Hobbies WEEKLY

Make this CATAMARAN

ALSO FREE DESIGNS FOR
DOLL'S KITCHEN MODELS

August 6th. 1938

2D

Vol. 86. No. 2233

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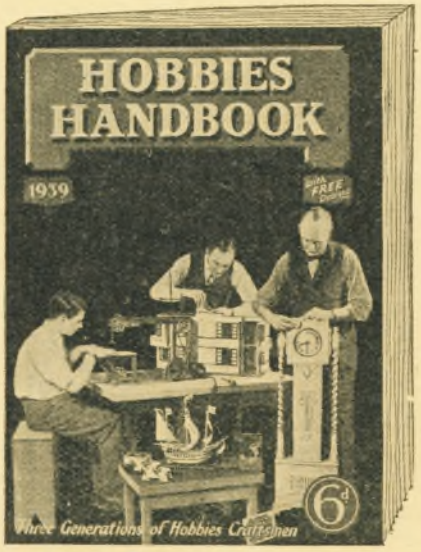

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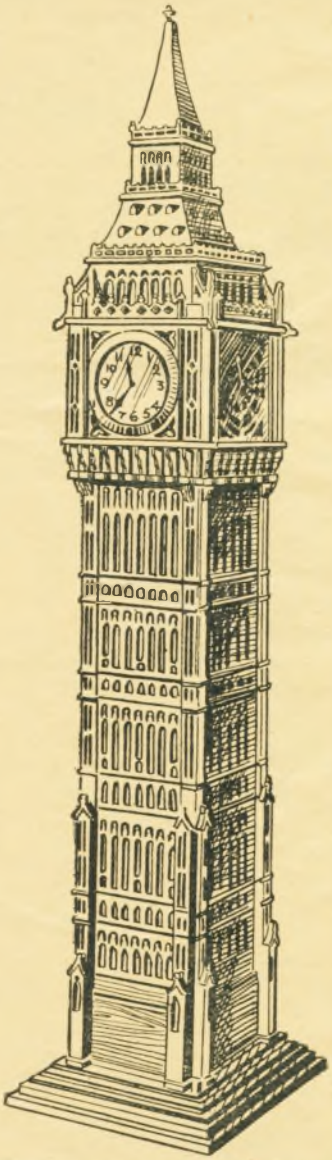

Get Yours NOW

Hobbies WEEKLY

August 6th. 1938 Vol. 86. No. 2233

I HAVE received a number of requests from readers who have visited the Empire Exhibition at Glasgow, if we cannot have some souvenir in wood to make. So I have had a small Wall Plaque designed and hope to be able to publish it within a week or two. It will serve as a pleasing reminder of this mammoth Exhibition, the size of which has to be seen to be believed.

* * *

WHEN you remember nearly 80,000 people stroll round its grounds and pavilions in comfort daily, you can realize something of its magnitude. But of that, more later, when the design is published. In the meantime have your H.W. delivered regularly to make sure not to miss a single copy.

* * *

DURING the summer months I have been having fewer articles on Electrical matters, and increasing our outdoor pastimes. Soon, however, there will be a return to the regular electrical articles, and in this respect I shall be glad to hear of any particular instrument, or apparatus, or experiment you would like introduced. I have warned the Electrical Expert to be getting along with some bright ideas and I hope to give you some real novelties, as well as practical instruction. At the same time I want suggestions from you as to what you would like incorporated in the Electrical series.

* * *

AS an extra incentive for you to give some thought to the matter, I shall send a small prize to anyone who makes a suggestion which I can carry out later on. Come on, then, put on your thinking caps or let me know what electrical problems you have. A short note is sufficient, providing you make it clear what you want.

* * *

DO you think it was ignorance or a touch of wit that I received a note the other day addressed to the "Territorial" Dept.? Really, of course, it was intended for the "Editorial" Dept., but I have an inkling that somebody was for pulling my leg! I wonder?

