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



*FREE design inside for
this charming novelty
which plays as you save*

MUSICAL TAVERN

THIS delightful model of an old-time half-timbered English tavern incorporates novel features which make it an ideal suggestion as a gift for a child or an adult.

It is quite an easy project for the average handyman with the fretsaw, and takes the form of a musical savings box, 7½ins. wide by 5½ins. high. Drop a coin in the slot and this actuates a musical movement which plays a tune once, then stops, and is started again for another rendering of the tune by the insertion of another coin. The novelty of hearing a tune every time you save a penny will particularly appeal. And when the time comes to empty the coins, this is done by way of a secret opening — merely by pulling out the side steps!

Special coin movements are obtainable from Hobbies Ltd., Dereham, Norfolk, and branches, from whom a kit of wood and fittings for making the tavern are also available. The model can be used as a decorative money box without the movement, but, of course, the tune adds much to the novelty.

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FOR ALL HOME CRAFTSMEN
Over 60 years of 'Do-it-Yourself'
World Radio History

4 ¹/₂ ^D

Make a start by tracing the various parts from the design sheet and transferring their shapes to the appropriate thicknesses of wood indicated. Then clean up all parts thoroughly with glasspaper.

Now assemble the base as shown in Fig. 1, consisting of pieces 1, 2 and 3. Pieces 2 and 3 are mitred together and glued underneath piece 1, which is chamfered at the front and ends.

The trip plate

Next make up the shell of the tavern which consists of pieces 4, 5, 6, 7 and 8. It will be noted that piece 8 is part of the false floor as shown in Fig. 2. Before gluing piece 7 to pieces 4 and 8, however, insert the trip plate which actuates the musical movement through the slot in piece 7 (Fig. 2) and then screw the movement in place to piece 4. Note that

MAKE IT WITH A KIT

Kit No. 3222 for making the Musical Tavern contains all wood and materials and costs 9/11. Special musical movements with coin trigger action 19/10 extra. Tunes available are 'Happy Wanderer' and 'Teddy Bear's Picnic'. Obtainable from branches, etc., or Hobbies Ltd., Dereham, Norfolk (post free).

and releases the money. It will be seen that with the wire in position and piece 11 glued to piece 8, piece 10 is securely held in place.

It is advisable to bore the holes to take the wire through pieces 5, 9 and 10 before fixing the assembly to the base.

half-timbered effect is obtained by cutting overlays of $\frac{1}{8}$ in. wood and gluing them on the front and ends as shown in the illustration of the finished tavern. Window overlays are also added to the half-timbered work.

Finishing touches

The side door is made up from $\frac{1}{8}$ in. and $\frac{1}{16}$ in. wood as shown on the design sheet, and it is glued in position above the steps. The front door is painted on piece 18.

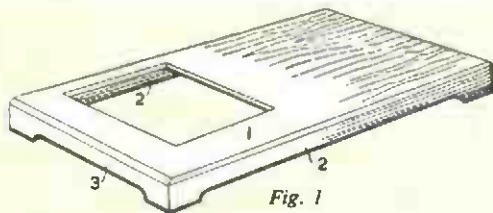


Fig. 1

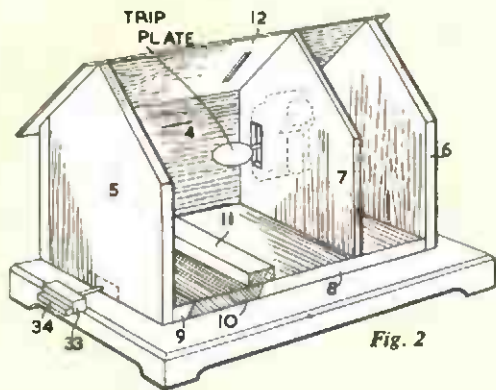


Fig. 2

the angle of the plate can be adjusted so that the coin will touch it as it drops. One slight touch of the coin on the plate is sufficient to set the movement in action.

Study carefully Figs. 2 and 3, which explain the 'secret' opening in order to get at the money saved. Pieces 8, 9 and 10 are shaped according to the sections given on the design sheet. Piece 10 is held in place by a locking wire fixed to the side steps (pieces 33 and 34). When the steps and wire are withdrawn, piece 10 drops through the opening in piece 1.

This can be done with a fretwork or breast drill with a $\frac{1}{16}$ in. bit.

Glue piece 9 to piece 5 and add piece 11 to piece 8, noting that it is not glued to piece 10.

Half-timbered effect

Next add the front (13) and roof slopes (12 and 14), cutting away piece 14 as shown in Fig. 4, and continue making up the tavern by adding the front gable and slopes (17), chimneys and finials (Fig. 4). Note that slopes 17 must be adjusted to fit by trial and error. The

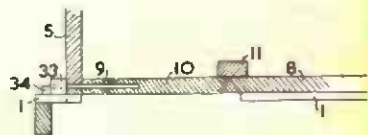


Fig. 3

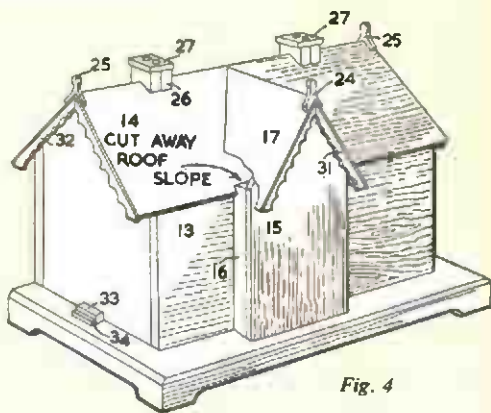


Fig. 4

The sign of 'The Musical Tavern' is cut from $\frac{1}{8}$ in. wood and glued in place. Windows are painted black and lined in white.

The whole model can be painted as desired or left in the natural wood. Workers will choose their own colour scheme for finish. Climbing shrubs round the windows can be modelled in plastic wood and painted.

Next week Gordon Allen will describe how to make a Stool Chest—of modern design and very practical. Also 'How to make a telescope' and other articles for the canoeist, modeller and fretworker.

CHEMISTRY IN THE HOME

EXPERIMENTS WITH DIMETHYLANILINE Part 4

TO make the dye Meldola's Blue, rig up a reflux apparatus on a sand-bath using a round bottomed flask (Fig. 1). Into the flask put 2 grams of beta-naphthol, 5 grams of p-nitrosodimethylaniline hydrochloride, 20 c.c. of water and 5 c.c. of glacial acetic acid. Boil the mixture. A red solution forms. This gradually changes to deep blue. Halt the boiling after two hours, pour the liquid from the flask into a beaker containing 150 c.c. of cold water.

