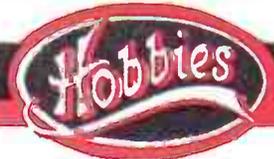


HOBBIES WEEKLY

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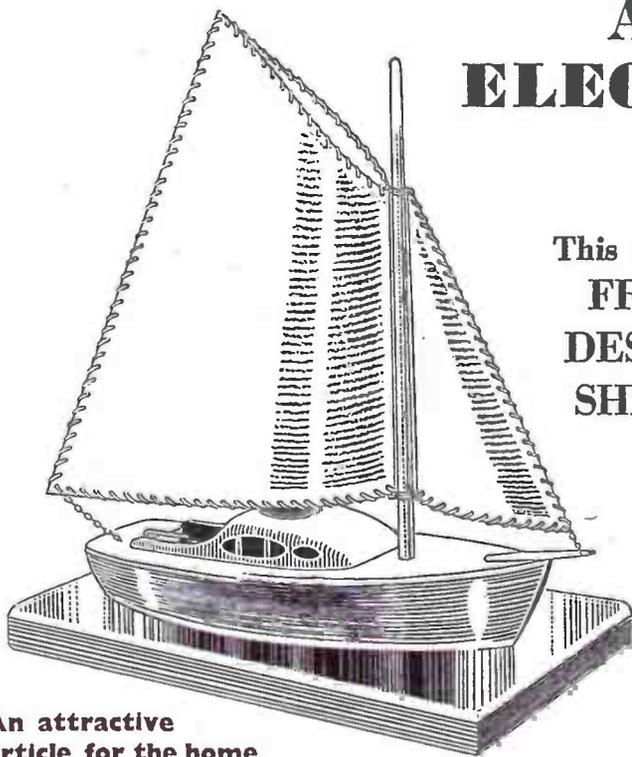
JUNE 8th 1955

VOL. 120

NUMBER 3110

Detailed instructions for making

A YACHT ELECTRIC LAMP



**An attractive
article for the home**

This week's
**FREE
DESIGN
SHEET**

THIS yacht electric lamp, in which the model has the added merit of conforming to the graceful lines of the real thing, makes an attractive project for the handyman.

Set on a sturdy base, which practically eliminates the possibility of an upset, the lamp is designed for use on the table, sideboard or writing bureau, or the dressing-table in the bedroom. Subdued lighting comes through the sails, which are made of Crinothene. It is a pleasing subject for making up for one's own use, or as a special gift for a special occasion.

How to Begin

Transfer the patterns to the appropriate thicknesses of wood, and cut out the pieces with a fretsaw. Glue together pieces 1, 2, 3 and 4 as shown in Fig. 1, to form the hull. This section is shaped with the aid of a rasp or penknife until the projecting steps at the stern and bow have been taken down, sufficiently to form flowing lines. The approximate shape should appear as in Fig. 2. There is no need to be over-particular about the shape so long as the sides are symmetrical.

A point to note, however, is that when

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

**For Modellers, Fretworkers
and Home Craftsmen**



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gluing these pieces together, the holes in pieces 1, 2 and 4 should coincide, as it is through these that the flex will finally be passed.

To form the cabin top (Fig. 3) glue together pieces 5 and 6 and the two pieces 7. These pieces 7, it will be noted,

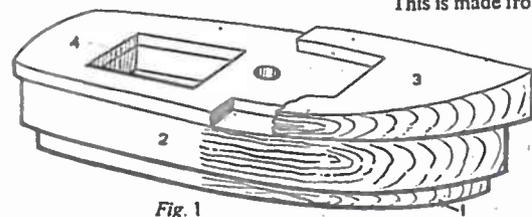


Fig. 1

A KIT FOR 25/-

For making this lamp you can obtain Kit No. 3110, containing wood, Crinothene, wire, round rod, chain, lamp holder and twin flex, from any Hobbies branch, or post free from Hobbies Ltd., Dereham, Norfolk. Price 25/-.

must be tapered in section conforming to the dotted lines on piece 4 shown on the design sheet. Also before assembling make sure by testing that the hole cut

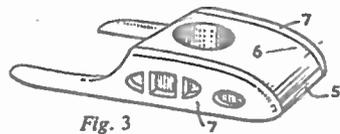


Fig. 3

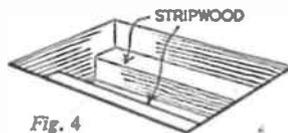


Fig. 4

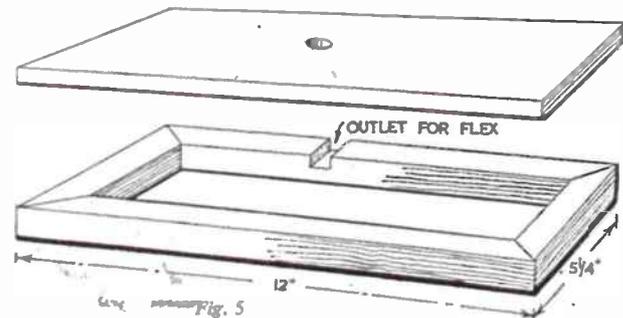


Fig. 5

out in piece 6 is large enough to take the bulb holder. When assembled, the section can be glued on to piece 4.

In the well, glue two pieces of 1/4 in. square stripwood as shown in Fig. 4 to form the seats. This completes the main body of the yacht.

The next step is to make up the base. This is made from 1/4 in. by 1/4 in. stripwood

and a piece of 1/4 in. wood as shown in Fig. 5. There are two points to remember in the construction of the base. One is that there is a groove to be cut in the stripwood of a size according to the flex which will be used, and the other is the provision of a hole in the 1/4 in. wood. To fix this exactly, set the yacht on its base and mark the position of the hole where the flex will be passed through.

Give both the hull and the base a thorough clean up with glasspaper

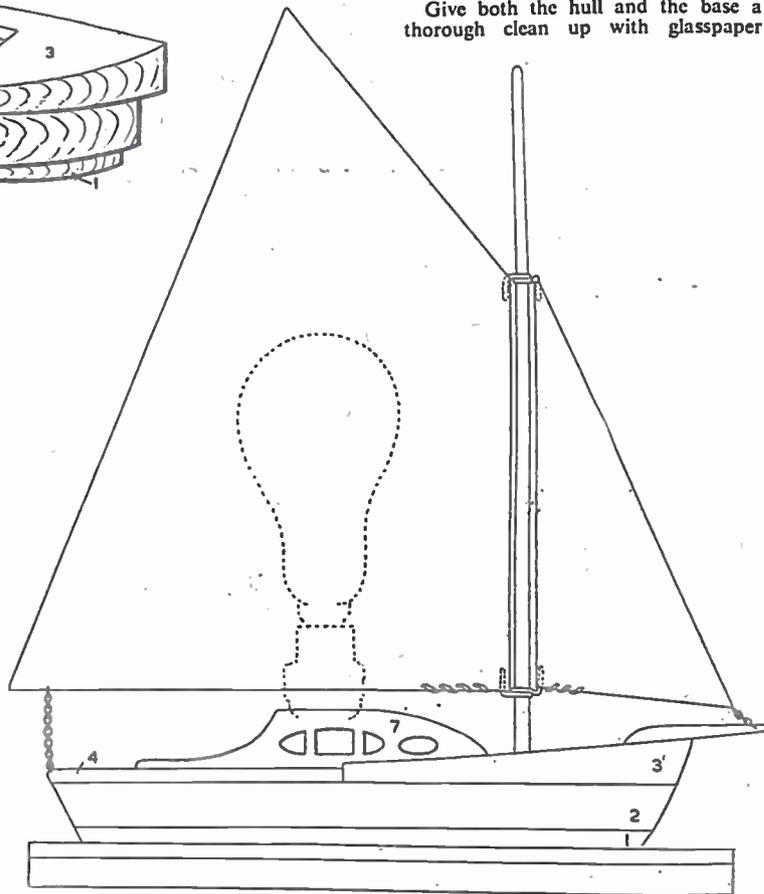


Fig. 2

before colouring. This can be with plastic enamel paint or Chinese lacquer. Give several applications, and after each coat is dry, rub down with waterproof silicon carbide paper used wet. Adoption of this method will be found to give a really high-gloss finish.