* * *

IT was very nice to receive a cutting from J. A. Gresty of Market Drayton, containing much interesting detail about the old sailing ship the "Cutty Sark." We have a special interest, of course, because our model has been made up by keen readers all over the world. The famous tea clipper is now resting on the Thames at Greenwich, after an adventurous and oft-times stormy life.

* * *

IT is said of her that in spite of regular journeys to China and Australia in all weathers, she never sprang a leak. It sounds quaint, but in 1889 she had a race against a steamer and reached Sydney 4 hours ahead. Her extra speed was, of course, a great asset in those days, because the first home from China with the new season's tea could always make an extra profit. A good average, then from England to China, was about 100 days—over three months. Compare that with the speed of today's mail steamers—to say nothing of the improved comfort!

* * *

"ALLOW me to add that I have had the great pleasure of using a Hobbies Handframe, etc. for the past 25 years. That is, of course, when I have had the precious time to give to the hobby. I am sorry to say I cannot find sufficient time, owing to my work, to spend on the world's greatest Hobby as I would wish." That's what T.R.B. of Eastbourne thinks, and says, about it and I am sure there must be thousands who agree with him. What?

* * *

THIS week sees the publication of the new Hobbies Handbook for 1939, and an interesting announcement regarding it is given on the facing page. The book is quite a new edition with interesting articles on things to make as well as two large free design charts and a Calendar cut-out picture in colour.

The Editor

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Correspondence should be addressed to: The Editor, Hobbies Weekly, Dereham, Norfolk, and a stamp enclosed with the Reply Coupon from Cover iii if a reply is required. Particulars of Subscription rates, Publishing, Advertising, etc., are on cover iii.

Why would a sparrow be angry if you called him a pheasant ?
You would be making game of him.

Why did the hen run ?
Because it saw the fox trot.

What game is played by a ship ?
Pitch and toss.

Why is a weary man like a motor wheel ?
Because he is tired (tyred).

WHY NOT ?

A man went away and asked his secretary at the office to forward business correspondence. She wrote saying he had the key of the letter box. He wrote enclosing the key but still received no correspondence. It's a tricky little problem you should be able to solve. If not turn to column 3 for the solution.

A FIXTURE

Dolly was ailing, so mother had taken her to see the doctor.

" Put your tongue out, my dear." said he.

A minute pink tip just showed itself.

" That won't do," said the doctor heartily. " Put it right out."

" I can't," replied Dolly. " It's—it's joined at the back."

SEE THESE STEPS ?

Can you believe your eyes ? This series of steps is not really that at all, but is made up of one continuous line from top to bottom. Now look more carefully and you will see what we mean.

Why is an egg like a drum ?
Because both can be beaten.

Can the sardine box ?
No, but the tomato can.

When is a man a reptile ?
When he's a bookworm.

What is it impossible to buy ?
A sheet for the bed of the river.

MORE HOWLERS

Septuagenarian—a person born in September.

Temperament—one who promises never to drink again.

As the arrow struck his eye, King Harold shouted " A hearse, a hearse, my Kingdom for a hearse."

Extradition—a newspaper term for special paper.

Cataclysm—what you have to learn in Sunday School.

An indenture is a set of false teeth.

Plato is the name of the dog in Micky Mouse films.

NO NUMBER PLATE.

" Hi ! What's the idea—you've got no number plate ? "

" Oh, that's quite all right. I can remember it."

Solution to Last Week's CRICKET X-WORD

B	A	T	■	W	I	L	L	O	W	■
O	V	E	R	■	N	■	R	U	I	N
W	A	G	■	B	■	P	I	T	C	H
L	■	S	C	O	R	E	■	■	K	■
E	H	■	C	U	■	A	S	H	E	S
R	O	B	■	N	O	■	U	■	T	I
■	B	R	A	D	M	A	N	■	■	X
P	B	■	B	A	I	L	■	A	M	■
A	S	S	O	R	T	■	S	T	A	B
D	■	I	V	Y	■	H	A	T	■	Y
S	I	D	E	■	C	R	E	A	S	E

When is a theatrical manager like an astronomer ?
When he discovers a new star.

Why are sentries like night and day ?
Because the one goes as soon as the other comes.