To the blue liquid add potassium hydroxide solution until a drop of the mixture spotted on to red litmus paper turns it blue. A violet-black precipitate of Meldola's Blue base will have formed. Filter this off and wash it on the filter until one wash water is no longer alkaline, that is, no longer turns red litmus paper blue.

Deep solution

Transfer the washed precipitate to a beaker supported in a boiling water-bath. Add small quantities of dilute hydrochloric acid until it has nearly all dissolved. After each acid addition the liquid should be stirred for a few minutes, otherwise you will overshoot the mark. A deep blue solution of Meldola's Blue results. Filter this and evaporate it to dryness on the water-bath, when you will obtain the dye as a violet-black solid which shows a bronzy lustre where the light happens to reflect from it.

Dissolve a little of it in warm water. Wet out a few strands of tannin-tartar emetic mordanted cotton, squeeze them and then turn them in the dye solution for a few minutes. Remove, rinse in water and dry the cotton. It will be dyed a full indigo-blue shade. It was, in fact, once used to make a cheaper dyed fabric by dyeing the cotton first with this and then with a small amount of real indigo. By using this method less of the more expensive indigo was needed to give a good shade than would otherwise have been the case.

Let us now prepare p-nitrosodimethylaniline from its hydrochloride. Make a thin paste with p-nitrosodimethylaniline hydrochloride and water. Into this stir drop by drop sodium hydroxide solution until a slip of red litmus paper dipped into the liquid turns blue. The p-nitrosodimethylaniline is precipitated during the sodium hydroxide addition as a lovely green solid.

Filter if off, preferably with a filter pump, and then put the filter paper and solid on a porous tile to dry. An interesting and instructive diversion from dye making is to take the melting point of this substance before and after

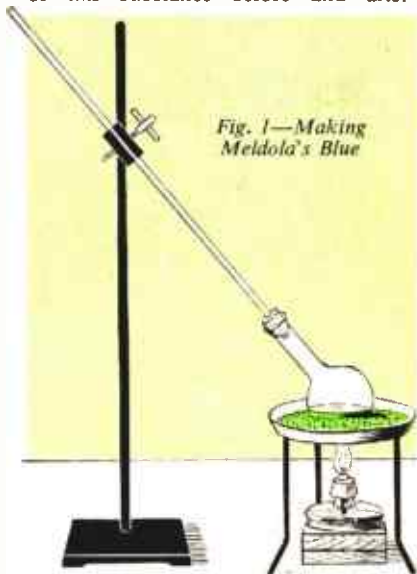


Fig. 1—Making Meldola's Blue

purification. Organic chemicals which will melt without decomposing can be tested for purity by this method. Indeed,

using it from benzene. To do this, place a little in a test tube. Partially immerse the test tube in a beaker of water which has just boiled and the flame been extinguished (benzene is, of course, inflammable). Add benzene little by little until all or most of the solid has dissolved. Filter the solution into a small evaporating basin and let it cool. Green crystals of the purified substance separate. Remove these and let them dry on filter paper.

Melting point tubes

You will now need two melting point tubes. Take a 5 or 6 in. length of glass tubing, heat it in the middle over a bunsen flame and draw it out as if you were making a jet (Fig. 2). Let the drawn-out tube cool and then hold the tube so that the tip of the flame impinges on the middle of the drawn-out section. A slight pull will cause the tube to separate into two halves. Any glass tail left will run up in the flame, leaving you with a closed capillary at the end of each tube.

Now rig up the melting point apparatus shown in Fig. 3. The beaker contains water. The melting point tube contains a small amount of the substance to a depth of about 3 millimetres and is secured to the thermometer by a rubber band. The stirring rod can be bent from a length of stout copper wire. This serves to keep the solution evenly heated and

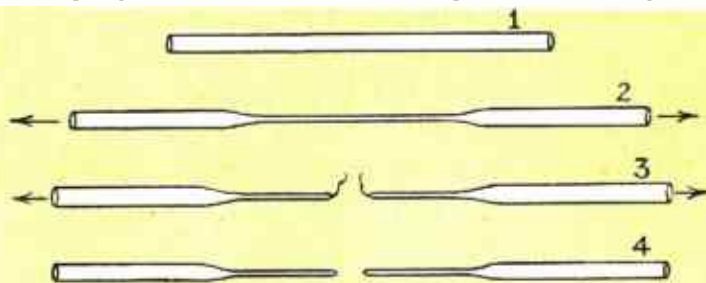


Fig. 2—The stages in making the melting point tubes

it is standard laboratory practice. A pure chemical melts sharply within a degree or two, whereas an impure or slightly impure chemical melts at a lower temperature and over several degrees.

First purify a small quantity of the p-nitrosodimethylaniline by recrystal-

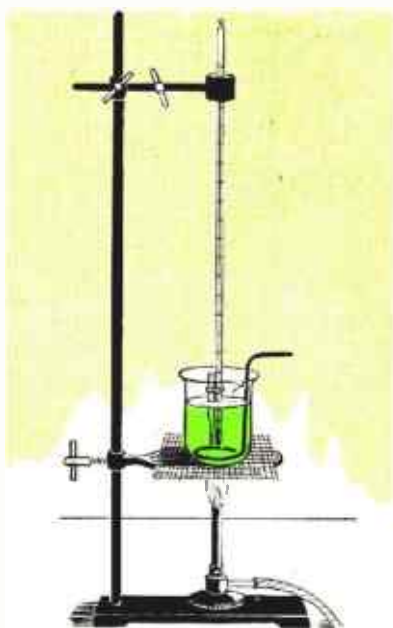
lized by moving it up and down while the heating is going on.

First test the unrecrystallized substance. Heat the water slowly until the solid in the tube melts to a clear liquid. Note the temperature at which it begins to melt and when it is completely liquid.

Repeat the experiment with the recrystallized substance. This will melt at a slightly higher temperature and more suddenly. Its melting point will lie between 84 and 86 degrees Centigrade. There is a certain amount of acquired skill in taking a melting point and you will find it useful practice to repeat these estimations by letting the water cool until the liquids solidify in the melting point tubes and then heating up again and heating very slowly after 75 degrees.

Since water boils at 100 degrees, solids whose melting points are higher than this temperature are tested in a liquid of high boiling point, such as glycerine.

To make Methylene Blue, dissolve p-nitrosodimethylaniline in as small a quantity of dilute hydrochloric acid as possible, by warming, allow to cool, add an equal volume of dilute hydrochloric acid and then pass hydrogen sulphide (generated from iron sulphide and dilute hydrochloric acid) through the yellow solution until it is decolorized. Owing to the objectionable smell of hydrogen sulphide, this should be done in the open air.