The colourings, of course, can be left to individual tastes, but it is suggested that the following would look well. Brown for the hull and inside of the well, green for the base, light brown for the deck, with the cabin in cream. The insides of the windows should be painted black.

When all the paint is thoroughly dry.

the hull can be screwed to the base from the underneath. Three or four screws will be found to be ample.

The mast is made up from a piece of 1/4 in. diameter round rod, 12 ins. long and tapered as in Fig. 2. Glue this in place in the hole provided in piece 3. The bowsprit, which is 2 1/2 ins. long, is also made up from a piece of 1/4 in. diameter round rod. This is shaped as in Fig. 2, the portion where it is fixed to the deck being flattened. For fixing the bowsprit, use glue and two fret pins (Fig. 6). The

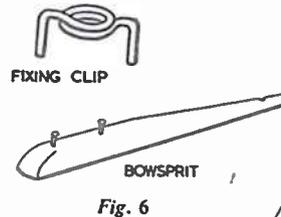


Fig. 6

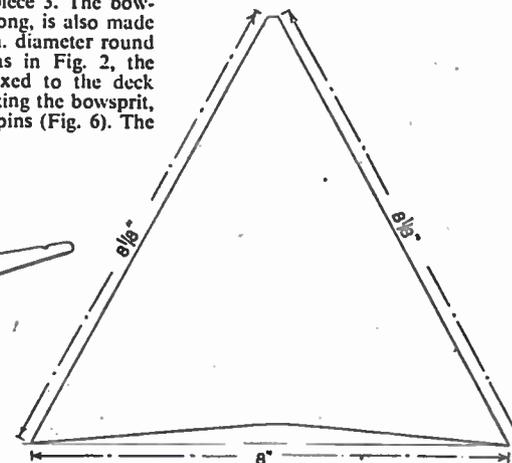


Fig. 7

mast and bowsprit can now be given two or three coats of clear varnish.

The next step is to screw the nipple attached to the bulb holder centrally over the hole in piece 5. Now thread through the flex from underneath. The ends of the wire should be bared, and after dismantling the bulb holder connect the wire to the terminals, afterwards reassembling the bulb holder, which can now be screwed on to the nipple, drawing the wire taut from underneath.

Making the Mainsail

The first thing to do when making up the mainsail is to cut the Crinothene to double the shape given on the design sheet. This shape is traced on the material and the pattern then reversed and again traced, thus making the final shape to be cut out double that of the size shown. The complete sail should appear as in the tiny diagram in the lower right-hand corner of the design sheet. On no account should the Crinothene be folded down the centre line and thereby creased, as in the finished article the appearance should be that of a billowing rounded sail and creasing would upset this effect.

The full dimensions of the jib sail are shown in Fig. 7. The base for this is the side which is 8 ins. long.

The holes for the thonging for both sails are best made with a leather punch just large enough to take the plastic thonging. Fig. 8 gives the general idea of the make-up of the mainsail. Lay it flat and cut the plastic-covered wire which forms the framework and shaping to fit along the top and bottom edges.

This wire is bound to the sail with the plastic thonging. Bend the sail round until the outside edges meet and bind these together with a continuation of the thonging. Note that if the thonging is to

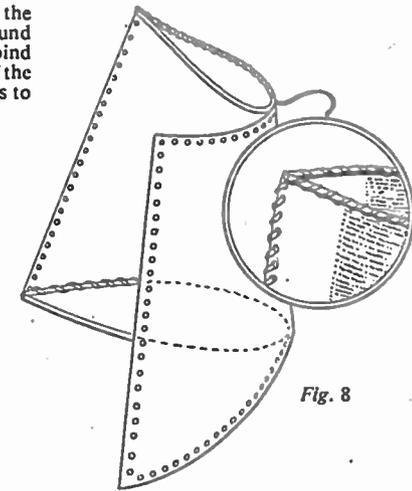


Fig. 8

of wire, that along the bottom edge, is required.

The two fixing clips for the sails are made up as in Fig. 6 and Fig. 2. They are twisted to shape from plastic-covered wire and hold the sails in position. A short length of this wire can also be inserted in the joined outside edges if this is thought necessary to aid stability.

To complete the assembly, tie two short lengths of brass chain to the sails, and pin the other ends to the bowsprit and stern as shown in Fig. 2.

FOR THE MODEL-MAKER

A Handy Wedge Vice

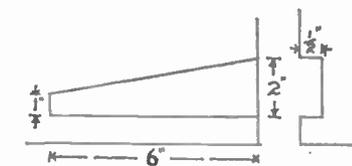
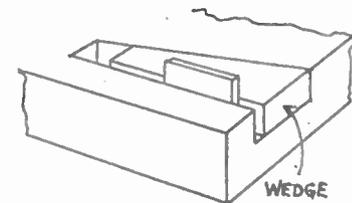
By A. F. Taylor

HOLDING small articles firmly is often a problem to the handyman and model-maker. Even if you do possess a bench vice there are times when it is of little use and something else must be devised.

A wedge vice is just the thing to make in the end of the bench and will be found very useful. If your bench happens to be the kitchen table, the vice can be made in a strip of wood and clamped to the table top.

The size to make the wedge vice will depend on the work that is done, but for most general purposes the measurements given in the drawing will be found about right.

It may be necessary to make two or three wedges of different sizes to cope with varying thicknesses of the work being held. It is best to cut the wedge slot as deep as possible, because this can be adjusted by placing a strip of thin



wood on the bottom of the slot to suit the work in hand.

This wedge vice should prove extremely useful to the wood carver and the width of the slot may be made very much larger to accommodate the panels.

MAKING A PAIR OF GLOVES

By J. MacIntyre

WITH a working knowledge of his materials the leatherworker can try his skill at more advanced articles and there is a wide range from which to choose. Leather toys, sandals, handbags, bill-folds, moccasins, belts and finger-puppets spring readily to the mind. A useful accessory for most seasons of the year is a pair of gloves or mittens, and in this article details are drawn out so as to simplify the making of these.

Start drawing from the left side of the wrist, round the finger-tips and finish on the right side of the wrist. Paste the paper to heavier paper or light cardboard and cut out neatly with a pair of sharp scissors. Again, a useful pattern can be had by ripping a worn glove and spreading the pieces flat.

With the pattern at your disposal, the first step is laying out the parts on the leather. After positioning the pattern pieces, which can be pinned at the corners, draw on to the leather. Extreme care should be taken when marking out



Drawing glove pattern on to paper

The construction of hand-sewn gloves or mittens can be an intriguing and even a profitable pastime. There is always a demand for well-made gloves where the workmanship and finish are good.

Suitable Skins

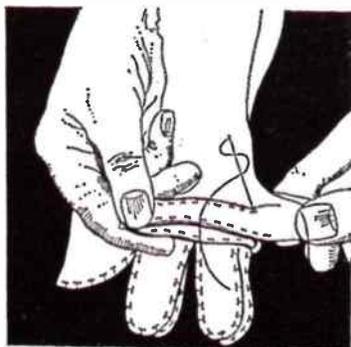
Leathers used for gloves and mittens should be soft and supple to allow for unrestricted finger and hand movements. Suitable skins are: cape, pig-skin, suede, doeskin or kid. As stressed in an earlier article, care should be taken when selecting leather to make sure that the skin is free from flaws or small holes. When inferior leather has been used, the gloves will have a tendency to split at the seams and break away. With the addition of a pair of scissors to the usual tools, the leatherwork implements previously described are suitable for glove-making.