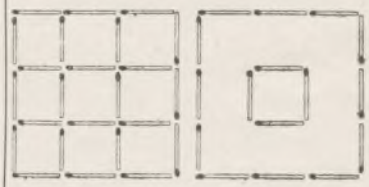
NATURAL.

Glasgow is laughing at this topical story. Bellahouston is, of course, the home of the Empire Exhibition, and Maryhill are two of its suburbs.

At the station booking office two women and a man were standing. The first woman said " Maryhill single." The second woman " Bellahouston single." The man said " Pat Murphy, married."

A MATCH TRICK.

Take twenty-four matches and form them into a square of nine smaller squares so that there are three rows of three. You are required to take away eight matches so that two squares only remain. The puzzle is tricky unless you know the answer. The drawings show you both. Try it on a friend.



A TONGUE TWISTER

Try and say this quickly : I guarantee this can-opener can open any can a can-opener can open, and if this can-opener can't open any can a can-opener can open, I give you this can-opener free.

STILL RUNNING

The teacher had taught his class that the Equator was an imaginary line running round the middle of the earth.

He was surprised to hear a few days later that one of the " dangers" of the tropics was the Equator.

" What makes you say that, Willie ? " he asked.

" You said it was a menagerie lion, an' if it's running all round the middle of the earth it must be dangerous, 'cos it's not caged up."

What is always behind time ?
The back of a clock.

Why is a fish like a shopkeeper ?
Because it has scales.

What will make pies inquisitive ?
S will make spies of them.

When is a fowl's neck like a bell ?
When it's (tw) rung for dinner.

SOLUTION.

Here is the reason for the non-arrival of the correspondence.

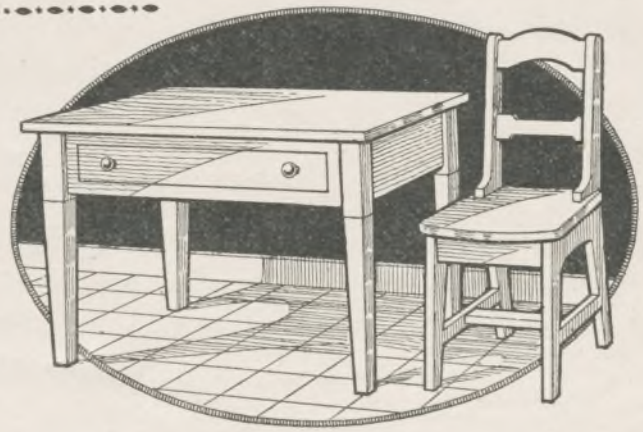
The letter was naturally put by the postman into the locked letter box. It could have been avoided by sending the key in a registered letter, which is delivered to some person in order that a signature can be obtained of its receipt.

Patterns are provided for this
DOLL'S KITCHEN SET

THE patterns in the centre pages of this week's issue provide the making of another of those interesting units in the series of doll's house kitchen furniture which we have published recently.

Here we have a kitchen table and one chair, but, of course, we can add to the chairs as much as we like by duplicating the pattern provided.

All these models are to scale in proportion to each other so that gradually we shall have built up a complete model kitchen and finally provided for it a stand and background to make the whole assembly complete. All the parts are straightforward to cut and very little work is required.



Full size patterns on pages 444 and 445

Suitable Finish

When finished the models are painted or stained according to the full size articles. In the case of the table this can be left with the wood in its natural state or the legs and rails stained dark or just varnished.

The chair, too, can be stained and varnished, but the table top itself should be left in its natural state, because later on no doubt the happy owner will want to cut table cloths to cover it or to fit up an American cloth as a permanent addition.

If you get the parcel of wood mentioned here you will find all the boards of the correct size and thickness for the various parts required, and this saves a good deal of cutting out.

Indeed, as several of the pieces are plain rectangles two of the sides of the patterns can be pasted down in line with the edge of the wood and so save the cutting. In addition it ensures a perfectly straight edge.