Now add ferric chloride solution until a full blue colour develops. Filter the solution, add an equal volume of saturated brine solution and then zinc chloride solution until no more precipitate forms. This precipitate is Methylene Blue. It is best filtered off with the aid of a filter pump. Dry it in a warm place. It sometimes has simply a dark blue colour, sometimes a reddish-blue shade, according to the state of subdivision.

Wool can be dyed by dissolving a little of the dye in warm water and heating the wetted wool with it for a few minutes.

Cotton needs a mordant and the tannin-tartar emetic mordanted cotton prepared as described in the first article of this series can be used. Set out a few strands with warm water and turn these in a few c.c. of Methylene Blue solution for a few minutes. Both the dyed wool and cotton should, of course, be rinsed in water before drying. Each will have a beautiful blue shade. Methylene Blue is also used in medicine.

(L.A.F.)

Fig. 3—Taking a melting point

● Continued from page 261

The Practical Camper

about anywhere, as in time the pitch can become fouled. Instead, such residues should always be poured into a specially dug hole over which there is a grease trap (Fig. 5). This is a grill of plaited pliable thin sticks. The grill is easily made and catches solid bits which can then be burned. When the grill itself becomes very greasy it, too, is burned and another made.

If it is your good habit to slip off your heavy shoes when entering the tent, a shoe-rest at the door is not only neat but keeps the shoes off the ground and helps to dry them. A rest is made with short pieces of wood as shown in Fig. 6.

Yes, camp is certainly the place for the handyman to express himself.

Have you forgotten a toothbrush? Then one can be quite well made with a twig about 1/2 in. diameter and 5 ins. long. Strip off the bark and by cutting and recutting the end, fluff up the wood for about 1/2 in. The soft end makes a splendid substitute for the forgotten article.

The handyman does not get burnt fingers by using a short fork or spoon over the fire, for he makes both items long-handled with an extension of wood, splitting the end, inserting the item and binding. Nor does he continually have to hold the book he is reading, for he rigs up a simple rest.

There is quite a lot of chance for

ingenuity about the tent itself, and the practical man should be able to fit storm guys and make double peg purchases when the ground is too soft for good holding. He ought to know a bit about everything from fixing up

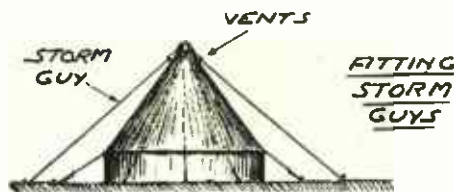
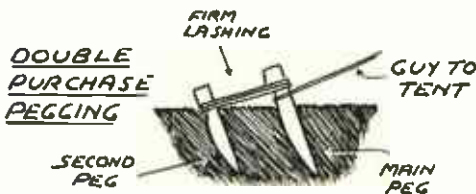


FIG. 7.



catches and hide-outs to emergency draining of the pitch, if caught unawares by a bad storm.

The whole subject of handyman activities under canvas is too large to be fully dealt with in a single article, but Fig. 7 shows how to fit a storm guy and put in a double purchase peg-hold, essential tasks under gale conditions.

Storm guys are lines taken out at a much greater angle than that of the tent guys, which gives an infinitely increased holding power in high wind. In fact, a tent that otherwise would be ripped from its pegs can weather a gale safely with these guys in position.

In a bell tent the extra lines can come through the vents. With a ridge tent they should come from the highest points on the poles. Storm guys must be set out in the direction from which the strain seems to be coming.

Double-pegging

Double purchase peg-holds are made by driving a second peg into the ground a little distance from the official peg which is somewhat higher out of the ground than usual. A rigid lashing is then taken from the top of this peg to the second, which is driven well down.

The enhanced holding power given by the second peg is rather remarkable. Indeed with such in position the tent can 'tug' even on really soft ground without causing any movement.

The Practical Camper

CAMP is the 'valhalla' of the inventive and practical man. Chances of improving conditions and making things more comfortable are always coming his way and these stimulate the right kind of mind; added interest being given by the fact that probably the only materials to hand are those found in nature's storehouse.

One item that should be taken from the world of houses, however, is plenty of light cord or strong string for making lashings. Such are to be obtained quite cheaply.

with strings (a) and then take the same number of strings (but longer) to a crossbar (b) as shown. Raise the bar and push in a wad of hay (c). Lower the bar so that the strings cross in the opposite way and again thrust in a wad (e). Lift the rod and repeat, and so on to the end of the length.

Cut the strings and tie the loose ends together. Trim the edges of the wads and you have the neat and comfortable mattress (d).

Some people find it very back-tiring to sit on the ground with the legs out in

'spread' them tripod fashion till the tops are just wide enough apart to hold the lip of the bowl. If strongly lashed the pieces will spread and be under a certain tension, everything thus being held rigidly. If the binding does not give a tension, push the lower ends of the pieces slightly in the ground.

A plate rack is handy, especially if there are a number of people in camp and washing up has to be done at one spot. The rack 'airs' the plates in the sun and is a handy place to keep them. All that is necessary are a number of

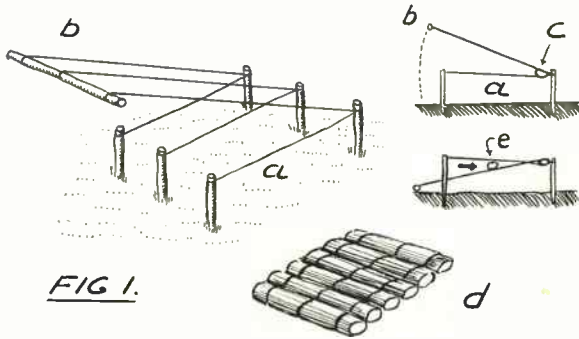


FIG 1.

FIG 2

BACK REST

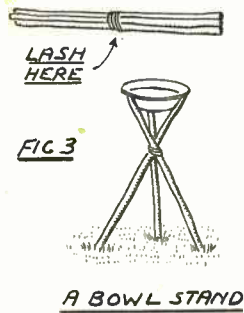


FIG 3

A BOWL STAND

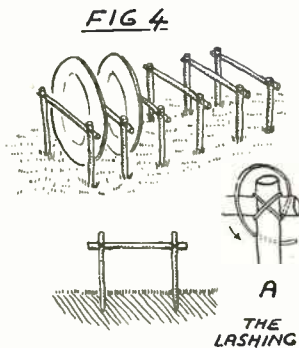


FIG 4

FIG 5

FIG 6

THE LASHING

PLAITING THE GRILL

BIND HERE SPLIT

The degree of trouble a camper goes to in making himself 'at home' depends to an extent on the length of stay, but if the time is anything more than a long week-end, then to make gadgets is quite worth while. In any case there is the fun in constructing them.