Glove patterns may be obtained in various ways. Printed patterns are obtainable in many sizes and varieties, but the worker can supply his own pattern, as illustrated.

Place the left hand, palm downward, on a sheet of paper, keeping the fingers close together and the thumb placed well back. Mark round the outline of the hand with a well-sharpened pencil.



Transferring paper pattern to leather



Stitching seams with dagger-pointed needle

the pattern on the leather. With a very sharp pair of scissors cut out the gloves.

Outside seams will prove to be the most effective for hand-sewn gloves. Practise sewing on odd scraps of leather

before attempting the actual work. Use dagger-pointed needles for tough leathers and sewing needles for soft light ones. When stitching be careful not to pull the threads too tight, as this is liable to crinkle soft leather. To sew, use strong thread such as linen, silk or heavy cotton. Each length should be lightly waxed by drawing it over beeswax, as this prevents knotting or tangling. The sections between the fingers are sewn to corresponding finger edges on



Simple method of joining seams—one continuous strip

the glove back from tip to forefinger. The last seam to be joined is along the outside hand at the little finger. If care has been taken in making accurate patterns and in cutting, the thumb piece should fit perfectly.

'Points' should be stitched last; these are worked as a decoration on the back of the gloves and many variations can be styled. Stitching may be carried out to match the leather or a contrasting thread can be used. Choosing a contrasting thread lends a decorative quality to the finished article. As a final note, the beginner should practise cutting and sewing on odd scraps of leather before attempting to make a pair of gloves. If reasonable care has been taken in cutting and making up, there should not be any difficulties.

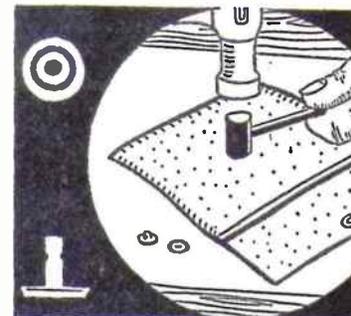
Fasteners and Eyelets

For setting eyelets in leather there are special pliers which are very handy, but the work can be accomplished easily enough with an eyelet spreader. The hole punched for the eyelet should be a tight-squeeze, so that the eyelet can be worked through it. Make sure when inserting the eyelet that the ring top is on the right side of the spreader. The point

of the eyelet spreader can then be inserted and given a blow on the top with a hammer. Eyelets are made in metal colours and also in bright enamelled lacquers. Striking effects can be obtained with rows of gaily coloured



Gloves with thumb pieces added separately

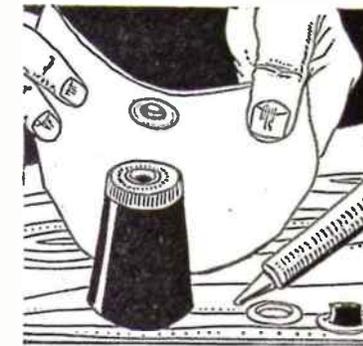


Setting a snap

eyelets in a dark belt.

Spring cage snaps consist of four parts: the socket, cap, post, and spring cage. To set the snaps, mark their position on the article, and punch a hole of correct size for insertion of the socket. Fit the socket and then put the cap over the socket, with the cupped end of snap setter over the cap. Drive

home securely with hammer. A grommet is a large eyelet. It has two parts—an eyelet and a washer—and it can only be set on a grommet setter. The same procedure is used for fitting. The illustration shows how this is accomplished.



Using the grommet setter

HINTS FOR HIKERS AND CYCLISTS

About Maps and How to Use Them

By Arthur Sharp

MAPS are indispensable to hikers and cyclists on a touring holiday. A good map of the particular region you intend to explore is the one thing you must not leave at home. A reliable map is a guide that will never let you go astray—if you read it aright. Directions given by folk you meet on the road are sometimes rather confusing. Distances, too, are ill-judged by many rural dwellers. Cross-country miles, not infrequently, are extremely long ones. But the map never varies.

The best maps, for those who tour on foot or on bicycle, are those issued by the Ordnance Survey Office, available from stationers and booksellers. The O.S. map with a scale of 1 in. to 1 mile serves the rambler and the cyclist very well. The 1/2 in. scale map is also very handy, more particularly for the cyclist. For walkers, the 1 in. maps are essential, as it is impossible to show on the smaller-scale maps the footpaths, byways, and many topographical details which are—or should be—of great interest to explorers of the countryside on foot.

The 1/2 in. maps are excellent cycling aids; the features of the country shown are substantially the same as those on the 1 in., and the details are delineated with the utmost accuracy. Relief is shown on the 1/2 in. sheets by means of layers; the different altitudes are indicated by flat tints of varying shades, low ground being shown by means of green tints, and higher ground is shown

in buffs and browns. Contours are shown at 50ft. and intervals of 100ft.

It is, of course, essential to obtain two or even three of these O.S. sheets where areas overlap on the route you wish to travel. The sheets are issued in popular form and size, mounted on linen and folded between covers.

Understanding the Map

It is not difficult to understand a map if you study it carefully and memorize the particulars given at the bottom of each sheet. It is easy enough to learn off by heart the conventional signs found there—these signs and symbols denote roads, footpaths, railways, woods, rivers and lakes, post offices, youth hostels, churches, villages, etc.

Contours are shown by thin red lines, enabling you to distinguish hill and valley, slopes and levels. Some practice is required in reading these various symbols on the map before you can read it at a glance.

An important thing to note is the scale, which helps you to gauge the distance from place to place. In the margin at the bottom of the sheet the scale is drawn; five miles of it, so that you can fix it firmly in your mind, and can roughly estimate by scanning the map the approximate distance between any two points.

When reading your O.S. map remember that the sheet runs—or rather the sides of it—in a north and south direction, i.e., the top of the sheet is the north, the bottom the south. Thus, by comparing the direction of any road or path with the side margins, you can obtain the direction of any path marked on the map which you desire to follow.

Always hold the map when you are reading it in the open country in the correct position, with the top pointing to the north. To 'set' a map correctly a compass is needed; but even without such an instrument—and not every hiker and cyclist carries one—it is easy to spread out the map flat on the ground, so that the north lines on the sheet point to north on the ground. Once you have north on map and ground corresponding, and presuming your position on the map is known, you may look for some conspicuous object on the ground which is marked on the map. A straight line is then ruled from your position to the sign or symbol of the feature, and the map turned round until the line, if prolonged, would reach from your standing-point.

The map, of course, is intended to be a help and guide, but the tourist should also try and develop a 'sense of direction', using his eyes and his knowledge of the area he is exploring and only relying on his map as a check on his movements. 'Make a friend of the map, but do not become a slave to it' says an expert on moorland tramping.

A Lattice Clothes Airer

By W. J. Ellson

length of 24ins. to 30ins. will, in most cases, suffice.

Fitting together can now be undertaken. Screws of the round-headed type are employed, and a thin metal washer should be provided for each. The end holes are bored an easy fit for the screws, that is a fit that allows the screws to be pushed through the holes up to their heads with easy pressure of the thumb alone. Having bored these,

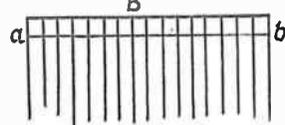
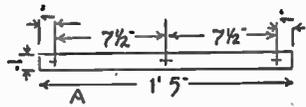


Fig. 1

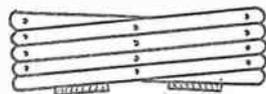


Fig. 2

MATERIALS REQUIRED

- 16 strips of 1/2 in. wood, 1 in. wide and 1 ft. 5 ins. long.
- 8 lengths of 1/2 in. round wood rod, 2 ft. long, or as desired.
- 2 lengths of 1 in. by 3 ins. wood for stiffeners at base, length as necessary.
- 12—1 1/2 ins. round-headed screws.
- 4—1 1/2 ins. round-headed screws.
- 6—1/2 in. round-headed screws. All with washers.
- 1 pair of 1 1/2 ins. screw bolts, with wing nuts.