Complete Patterns

The patterns are shown full size with the exception of the floor, and this has had to be broken to get it on the page. All you need do, however, is mark off a rectangle on a piece of $\frac{1}{8}$in. wood $4\frac{1}{8}$ins. long and $2\frac{7}{8}$ins. wide.

Of course, the same applies to the other rectangular patterns where it is a simple matter to transfer their size direct to the wood without actually pasting the pattern on to it. Lay the paper on the wood carefully, then prick a small hole in each corner of the part. Take the paper away and link the holes up with a ruler and you have the size and shape required.

MATERIAL SUPPLIED

Parcel of wood.—For making this design we supply a parcel of selected Beech including two (No. 80) Knobs for 1/6 or sent post free 2/-.

The construction should be straightforward, but it is best to notice the various parts which join each other. These ase lettered on the patterns, but this lettering will not be available after the pieces have been cleaned up.

Lettered Parts

A good plan, however, is to draw the letter on the back of the wood lightly in pencil so you still have a reference when the paper is cleaned off.

On the other hand, after a little study of the patterns and the drawing of the finished article, there should not be much need for letters at all. Take out the parts and test them together after cleaning up, as you go along. You may decide to cut the table or the chair first—it is immaterial which.

The Table

The table is straightforward with a plain top to which are added four rails, four legs and the drawers. First get the legs out in $\frac{3}{8}$in. wood. These taper from a dotted line shown across the pattern, and we must also taper down the other two sides to correspond with it.

Now get out the front and back rails. They are shown in one pattern but in the case of the front the table drawer is cut from the same piece. For the back you have a plain outline $4\frac{3}{4}$ins. by $1\frac{3}{8}$ins.

The front is a similar sized piece, but the pattern shown should be pasted down so you can cut out a centre panel. Put a tiny drill hole in one corner, and use a saw to go round between the two lines shown. This part which comes out is the drawer front to be made up later.

To complete the table, get out the two end rails and put all four of them between the legs. Notice that each pair is exactly the same size or it will throw out the legs of the framework.

The legs are set inwards about ¼in. from the edge of the top then the four rails glued between them. Note, as shown by the dotted lines on the table top pattern, that these rails are not set in line with the actual legs but slightly back from their front face.

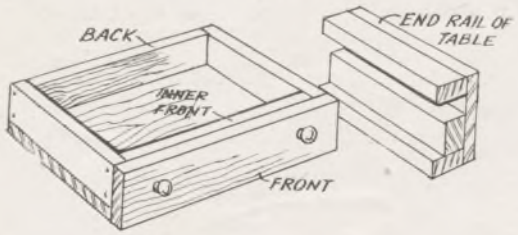
Get these rails glued firmly between the legs and also to the underside of the table top.

One of the points to be particularly careful of is to see the distance between the rails is the same in order to allow the drawer to run in and out easily.

The Drawer

The construction of the drawer itself is shown in the detail herewith. Get out the floor, back, two ends and the inner front. The four side pieces forming the upright frame are glued on to the floor then the front cut from the rail is glued on.

This covers the join of the front and floor and fills up the opening in the table itself. In making



up the drawer, see it will pass through the opening in the front rail and rub the edges down lightly with glasspaper to make this more comfortable.

The runners on which the drawer slides are made up by two pieces of wood. One is a guide and one is a runner and they are glued together as shown in the drawing. Each is a similar piece of wood, but one is cut from ⅜in. and one from ¼in. They are glued inside the rails of the table just far enough apart to allow the drawer to slide along the floor piece.

The front of the drawer is fitted with two of the tiny knobs (No. 80) which are sunk a little way into the hole made with a drill point or bradawl and there glued in place.

The Chair

The chair is built on the two side frames, the seat fitting into the little slot joint at A, and the other cross rails being glued between. Notice which are plain cross rails and which are shaped as well as their position between the sides.

Here again all rails must be exactly the same length or you will not get a good fit for the completed article. The two flat ones B form the supports back and front under the seat. They are not put flush with the front edge of the sides, but set back nearly ⅛in.