Methods of making oneself snug at night have been mentioned earlier in the series, but if there is hay to hand (or dry grass) the handyman should certainly weave a mattress. Three sticks are set firmly in the ground and the same number some 6ft. away (Fig. 1). Join

front and you cannot always be stretched out flat. The simple back-rest in Fig. 2 solves the problem. Cut several pieces of wood (a) roughly the same length, and two rather longer pieces (b). Notch these two at (c). Find also two supporting pieces (d). Fasten the (a) lengths to the upright with the simple lashing (e), set up, and the back-rest is complete.

You may like to wash by the brook or you may have brought a small bowl. If so, it is worth making a stand (Fig. 3). Cut three sticks about 4ft. long and lash these tightly together in the centre. Now

pieces of wood about 1ft. long. Three go to each frame, two being pushed in the ground and the third locked across the top, Fig. 4. A number of these frames are put side by side, the plates going between. Finish off lashings as (A) by bringing the cord round between the pieces and pulling. This way no knot is required.

When a camp is of any length and there are a number there, greasy water in which plates and pans have been washed should not just be thrown

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It's more fun

MAKING YOUR OWN PRINTS

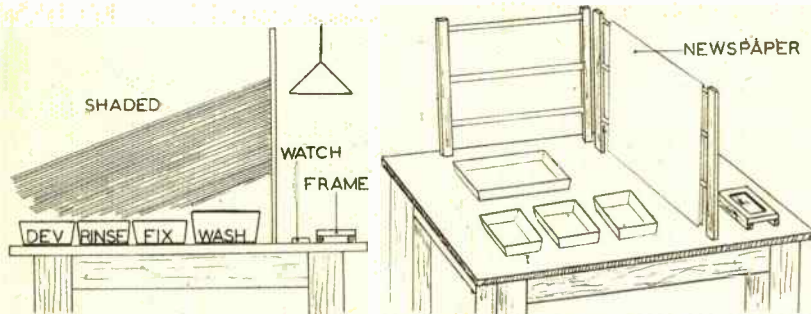
ONE of the main reasons why photography is so often regarded as an expensive hobby is because prints account for the greater portion of the expenditure. Yet you can reduce these costs considerably and get more fun out of your hobby by following these commonsense methods.

Have you ever thought of seeking the co-operation of your friends? Perhaps you have one or two chums also interested in the same hobby, and shar-

bottles come in useful and, perhaps, Mother will be able to help. You must also ask her help in allowing you to use the kitchen, and for the provision of some saucers or dishes for doing the actual job.

You will need some sort of printing frame, of course, and again the cost may be shared between friends, but if initial funds are lacking, use a piece of glass. Printing paper can be laid face upwards on the table, negative on top, face

both are in contact. You can easily tell the emulsion side of the negative, for it looks dull, but the reverse applies to the paper. The paper is exposed to the light for a few seconds, then transferred to your miniature darkroom for processing. Now you can save both paper and time by sorting out all negatives of similar density, and making a test strip for each group. This is done by exposing the entire paper — with negative — for, say, 2 seconds. Cover a strip $\frac{1}{4}$ in. wide with cardboard, making another exposure of 2 seconds, and so on until all the paper has been exposed in $\frac{1}{4}$ in. strips. Develop the print for 1 minute and the different strips will reveal exposures for 2, 4, 6, 8 and 10 seconds. Examine the print in the normal light, select the correct exposure, then make all prints for that group of negatives, using the same exposure each time.



ing both the work and costs will help all. For a start there are some handy little packs containing paper and chemicals, but remember that the same amount of fixer and developer will cost no more to make twenty-four prints as eight, so if three other friends join with you, this will save chemical costs for a start.

Processing is so much easier with more hands at work, and you can make a whole batch of prints in next to no time.

You need a packet of contact paper, once called gaslight paper, because it could be handled quite safely in that type of illumination without the need for a safelight. A box of 100 sheets of $2\frac{1}{2}$ in. by $3\frac{1}{2}$ in. paper costs $7/8$, while a packet of 25 sheets costs $2/9$, so you almost get one packet for nothing if you buy the larger quantity. Other sizes are almost proportionate in price, so there is a similar saving on larger purchases.

The same applies to developer powder, and the cheapest method is to buy a tin to make 20 ounces of solution. Buy the developer recommended by the paper manufacturers, make up according to their instructions, using water that has been previously boiled. Again, it is cheaper to buy 1 lb. of fixing powder than the $\frac{1}{2}$ lb. pack.

When preparing the developer for use, it will be found that the instructions state 'one part of stock solution to three parts water', so you will want some suitable measure. Here small jars, or

downwards, then the glass over both to keep the two in perfect contact. The glass must be cleaned, for dirty marks will be shown on the prints. If you prefer a white border, a packet of celluloid masks may be bought for about 6d., or you can make your own from some black paper, sticking on to the glass with a touch of gum. If you do happen to make your own masks use a set square to produce perfect corners and an opening of 2 ins. by 3 ins. for $2\frac{1}{2}$ in. by $3\frac{1}{2}$ in. prints.

You can safely handle any contact paper in the shaded light of an ordinary electric lamp, providing it is kept from the direct glare. Move the table to that part of the room farthest from the light, erecting a screen of some description, so that all operations may be done within its shade. A clothes maiden is very useful for this, with one side draped with sheets of newspaper. Alternatively, you may shade the light itself.

Four dishes are advisable for the work of printing, one for developing, one for rinsing, one for fixing and one for washing. A watch with a second hand is also useful as a timer, unless you can count seconds accurately. Place the dishes as shown in the diagram and you are ready to start the printing.

The paper is opened within the shade and a piece placed with the negative in the printing frame (or under glass as mentioned), so that the emulsion side of

Communal effort

With three friends at work, one can expose, one develop, one fix and one attend to preparing the next printing. Then you can change round for a time. The one developing must drain the print — to save solution — then drop into the rinse water dish. The fixer must give the print a really thorough rinse for half a minute before transferring to his fixing bath. This rinse is most important, for failure to observe will most certainly result in stains. The prints must also be kept moving in the fixing bath for at least half a minute, achieved by a gentle rocking of the dish. Here they are allowed to remain for ten minutes, after which they can be transferred to the final wash dish.

It is a good plan to examine the prints as you go along, and if your prints are a little dark, the exposure may be too long. You may be too near the light, so the obvious remedy is to move the printing frame farther away.