*If octagonal rods preferred, 4 ft. run of 1/2 in. by 9 ins. deal board, if 2 ft. long rods desired. Also note that 1 rod, a top one, will be 1/2 in. longer than the rest.

the centre holes can be attended to. A difference in fitting is adopted here. In one strip a similar hole to those at the ends is bored, but in the strip to which it is subsequently attached, a smaller hole is made with a bradawl, just large enough to let the thread of the screw bite its way in. Detail D, in Fig. 3, explains this.

One exception to this is the screw holes in the two top sets of strips, where they cross each other, the easy-

fitting holes being bored through both, and this time using a 1/16 in. drill bit. These are joined together with screw bolts and wing nuts, as at E, and being capable of adjustment of tightness, help to keep the clothes airer firm, when drawn out. Now screw the lattice sides to the cross-rods, commencing from the bottom upwards, as it will be found that the top rods or one rod, at least, will have to be a trifle longer than the rest. In all cases where the screws are employed, slip a metal washer under their heads, as shown in detail C.

Holes, made with a bradawl, must be made in the centres of the ends of all the rods beforehand, obviously, and a good plan is to punch a hole in the centre of a

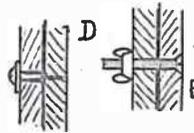
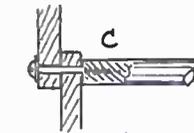


Fig. 3

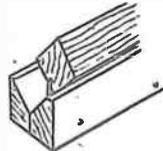
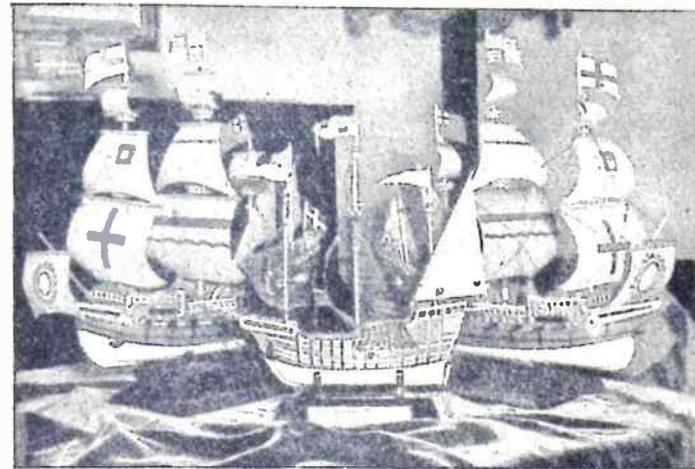


Fig. 4

disc of thin, or even stiff card, cut to the diameter of the rods and to use this as a guide by laying it on the ends of the rods in turn, and pricking through the centre hole with an awl. Adjust the tightness of the screws to provide a reasonable easiness of movement, when pulling out or folding up, without losing stability and firmness when in use.

Across the bottom pairs of strips, screw 1/2 in. by 3 ins. bars of wood, as can be seen in side view, Fig. 2. This will help in steadying the article when extended for use, and add a little further stability and rigidity to it. Give the completed clothes airer a rub over with fine glasspaper, but otherwise it is best left unfinished and is then unlikely to mark any damp clothes placed upon it. The ends of the cross-bars should be slightly rounded off as a finish.

A FINE COLLECTION OF MODELS



WHETHER he is engaged in modelling old-time galleons or modern ships, Mr. A. J. De'ath of 7 Charing House, Windmill Walk, Lambeth, S.E.1, is very much in his element, as the accompanying photographs of some of his finished work emphasise.

Mr. De'ath has been reading 'Hobbies Weekly' for many years, and has found a wealth of material in its pages. His first essay in model making was a doll's house, and he has made up literally dozens of Hobbies kits.

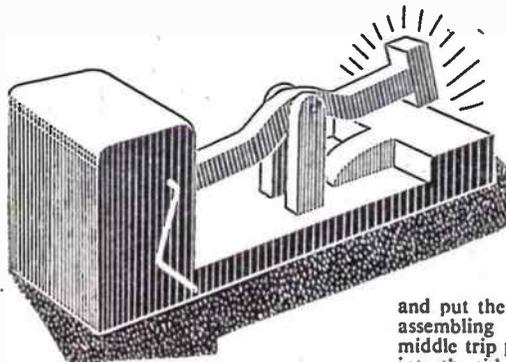
Painstaking Work

Beautifully executed, his galleons represent many hours of pleasurable and painstaking work. The model of the 'Santa Maria', in the foreground of the galleons displayed here, is now the treasured possession of his daughter, who is in the U.S.A.

In the smaller picture Mr. De'ath is seen with his working model of the tug 'Climax', which, as he says 'turned out a very nice job and made a very nice present for a little boy'.

Indeed, it makes a very nice present! And so would the many other models featured in Hobbies large and varied range of kits. Those who have been inspired by these examples of Mr. De'ath's efforts and would strive to emulate him should write to the Editor, 'Hobbies Weekly', Dereham, Norfolk, for a free copy of the booklet 'Profitable Leisure', which contains examples of the fine work which can be achieved.

Making a Toy Trip-Hammer



Full-size patterns are on page 159

YOU can make this interesting little toy from odd pieces of wood. Painted in bright colours, it will be an acceptable present for a small boy. It is also a suitable subject for the beginner in modelling.

Construction

Cut the base (A) from 1/2 in. wood to the shape shown on the pattern page. Cut out the two holes to take the hammer supports. Now cut two sides (B), the back (C) and the top (D) from 1/2 in. wood. Make the handle and trip combined from medium gauge wire,

and put the wire trip in position when assembling the sides, etc. Bend the middle trip portion first, insert the wire into the sides, glue the sides in position and bend the handle when the glue on the sides is dry.

Next cut and glue pieces (E) and (F) in position. They should be 1/2 in. thick. Pieces (G) and (H) are the same thickness, piece (H) being the hammer head. The upright supports are 1/2 in. thick and should be high enough to allow the hammer to work freely. Measurements are not given because it is a matter of adjustment.

Clean up all the parts and paint with plastic enamel paint, giving two or three coats to make a high-gloss finish.

(M.p.)



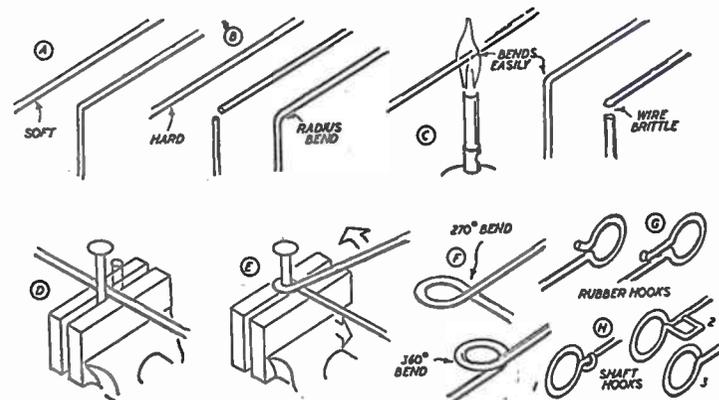
Making Parts and Fittings in

Steel Wire

STEEL wire is produced by drawing, which process makes the wire stronger and, quite often, brittle. Wire is always stronger than the steel from which it was originally drawn. Down to about 20 S.W.G. diameter, the wire is thin enough to be bent to almost any required shape by the use of pliers, but thicker wire is a different proposition. 18 and 16 S.W.G. wire sizes are

relatively little spring in it.

An easy way of bending hard wire to heat it to anneal or soften it—C. It is then quite easy to bend—but quite useless if it has to take any strain at all. It will simply snap off at the bend.



typical of the wire specified for propeller shafts for model aeroplanes, small boat drive units, etc., whilst thicker wire still may be required for marine propeller shafts, model aeroplane undercarriages, etc.