The cross rail C is the flat one fitting between the bottom rail of the sides. These lettered D and E are the fancy rails of the back. The top edge of E should be rounded off to make it more shapely and realistic, and is then glued between the sides a little way inwards from the top and front. The rail D comes ⅞in. below that.

Constructional Methods

The best method of construction is to lay one of the sides flat on the bench then glue the rails upright on it in their proper position. Then get the other side and having glued the edge of the rails put it in place.

Let the whole framework set, then glue the edges where the seat will come and slide that piece into place into the joints at A. You must be careful to test the distance between the sides and the slot joints in the chair seat.

If these are not the same you will either force the sides apart or break off the small projecting pieces which should fit in place.

After construction and the glue is all set, give the whole thing a final rubbing with glasspaper then complete by means of stain and varnish. Take care if you are varnishing the front of the table, not to apply it to the drawer so it sticks.

HOBBIES LEAGUE CORRESPONDENCE CLUB

These Members of Hobbies League would like to get in touch with other readers and so form pen friendships which will undoubtedly prove interesting to all. In this way, one has a wide circle of friends and increased knowledge in people and places, not only in one's own country, but all over the world. Members should write direct to the addresses given, stating their full address and age, adding any hobbies in which they are interested. Hundreds of members have already taken advantage of this Correspondence Club in this way and others who wish to do so should notify the Registrar with the necessary particulars.

NAME	*ADDRESS*	*WANTS FRIENDS*	*INTERESTS, Etc.*
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V. Ruthensamy.	*c/o 162 Forrest Rd., Overport, Durban, S. Africa.*	*England, Toronto, Mozambique, Egypt.*	*Fretwork, Cig. Cards, Stamps and Electricity.*
Maurice Tan.	*20 Lorong 28, Geylang, Singapore, S.S.*	*Anywhere.*	*Stamps, Snaps, Fretwork, Post Cards and Air Mail Envelopes.*
S. A. Uchendu.	*Government School, Afalli, Awka District, Onitsha Prov., Nigeria, W. Africa.*	*England.*	*Anything.*
PD. M. Epo.	*St. Charles Training College, Onitsha Town, S. Nigeria.*	*Anywhere.*	*Stamps.*
V. I. O. Ijeh.	*c/o John O. Ijeh, Contractor, Umu-Ahia, S. Nigeria.*	*Anywhere.*	*Anything.*
C. I. C. Nwoke.	*c/o P. N. Nwoke, Posts & Tells., Onitsha, Nigeria.*	*Anywhere.*	*Anything.*

You can get great fun from A CATAMARAN

THE catamaran is a type of vessel having much to recommend it. It is comparatively easy to construct and is as safe as any vessel can be. Of course, it is not a speed boat, but is excellent for navigating shallow, weed infested waters and for river sport generally.

A side view is given in Fig. 1, which, with the end view in Fig. 2 will give a good idea of the construction. Make the pontoons first. These consist of two boards, nailed to vertical divisions A-B.

Curve the boards to a point at the fore ends; at the rear ends they are curved to leave a flat, 2ins. wide, to which the rudders will be hung. Posts, C-D are nailed to the ends.

The Pontoons

They are cut from 2ins. by 4ins. stuff and have their outside edges planed to the curve of the sides. Get all the outside edges level, trimming them with a plane if necessary, so that the sides of the pontoons will bed down satisfactorily and not leave gaps.

At E, glue a 2in. sq. block of wood in the centre of the top board underneath, to provide a foundation for the screw hook holding the mast stays.

The centre of this should be marked on the top of the board by a cross, as a guide to fixing the hook. Also draw pencil lines across directly above the centre of the division pieces as a guide to exactly where they are. This will be helpful when fixing the cross bars afterwards.

Use Good Plywood

Plywood, of a quality that will bend to the curve, should be chosen and should be cut in strips with the grain running across to facilitate the bending. Coat the outside edges of the boards, division pieces and posts with thick paint, lay the plywood over and nail closely in contact.

Where joins in the sides are necessary, arrange for these to come over the division pieces. At the fore ends butt the meeting edges of the plywood neatly together and at the rear ends, trim off level with the flats of posts D. Fig. 3 shows the pontoon cut away to give construction.