The fourth dish is only a temporary measure really, for prints must be given a thorough washing in running water for an hour. Use the kitchen sink for this, adjusting the outlet plug, so that drainage is reduced.

After this washing, drain off surplus water from the prints, laying them on sheets of newspaper where they will dry overnight.

If you make twenty-four prints from a small packet, having used one for a test strip, the cost will be $2/9$ plus about 6d. for the chemicals. In the shop each print would probably cost you $4\frac{1}{2}$ d.

(S.H.L.)

OLD FRAMES – NEW IDEAS

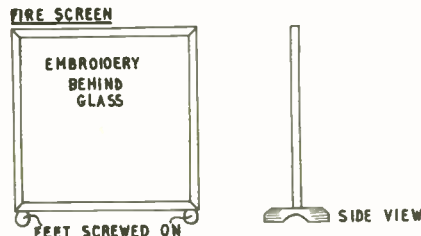
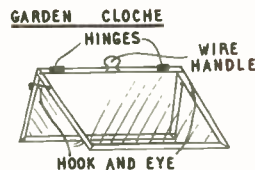
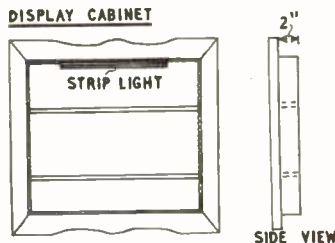
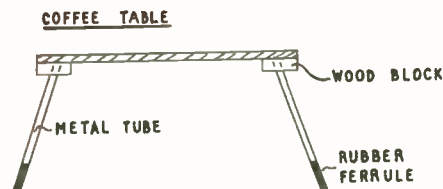
OLD pictures can be found in every junk-shop, lumber room or garage. You know the kind of thing, 'Volunteers returning from the Zulu Wars', 'Stag at Bay', etc. Gaudy prints and mildewed engravings in heavy old frames, pleasant enough in their own way, but out of place in the modern home.

three ply or hardboard. Glue and screw blocks of wood at each corner, drill holes at a slight angle, and fit lengths of gas pipe or electric conduit for legs. Fit rubber ferrules on the legs; rubber handle bar grips cut down serve very well.

Attractive and easily made tea trays can be quickly constructed from well

glass and backing, then fit a shallow box with one or two shelves, on to the back of the frame. These little cabinets make ideal settings for collections of china, etc. A strip light fitted into the top will turn it into a living picture.

Plain frames, particularly oak ones, can be turned to good use, as they make excellent holders for notices of all



shaped frames. Proceed exactly as before, adding a handle at each end.

In both cases embroidery, colourful maps or magazine illustrations can be inserted between the glass and the backing for decoration, or alternatively, the glass can be painted on the inside, of course.

Fire screens can be made in the same way by adding two feet instead of handles. These make ideal mediums for showing off tapestry, embroidery work and marquetry.

Unusual and very attractive display cabinets for wall hanging can be made from picture frames. Choose a deeply carved or moulded frame. (I found a beauty for five shillings). Remove the

kinds, such as menus, shop and factory acts, club rules, hotel conditions, etc. The frames keep the notices clean and legible and look neat.

If you cannot find the right size frame for what you require, one can easily be cut to size with the aid of a mitre block. Oak frames with their varnish removed look very well with a limed finish.

To make a garden cloche, hinge two frames together and fit hooks and eyes of wire, at each end.

With a little ingenuity converting old frames can become a lucrative and useful pastime, and, if the worst happens, there is a surprising amount of fire wood in a frame! (K.J.H.)

COLOURING CELLULOSE

COLOUR treatment for celluloid articles in sheet, strip or moulded form can be rendered by time baths. The depth of the colour produced can be controlled by time of immersion in each bath.

The celluloid is first thoroughly cleaned by washing with warm water. Scratches or similar surface imperfections can be polished out with an abrasive metal polish, followed by a fine metal polish. Most proprietary brands are suitable. Wash again after polishing and then dry thoroughly.

Two solutions should now be prepared in separate containers with an intermediate bath of clean water.

Alternatively the celluloid can be washed under a running tap.

The procedure is to completely immerse in Solution 1, leave for a few minutes, remove and rinse in fresh water, then immerse in Solution 2, finally removing and rinsing after a few

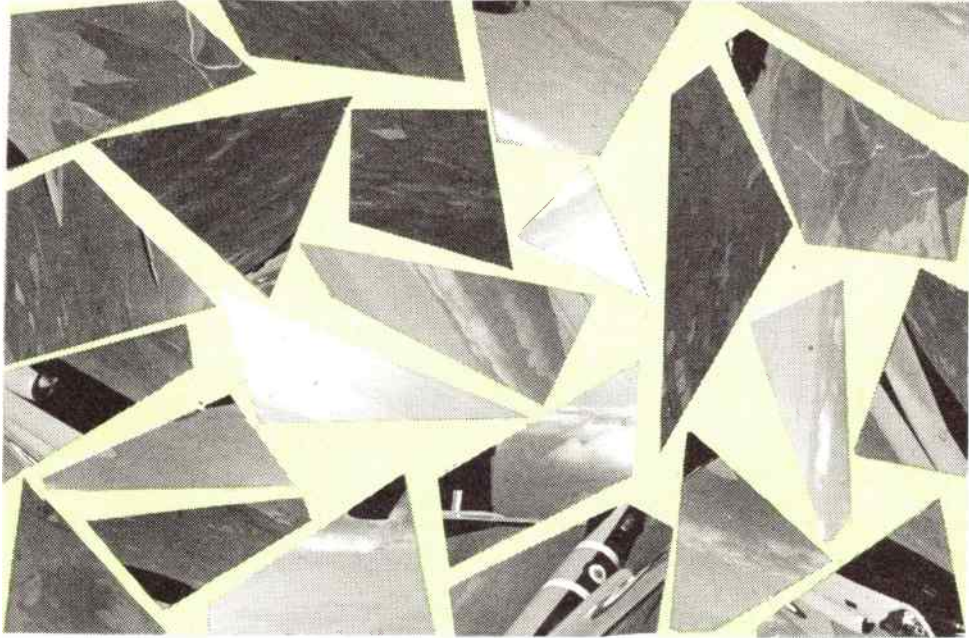
minutes. Repeat the cycle of treatment as necessary to produce the desired depth of colour.

The strength of the solutions will also have an effect on the depth of colour produced and also influence the number of separate 'dip' cycles required. The second or third cycle of operations should build up a reasonable depth of colour, so strength of the solutions can be adjusted accordingly. (R.H.W.)