People who have taken this easy way of bending 12 or 10 S.W.G. wire into undercarriage shapes for model aircraft have soon learnt this lesson, as the undercarriage falls to pieces on the first landing!

To bend steel wire properly you have

Stainless Steel Preferred

The steel wire you can buy is known variously as 'piano wire', steel wire, etc. The name is seldom a true indication of the type of wire, which may range from quite soft to brittle hard, be of plain steel, stainless, or plated. For most types of work, stainless steel wire is preferred, as it will not rust. The protective coating on plated steel wire is often damaged when forming to hook shapes, etc., thus leaving the exposed bare steel wire free to rust.

The softer varieties of steel wire can be bent fairly readily through a right angle—A. If you try this with really hard wire, however, it is most likely to break. It is necessary to work through a definite radius in making a right-angled bend—B—rather than attempt an acute bend.

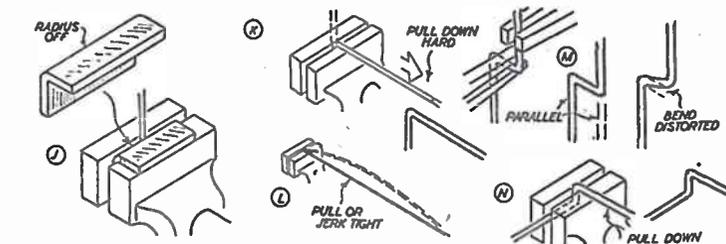
This brittle-hard wire is the best where maximum rigidity and springiness are required, provided it can be formed to shape satisfactorily. For general use, however, a slightly softer grade of wire is better, but not one so soft that it has

one of the ends right round the nail or rod—E—and you have a perfect loop. It is important to keep the wire pulled tight all the time, otherwise the loop will not lie snugly against the nail or rod. And start with enough length of wire to get a proper grasp.

Symmetrical Loop

If you are wanting a symmetrical loop in the end of the wire, a 270 degree bend is not enough. You must complete a full 360 degree bend—F. The remainder of the job then consists of using round-nosed and square-nosed pliers to form the required finished shape on the original loop. Thus rubber hooks for rubber-powered models, etc., will be bent first to line up the loop with the rest of the wire, then forming the short end and finally cutting off—G. A small triangular file is better than cutters for parting off excess wire. Shaft hooks which may or may not have to take a tensional loading are finished off as in H. Type 1 locks the loop so that it cannot pull open under load. Type 2 shows a freewheel loop bent integral with the shaft for model aircraft work. Not only does this save the bother of having to make a separate clutch loop, but it also eliminates soldering and gives a foolproof assembly. The plain loop shown in 3 will tend to open up under load, but is quite suitable for flexible couplings, etc., on small models.

Radius right-angled bends can be attempted in a similar fashion, bending around another length of wire or a stout



to get tough with it! The secret of making good bends is to have complete control over the wire all the time, and not let it get out of hand. Thus, to make what is apparently one of the most difficult of all bends in heavy gauge wire—a perfect closed loop—adopt a technique which provides this control.

Having decided the diameter of loop required, clamp a wire nail or piece of metal rod of the same diameter securely in a vice—D. The wire is then laid across the vice, as shown, holding each end. Keeping tension on each end, pull

nail clamped in a vice. An alternative is to use a radius plate in the vice, simply pulling the wire around this as shown in J. A hard strong pull is needed to produce a full right-angled bend, but the final adjustment can always be made with pliers. Wire which does not crack when bent sharply can be bent in a vice without an angle plate—K.

Incidentally, this is also a good way of straightening out kinks in the smaller sizes of wires. Just fix one end in the vice and tug hard on the other. If necessary, jerk taut. Make sure first

that both the vice and the end of the wire are firmly anchored. Softer non-ferrous wires (e.g. copper) can be straightened in a similar manner, but just by pulling instead of jerking. Pull hard enough and the wire will eventually start to 'give'. Stop and it will now be quite straight—and much harder than when you started.

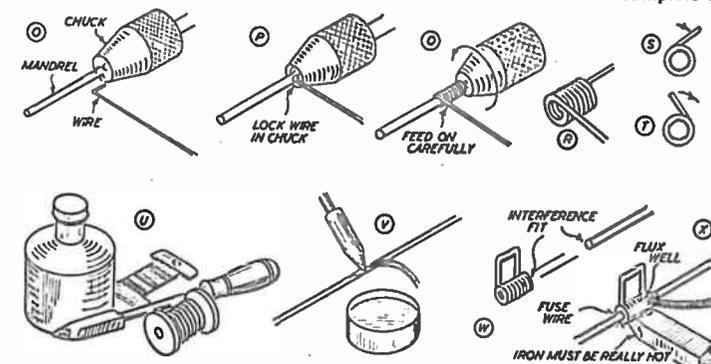
Having got your first right-angled bend, a crank bend will have to be completed with pliers—M. Note that pliers must be used to hold the short length between bends, otherwise you will almost certainly pull this out of truth. Strong wrist action is the secret of wire-forming with pliers, but it is also knack rather than sheer strength which counts. If possible, of course, use the vice again for making further bends—N. A vice always provides better clamping action than pliers—and also leaves you an extra hand free.

Winding coils of steel wire, e.g., for springs or clutch loops, etc., is quite easy if you use a hand drill. Fit a mandrel into the drill of a diameter equal to the inner diameter of the coil required—O. Then bend over one end of the wire and lock this behind one of the jaws of the chuck. It will not be necessary to clamp it in place—P. Then, by turning the drill and keeping the free end of the wire pulled taut, you should be able to wind on any length of coil with comparative ease—Q. The job needs two hands, so fix the hand drill in a vice if you have not got a helper. And remember that you must keep pulling on the wire to get a close coil, which should

slip off the mandrel looking like R.

Remember, too, that if you are making a clutch loop or coil which has to take a radial load, one direction of winding will tend to unwind the coil, and the other to close and lock the coil even tighter. In the case of a propeller clutch loop, for instance, coil S will tend to close and lock when engaged, whilst coil T will tend to open up.

Soldering steel wire is no problem,



provided you use the right type of flux; make sure that the wire is really clean, and use a very hot iron. Electric irons seldom get hot enough for the job, and a gas-heated iron is usually better.

Pre-tinning also pays—V. The tinned coating should be very thin and should run on to the wire smoothly. If it tends to lump up, then most probably the iron is not hot enough. If it will not

spread and run, then probably the wire is greasy or dirty.

As an example of a stressed soldered joint, take the case of a clutch loop soldered on to a wire shaft. The clutch should be an interference fit on the shaft in the first place—W, which means that the coil will have to be screwed or forced in place over the pre-tinned length of shafting. Add a binding of fuse wire at each end and complete the

joint by coating with flux, holding a hot iron against the bottom and applying solder to the top. The solder should run to coat the whole joint area smoothly and uniformly. Such a joint is seldom likely to fail under load, especially if the coil has been wound the right way in the first place. But wash after completing to remove traces of corrosive flux remaining, dry and lightly oil.

Flower Sticks with a Difference

By Margaret Eldraw

FLOWER sticks to hold up heavy-headed hyacinths or to keep overgrown leaves in place in your bulb bowls can be made to look most attractive by the addition of a brightly painted butterfly, bumble-bee, or dragonfly on the top.

Use Coloured Beads

One type can be made quite simply by using an elongated coloured bead for the insect's body, attaching a smaller round bead with strong thread to one end for the head, and sticking two tiny strips of cellophane paper with plastic wood on to the body for wings. Using green-painted sticks, obtainable at any good florists, the insect can then be attached with firm wire to the stick top by boring a hole in the top of the stick and threading the wire through this hole and then through the insect's body, finally twisting the ends tightly. The finished stick should measure about 12ins.

