobby

Croid

CROID AERO GLUE

"The strongest glue in the world," and the best hot glue for all handicrafts. It needs no mixing or preparation. Available in tins from 8 oz. to 28 lb. The special HOME OUTFIT consists of 8 oz. Croid Aero Glue, hot water container, glue container and handy brush.



The glue recommended for use

with **Dust-Bild** woodworking patterns.

CROID LTD., IMPERIAL HOUSE, KINGSWAY, LONDON, W.C.2

HOBBIES FRETSAWS

Not only in fretwork and model making but in a hundred and one woodwork, composition plastic, leather or metal sheet jobs you'll find a fretframe handy. And the best blade for any is the saw which is made by Hobbies from good steel and the experience of over forty years of manufacture. Every dozen is distinctly labelled.

BLUE LABEL

10d. doz. 9/6 gross
Grades OO (fine), O, 1, 2, 3, 4, 5, 6

YELLOW LABEL

1/2 doz. 13/6 gross
Grades OO (fine), O, 1, 2, 3, 4, 5, 6

HEAVY SAWS

For Thick Work, Toy making, etc.
1/6 doz. 17/6 gross



METAL-CUTTING

For Sheet Metal of all kinds

1/3 doz. 14/6 gross
Fine or medium grade.

Obtainable from Ironmongers' Stores and Hobbies Branches, or post free from **HOBBIES LTD., DEPT. 99, DERHAM, NORFOLK**

Finish your WINTER LEISURE with an attempt at the Fascinating Craft of

MARQUETRY

Pictorial
Characteristic
Coloured

With

HANDICRAFTS LTD., PETERBOROUGH
DESIGNS — VENEERS — EQUIPMENT

PICTORIAL—Handicrafts range of 24 different Designs

To make a Marquetry Picture size 16in. x 12in.

M/SERIES
DESIGNS
2/6 each

13/-
COMPLETE

M/SERIES
VENEER PACKS
10/6 each

CHARACTERISTIC—Lifelike Marquetry Picture of a great Statesman 'Sir Winston Churchill'

Picture size 10in. x 7 1/2in.

S.W.C.
DESIGN
1/9 each

10/6
COMPLETE

S.W.C.
VENEER PACK
8/9 each

COLOURED—'Fantasy' and 'Wild Bird' Series

To make a Marquetry Picture size 12in. x 8in.

CN/SERIES
DESIGNS
1/9 each

12/3
COMPLETE

CN/SERIES
VENEER PACKS
10/6 each

The craft of Marquetry is fully explained with illustrations in

HANDICRAFT ANNUAL 1955

REPRINT Copies now available

Price 2/6

from your local Newsagent or direct from

HANDICRAFTS LTD., PETERBOROUGH

(post 3d. extra)