Solutions required for different colours are:

Colour	Solution 1	Solution 2
Black	Any weak alkali	Dilute silver nitrate
Red	Weak nitric acid	Ammoniacal solution of carmine
Blue	Ferric chloride	Potassium ferricyanide
Yellow	Lead nitrate	Potassium chromate

AIRCRAFT SPOTTING



THIS is the first test in a new and practical feature for aircraft spotting enthusiasts.

Mount the photo illustration on a piece of thick card, using gum or photo mounting paste. Better still, mount it in the professional way by using shellac tissue and a hot iron, as described in a previous issue of *Hobbies Weekly*. Then, using a modelling knife and a straight-edge, cut out the various geometrical shapes and join them together, jigsaw fashion, to form a complete picture. One of the pieces is a 'key-piece' round which it will be fairly easy to build up the illustration.

You then have to identify the aircraft — sometimes it will be a modern 'jet' or civil transport, sometimes it will be a fascinating 'oldy' which most keen types will have read about in their quest for aviation knowledge.

To help you to 'spot' the aeroplane the following facts and information surrounding it — clues if you like — will be found both helpful and interesting:

This aeroplane is a special version of a twin-jet bomber at present in service with the Royal Air Force. It is special because it is — or was — a 'flying test bed' used for the development of the Bristol Olympus turbojet engine and it broke the world's altitude record on

August 29th, 1955. The record height was 65,876ft. (over twelve miles high) and the pilot of the aeroplane was Wing Commander Walter Frame Gibb, D.S.O., D.F.C.

To ensure that the record cannot be disputed the aeroplane carried a sealed box containing a pair of sensitive altimeters, a pair of temperature indica-

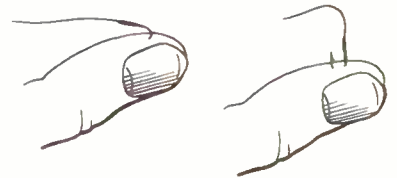
tors, a voltmeter, an air speed indicator, a temperature indicator registering the temperature of the box interior — and two cine cameras for a permanent record of the performance.

A solution to this Jig-Quiz showing how the pieces are assembled will be given next week.

REMOVING FISH HOOKS

MOST boys like to go fishing. A great deal of fun can be had just standing on the bank of a river playing the fly and hoping for the best. But, even in fishing, accidents can happen, and on occasion a hook gets caught in a hand or leg. When this happens the first reaction is to pull it out. This makes a very nasty ragged cut that takes some time to heal. To try and pull the hook out backwards also tears the flesh.

The best thing to do if the hook is not too deeply penetrating the flesh, is to push it right through and then break off the pointed arrowhead when the round wire can be pulled back through to the point of entry. This leaves only two small puncture wounds which can quite



easily heal. Use a spot of iodine or other disinfectant to prevent infection of the wounds.

In cases of doubt or for a deep penetration, it is better by far to see a doctor, as a local anaesthetic may be required before any attempt at removal of the hook can be undertaken.

(T.H.E.M.)

Replies to Readers

Is this YOUR Problem?

Cleaning Leathercloth

I AM renovating the interior of a car and would like to know how I could prevent the red dye from coming off the plastic rexine. I have tried washing it with warm soapy water and applied a wax polish, but with no success. (E.G.—Weston-super-Mare.)

THE usual leathercloth used for car upholstery is made from coloured plastic, and there is no independent dye which can rub off. Has the seating been treated at some time with a coloured polish such as red linoleum polish? If you think any colouring matter has been applied, try cleaning it off with a solvent fluid such as 'Polyclean'. If this leaves the shabby surface exposed and it needs some treatment to revive it, use one of the upholstery revivers which can be obtained from some garages and motor sundries shops. If the surface needs polishing, use a silicone leather or plastic polish.

Dynamo Conversion

IS it possible to convert a cycle dynamo to an electric motor, and if so please advise what would have to be done. Also state what voltage of battery would be required to operate the motor. (T.D.—Crewe.)

THE usual cycle dynamo consists of a magnet rotating between the poles of a wound field; or the magnet is fixed and the winding rotates. With both such arrangements it is practically impossible to fix up the necessary commutator and brush gear which are required in a motor, and for this reason it is not feasible to convert the dynamo to a motor.

Formula for Paint Stripper

CAN you recommend a recipe for a paint stripper? I understand there are liquid and jelly or waxy types; is the latter I am seeking, to be used on household paints, not cellulose. (S.O.—Tottenham.)

A VERY efficient wax-based stripper for non-cellulosic paints is made up from 1½ pints benzene (not benzine), 1 pint methylated spirit and 1 ounce paraffin wax. Heat up a pan of water to boiling, turn out the flame and place a vessel in this containing the benzene. When it has warmed up, add the paraffin

wax and stir until dissolved. Stir in the meths., remove from the bath and allow to cool. By increasing the wax content, stiffer and more waxy-looking strippers can be made. This product keeps indefinitely if stored in well closed vessels.

Condensation on Pipes

THERE are two exposed water pipes passing through the kitchen and both are constantly dripping, causing ugly stains to appear on the wallpaper. Can you suggest a remedy, please? (J.D.—Navan.)

THE condensation on your water pipes can be reduced if not completely cured, by applying three coats of well jellied distemper on a dry day. The distemper can be prepared by softening whitening with water overnight, draining superfluous water off and adding colouring matter and thick glue size, using it cold. As an alternative method you could give a trial of anti-condensation paint such as ZAT, for example. This can be bought direct from Concrete Paint Co., Maiden St., Barnstaple, Devon.

Laying Wood Blocks

QUITE a number of oak blocks have become loose in the floors of my house. Can you help me to solve the re-fixing problem? They are laid on a concrete base. (E.M.—Upper Fornal.)

REMOVE any loose blocks in the wood floor, then with a mixture of one part cement to two parts sand, make the concrete undersurface level. Let set and when dry, dip the underside of the wood blocks in hot pitch and re-lay.

A Leaky Flat Roof

I HAVE a garage which is brick built with a flat roof. I wish to use the garage as a workshop but it leaks very badly. Please suggest a remedy which is not too expensive and which I could undertake myself. (B.D.—Swansea.)

IT is assumed that your garage roof, being a flat one, is of concrete. This develops cracks under the influence of weather conditions — hence the leaks complained of. You can cure this by covering the roof with a thin layer of

STROPPING PAPER

THE following abrasive paste can be applied to strips of paper, wood or similar material to be used for sharpening small, keen edge tools. Applied to paper it is particularly effective for stropping safety razor blades. It can also be used for applying the final 'edge' to knives, etc.

For paper strops, ordinary thick writing material is about the best base.