A more elaborate, but also more lasting, method is by cutting out the insects with a fretsaw from three-ply wood, and painting them in exotic colours. There is more scope for ingenuity and artistic skill this way, and the extra work involved is amply repaid by the beautifully shaped and coloured insects which can be produced.

For this second method you will again need the green garden sticks about 12ins. long, a piece of three-ply wood, a fretsaw and small clamp, water colour or oil paints, a small bottle of mastic varnish, a tube of plastic wood and medium glasspaper.

The butterfly or bumble-bee can be traced or drawn direct on to the wood and carefully cut out with the fretsaw, the edges being smoothed with glasspaper. It is a good idea to cut out a number of insects, so that they can all be

painted together, especially when oil paints are used. Oils are really the best for use on wood, but with care, water colours do very well. Both types must be left sufficiently long for the paint to dry thoroughly before the addition of a different colour. Any amount of ingenuity can be used over the painting and the colours used, but the mastic varnish must not be applied until the paint is completely dry.

Plastic Wood Platform

The final stage is to fix the butterfly or insect firmly in place on one side at the top of the stick. Using plastic wood, a little platform can be made which will hold the insect's body firmly in position. Again this must be allowed to dry and harden thoroughly, and then your batch of sticks is ready for use. Try them for yourself and see what an added attraction they are among your plants and bulbs.

An Outdoor Meat or Provision Safe

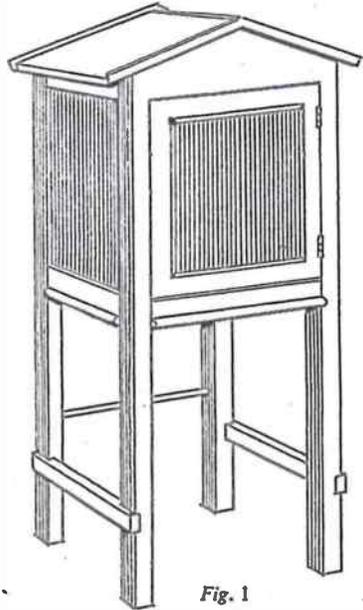


Fig. 1

half-lapped together as shown in Figs. 2 and 3, and glued and screwed together.

The side frames each consist of a front rail (D) 1ft. 10ins. long, a back rail (E) 3ft. 10ins. long, and two rails (F and G) 13ins. long. All these rails are 2ins. wide and 1in. thick and are half-lapped and glued and screwed together. The side frames are screwed to the back of the rails (A) in the manner shown in

top edge of the back is shaped to correspond exactly with the rail (B) of the front framework, a narrow rail or spline, being put across for strength as shown by the dotted lines. The front and side edges of the floor should be rounded over as shown. Observe, also, that the back (H) is nailed to the back edge of the floor, a 3/4in. being allowed to project below the underside of it to give good nailing strength.

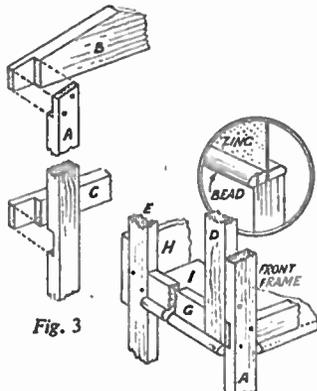


Fig. 3

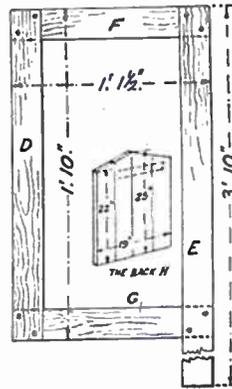


Fig. 4

VERY useful cupboard suitable for meat or other provisions which would be best kept outdoors during the summer season is illustrated in Fig. 1. It stands on legs 2ft. high, but these measurements can be amended according to position and need. The construction is simple and easy for the handyman.

There are three distinct frames which go to make the cupboard—the front, and two side frames. The floor, back and roof consist of tongued and grooved boards. The shallow slope of the roof should carry off any rain-water. After the framework is all in place a door is fitted, and this and the side panels are fitted with perforated zinc. Ordinary planed deal may be used, and paint will make a sound preservative and give a finished appearance.

How to Begin

A start may be made with the front framework of the cupboard and this has two uprights (A) 3ft. 10ins. long by 2ins. wide by 1in. thick. The top rail (B) is 1ft. 7ins. long by 4ins. wide in the middle, tapering down to 2ins. wide at the ends, and 1in. thick. The bottom rail (C) is also 1ft. 7ins. long by 2ins. wide by 1in. thick. All these pieces are

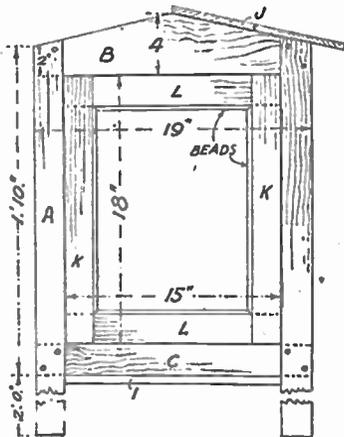


Fig. 2

Fig. 5. The back (H) and the floor (I) consist of 3/4in. tongued and grooved boards, the latter having the joints running from side to side, while the backboards run upwards according to the dimensions in the diagram of the back in Fig. 4. It must be noted that the

Two boards (J) each measuring 17ins. long by about 6ins. wide will form each slope of the roof, the tongued and grooved joint running from front to back as seen in Fig. 2. Nail the boards well to the top and side rails of the framework, and note that they overhang the front by 2ins. and the back by 3/4in. The side overhang is shown in Fig. 2. Cover the roof boards with stout felt or lino, brought over the edges and tacked down, a narrow spline being added at the front and back as in Fig. 6.

Making the Door

A close and well-fitting door must be made from two side rails (K) 18ins. long, and two rails (L) 15ins. long, all being 2ins. wide by about 1in. thick. All the rails are half-lapped together and glued and screwed. To hold the perforated zinc in the door, first mitre and nail round the opening four beads of wood

Continued on page 156

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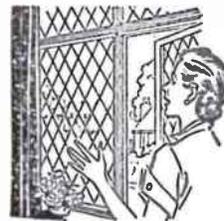
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Planning Shelves for the Kitchen

By Victor Sutton

THE home handyman often has to re-design his kitchen fittings and shelves, and it is wise to work out something based on the space available, which may be limited. Research has proved that the average woman spends three to four hours a day in the kitchen on various duties. All kitchens are not up-to-date, and we have to make the best use of the space available and take into consideration the fittings already installed.

In re-arrangement of the kitchen it is often a good plan to allow for the fact that at least one meal a day may be served there, thereby saving fuel and labour. So if you can do so, fit in a pull-out table.

It is the space above existing units which often leads to waste of room. Shown on the left of the sketch is a normal kitchen cabinet to which you can adjoin your newly arranged work. As a rule the cooker comes next and cannot be removed, but a built-in cupboard can be added next in the row as shown. This has a flush door and deep drawer at the top for cooking utensils and accessories. The corner section is ideal to use for deep shelves for trays, tins and the more generally used articles. So often these never do find a very practical home. China cleared from the table on trays can be slid into this fixture and await washing-up time.

It depends on just what space you have, but the provision of a 1ft. space between cooker and cupboard is a good move to accommodate fold-up kitchen chairs or a towel or cloth rail.