The paste is made by mixing equal parts of sodium carbonate and persulphate of iron. Make up only the amount immediately required since it must be applied fresh to the paper. (R.H.W.)

bitumen or asphalt. If too expensive, try filling up the cracks with asphalt, then coat roof inside and outside with Macstet, which if not sold locally can be obtained direct from Devon Commercial Arts, Church Lane, Barnstaple.

Liquid Manure

CAN you furnish a formula for making a liquid manure suitable for feeding indoor plants? (A.Y.—Emsworth.)

A CONVENIENT manure for indoor plants is one which can be kept as a solid concentrate and a quantity mixed with water prior to use. A useful formula is:—

Ammonium nitrate	40 parts
Ammonium phosphate	20 parts
Ammonium chloride	5 parts
Potassium nitrate	½ part
Calcium sulphate	6 parts
Ferrous sulphate	4 parts

All parts are by weight. Separately powder the solids and mix very thoroughly. For use, ¼ ounce is well stirred with 1 gallon of water, and the plants watered with the mixture.

Galvanizing an Aquarium

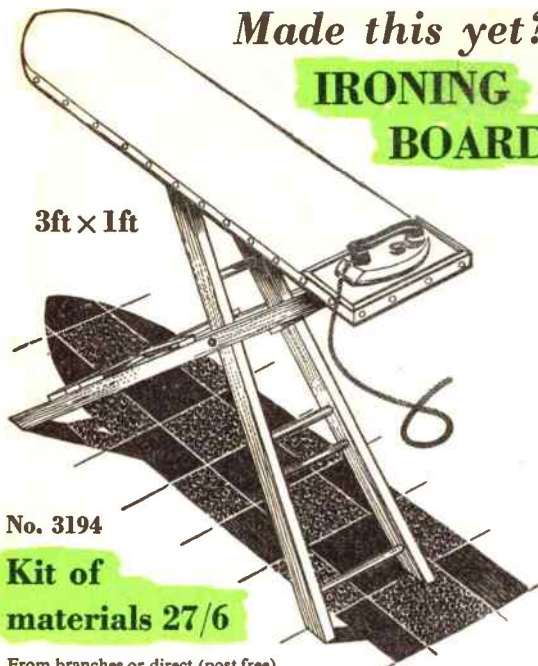
I HAVE a galvanized tank and my intentions were to have (one side only) two windows ¼ in. plate glass and use as an aquarium. Can you please advise on the best method of window fixing, also should I paint any particular substance on the inside? (J.B.—Bristol.)

IF the tank is not rusty you should not need to paint it inside. If it requires painting, all the rust must be removed. You could use bath enamel on it. The windows could be held by frames bolted to the tank, with the glass and frames bedded down in a jointing compound, such as 'Sealstick'.

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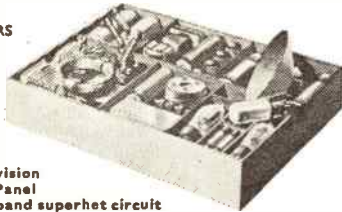
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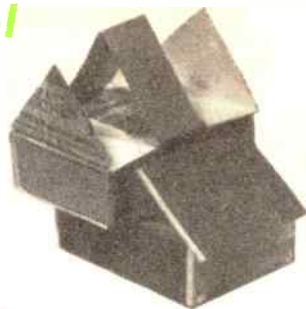
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Wine from the Garden

WHATEVER the size of a garden and however well you have planned the crops, there is bound to be a certain amount of surplus or waste. That row of lettuce has come on too fast or some may have run to seed. You may have miscalculated and grown too much of something else and cannot use it up quickly enough.

By A. F. Taylor

All this surplus, which would otherwise be thrown out or dug in, can be turned to very good account and made into a nice wholesome wine. Most forms of vegetation, provided it is not poisonous, may be made into wine, and very nice it can be.

Here are a few recipes to help use up some of the garden waste and turn it into a most enjoyable wine.

LETTUCE WINE

Lettuce is one of those crops which often matures rapidly with the result that it cannot be used up quickly enough. All this surplus will make an excellent wine. Ingredients: 3½ lbs. lettuce, 1 lemon, ½ lb. stale bread, 3½ lbs. sugar, 1 gall. water, ½ oz. yeast.

Toast the bread evenly on both sides and place this with the lettuce, water and grated rind and juice of lemon to boil gently for thirty minutes. When cool strain through two thicknesses of butter muslin and add the sugar and yeast. Pour into bottles and leave to work for from two to three weeks or until fermentation practically ceases. Temperature will affect this rate and if it is well below 60° it will take much longer—65° is the ideal to aim at.

Some people prefer to omit the yeast, and provided the wine will start fermentation without it this method is to be preferred.

Cabbages and other greens can also be used with the same recipe, or as a variation 1 lb. barley may be added, but the boiling time should be cut down to twenty minutes when this is done.

CARROT WINE

Parsnip wine (see *Hobbies Weekly* of May 9th, 1956) is a firm favourite with

home wine makers, but little use is made of surplus-carrots. Like parsnip wine it is very good, and can become quite strong. Ingredients: 3½ lbs. carrots, 1 lemon, 1 orange, ½ lb. raisins, ½ lb. wheat, 1 gall. water, 3½ lbs. sugar, 1 oz. yeast.

Scrub the carrots and boil with water until soft, but not mushy. Strain and while still hot, add to the raisins, wheat, orange and lemon. Allow this to stand for forty-eight hours, preferably in a stone jar covered with a cloth. Then strain, add the sugar and yeast and pour into bottles to work for about two weeks.

ROSE PETAL WINE

Flowers generally make very good wines and one of the best is prepared from rose petals. Unless you possess some of those old-fashioned red roses which bloom so profusely you must be content with small quantities. Ingredients: 4 ozs. rose petals (about 1 quart), 2 pints water, ½ lemon, 14 ozs. sugar, ½ oz. yeast.

The petals can be plucked off the bushes or they may be freshly dropped ones. Lightly rinse them in cold water to remove dust and then boil with water for fifteen minutes. Leave to soak till next day, then strain, add the sugar, lemon juice and grated rind and yeast, and put it into bottles to work for about two weeks.

Many other flowers are worth using for wine making, and the same recipe is quite suitable, but you may substitute an orange for the lemon if desired. Try making a bottle or two with marigold, pansy, jasmine, primrose or wallflower petals, and you will be very pleased with the result.

POTATO WINE

Potatoes can hardly be called garden waste, but you can make a very excellent wine from the peelings using the same recipe as for potato wine. Here it is: 4 lbs. potatoes or peelings, 1 gall. water, 1 orange, 1 lemon, 4 lbs. sugar, 1 oz. yeast.