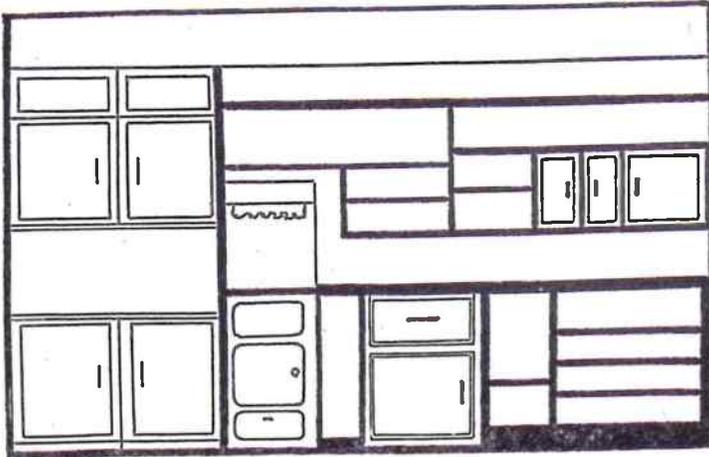
Careful re-arrangement of the shelves above the cooker and cupboards will give plenty of extra space, as shown in the illustration.

Stores of bottled fruits are often kept too low on the shelves, and as kitchen steps are usually available, there is no reason why fruit should not be stored well away to the top. Most standard jars only need 7ins. to 8ins. clearance,

so there is no need to have the shelf 18ins. deep.

Some saucepans are stood in sets and others arranged along the shelf. By re-arrangement of the shelf design you can get quite 8 to 10 saucepans into the double section, while allowing the deeper compartment for the stacked sets and such items as the porringer.

Small cupboards are far better for



storage of dry goods and the set shown will come in under the saucepan shelves and use up the deeper space above the cupboards, thus avoiding the plate stand of the cooker. As these need only be shallow they will not be an obstruction. This section would be best made in one unit and completed and then screwed to the base of the main shelf. Neat flush doors are the best and some of Hobbies' beadings will be found ideal for fixing these doors which need a fine fitting to make them look more professional.

In designing these small compact cupboards it is a good plan to assess just what can go in them, and then plan the divisions accordingly.

For the main work in this fixture use the best planed floorboard in the 6ins. width and 1in. thickness. This gives ample strength and can always be lined in neatly with hardboard.

Space permitting, another shelf can be put in for the storage of plates just above the cooker racks and as most cookers are now specially constructed

against heat you will not have much trouble in this respect.

All woodwork in a kitchen should most certainly have at least one good first coat of a flat priming paint. These fixtures are always subject to a lot of condensation and you will find that a finishing coat will also have a much finer finish after this has been done. If the new work cannot entirely tone in with the existing colour scheme, you will find that dove grey is a good suggestion, and in a dull kitchen aluminium paint can be used to good advantage.

There are several plastic surface panels now available which can be lined on to shelves and cupboard sections and although fairly expensive, they are practically indestructible and well worth the outlay.

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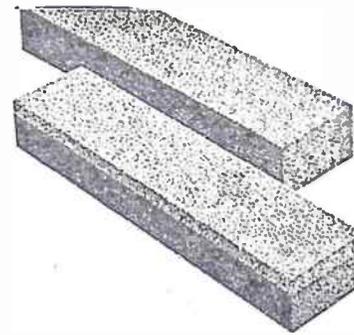
Continued from page 154

Meat or Provision Safe

½in. by ½in. in section, and on these will rest the zinc. Then cut another four mitred beads and nail round inside as in the enlarged and circled diagram in Fig. 5. The door is hung with a pair of ½in. brass hinges.

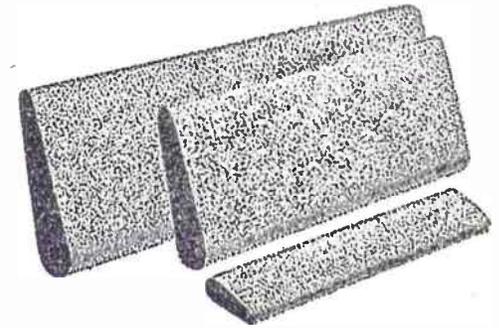
Proceed to fill the side panels with the zinc, mitring and nailing the beads of wood similarly. A shelf of ½in. boards

may be fitted inside the cupboard to rest on bearers screwed to the side framing. Stiffening rails connecting the legs of the cupboard are shown in Fig. 1, and these may be added as desired; they would certainly help to make the safe rigid, especially if the legs are made longer than those suggested here.



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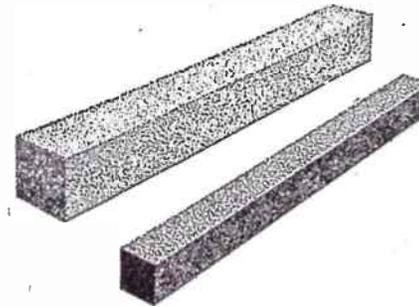
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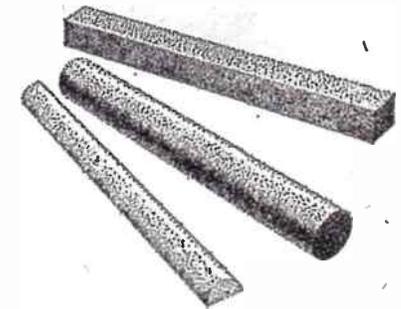


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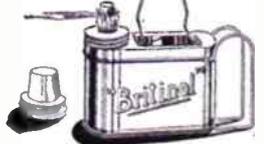
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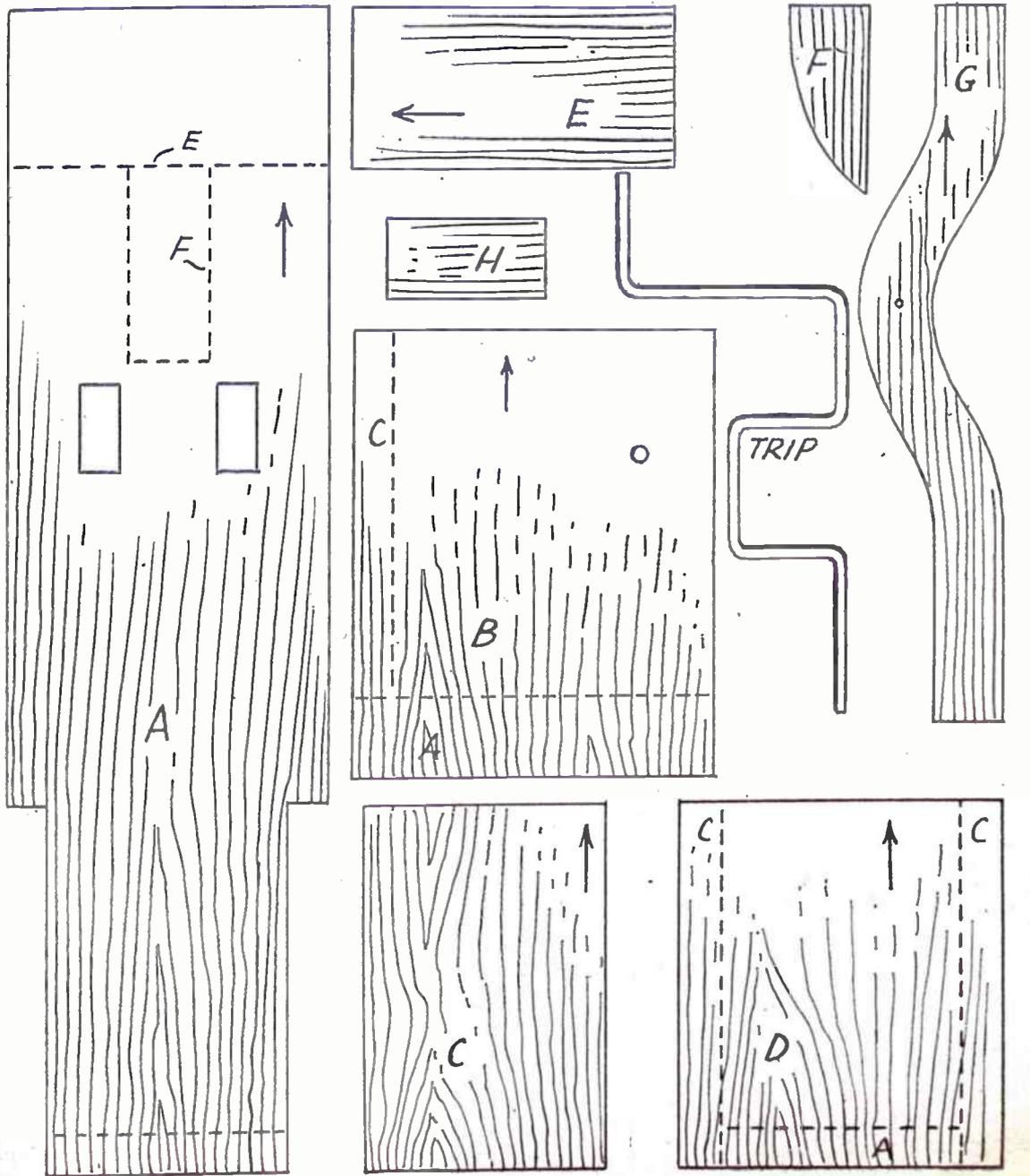
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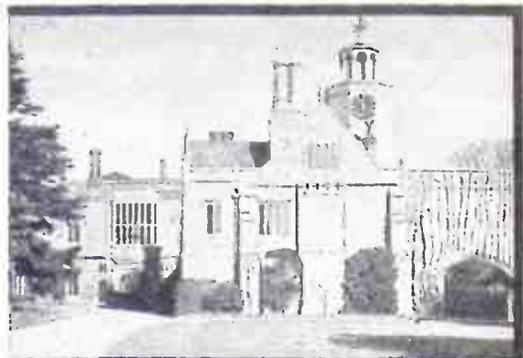


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SEE PAGE 151

Patterns for the Toy Trip-Hammer





St. Oyth's Priory, Essex

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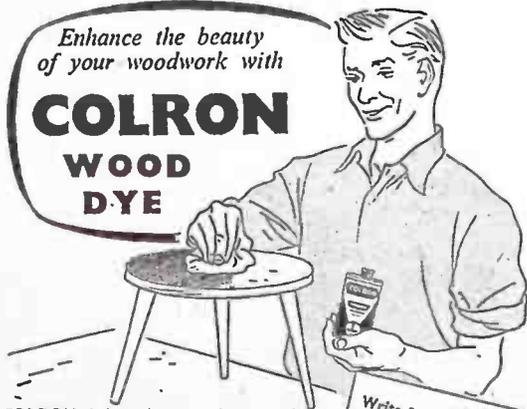
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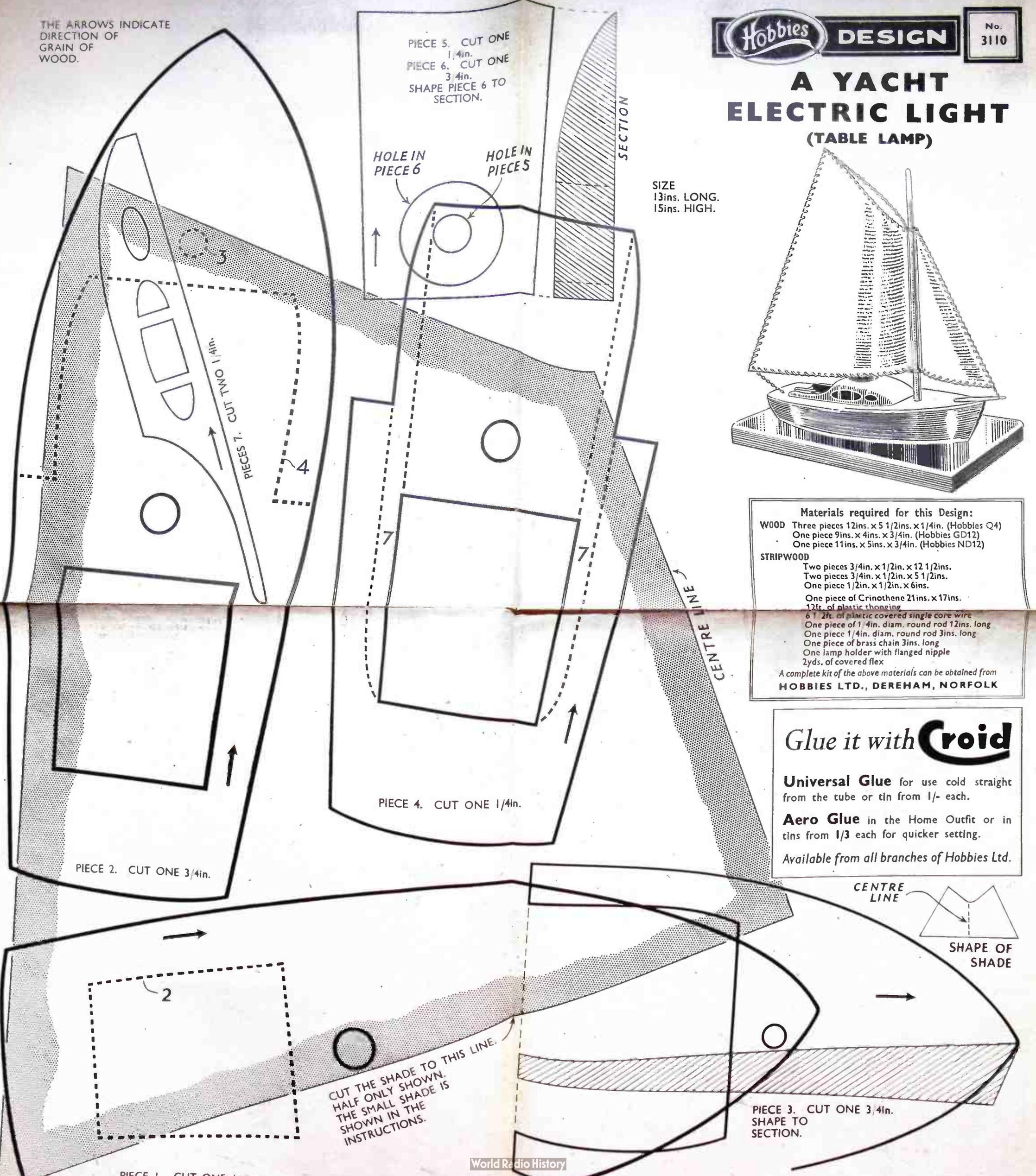
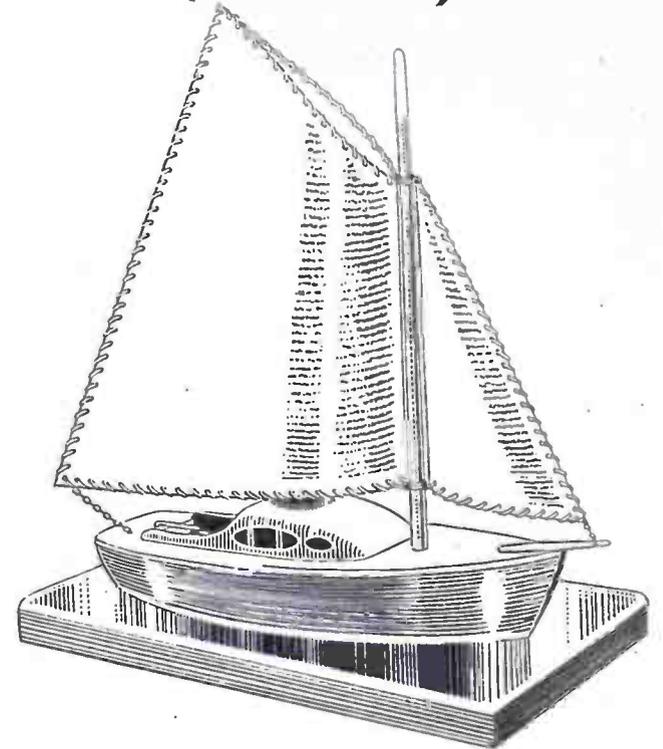
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