Boil the potatoes with the grated rind of orange and lemon for fifteen minutes and strain carefully so as not to mash them or the wine will be very cloudy. Stir in the sugar, orange and lemon juice and yeast and put to work in

bottles for three weeks. Decant and strain through muslin into fresh clean bottles but do not cork tightly at first.

Demerara sugar may be used instead of granulated, and you may leave out the orange and lemon and instead of these use 1 lb. raisins and 1 lb. wheat, which are boiled with the potatoes.

NASTURTIUM WINE

The seeds of nasturtium are often used for pickles, but are rarely made into wine. Nasturtiums will grow almost anywhere and in poor soil will bloom profusely, a few plants producing quite a lot of seeds. You can, of course, also use the petals and leaves to make wine with. Ingredients: 1 pint nasturtium seeds, 1 gall. water, ½ lb. raisins, ½ lb. wheat, 3½ lbs. sugar, 1 oz. yeast.

Rinse the seeds and boil with the raisins and wheat in water for twenty minutes. Strain, add the sugar and yeast and stir until dissolved, when it is ready to put into bottles to work which will take from fifteen to twenty days.

Mint wine was mentioned in *Hobbies Weekly* of October 24th, 1956, and most other surplus herbs can be turned into wholesome wine. Parsley is especially good and so is sage, spinach or thyme. If you haven't got enough of one herb try a mixed batch for a change.

Mustard and cress either together or separate are somewhat unusual but quite tasty. The mint recipe may be used for all these wines, or you can alter some ingredients to suit your fancy.

An orange or lemon may be added with, perhaps, a few cloves or a little ginger to improve the flavour. Raisins, dates or figs are often included in a recipe, say, from ½ lb. to 1 lb. to the gallon. A favourite ingredient especially with country folk is wheat, or barley, and even rice — not more than 1 lb. to the gallon is needed.

NETTLE WINE

Stinging nettles are a menace in some gardens and they can be difficult to get rid of — don't worry, make them into wine. Do the same with dandelion leaves and enjoy a good drink. The roots, also, are excellent for the job, so get busy and dig them up.



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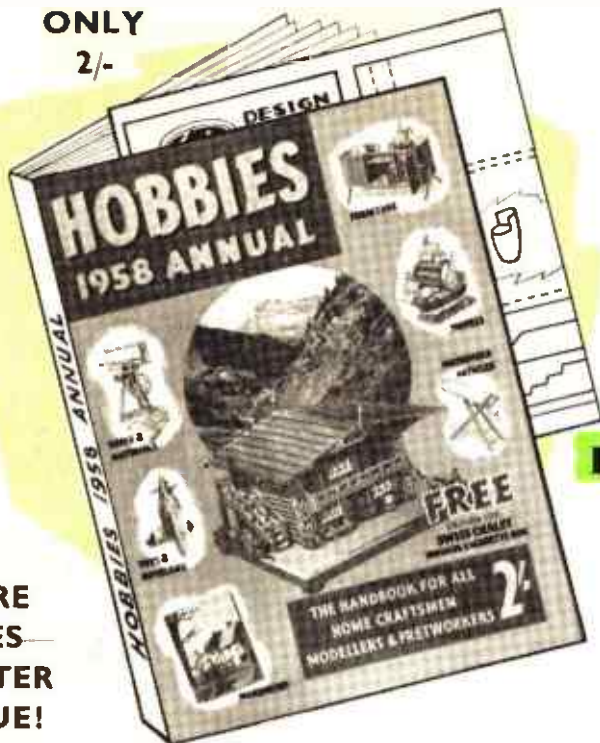
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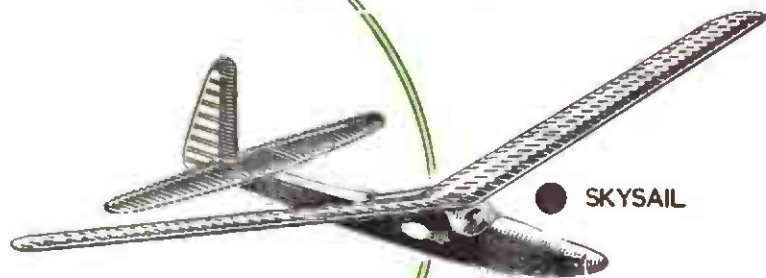
Transfer the pattern to $\frac{1}{2}$ in. wood by means of carbon paper, and cut out with a fretsaw. Cut the interior frets first and then the outline. Frets are drilled to take the saw. Clean up with glasspaper and paint in suitable colours. Coloured cloth or paper can be pasted behind the frets to give good effect to the lettering.

Fix a suitable brass hanger at the back for fixing to the wall. (M.p.)

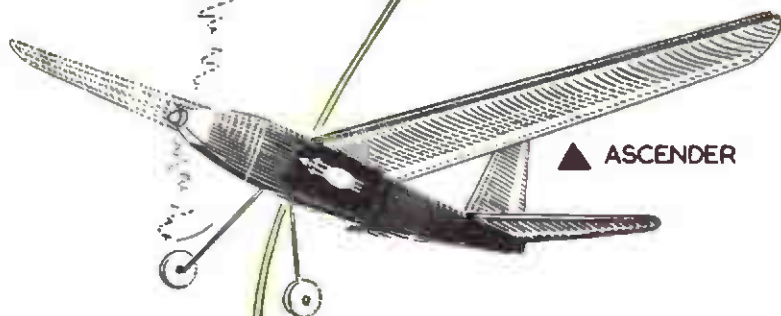


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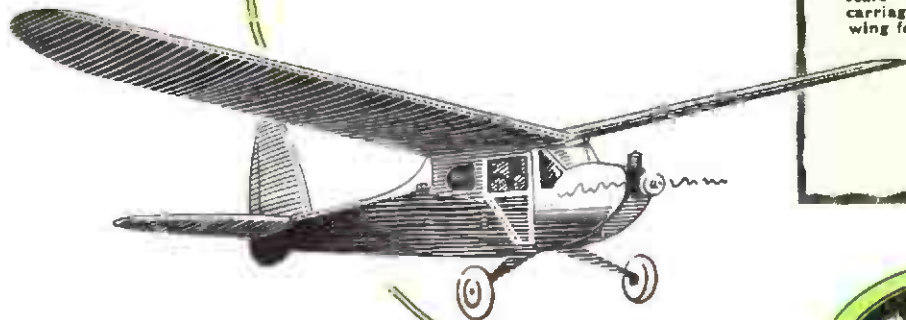
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