The sides of the pontoons are to be covered with some material, calico will do, as the water will play havoc with the plywood otherwise. Cut strips for the purpose long enough to reach the full length of each side and with an inch to spare, top and bottom, for bending over.

The Covering

Apply to the sides a coat of thick lead paint, lay the calico over and rub well down into contact. Make a neat job and avoid creases. Where the material meets at the ends, fold together and copper tack down.

The spare inch top and bottom is best glued over to hold down securely. Snip the curved parts to avoid creases.

The cross bars, F, G, are now cut to length and screwed to the pontoons. Two screws will be enough each side and preliminary holes should be bored for them.

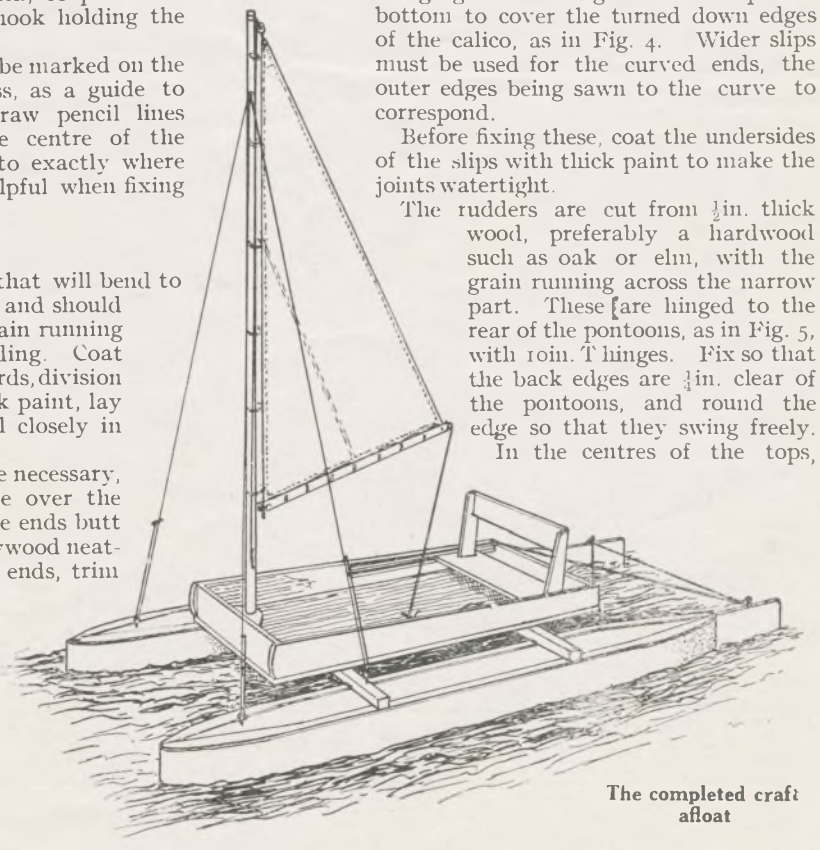
Ordinary wood screws are not used for this job, but 4in. coach screws, as in Fig. 7, driven in with a spanner. These screws will be driven through the bars into division A, B, the pencil lines previously drawn across being taken as guides for boring the holes in the right place.

Planed slips of wood, $\frac{3}{8}$in. by 1in., are nailed along against the edges of the top and bottom to cover the turned down edges of the calico, as in Fig. 4. Wider slips must be used for the curved ends, the outer edges being sawn to the curve to correspond.

Before fixing these, coat the undersides of the slips with thick paint to make the joints watertight.

The rudders are cut from $\frac{1}{2}$in. thick wood, preferably a hardwood such as oak or elm, with the grain running across the narrow part. These are hinged to the rear of the pontoons, as in Fig. 5, with 1oin. T hinges. Fix so that the back edges are $\frac{1}{4}$in. clear of the pontoons, and round the edge so that they swing freely.

In the centres of the tops,



The completed craft afloat

drive in a stout screw eye. The rudders are linked together by a bar of $\frac{1}{8}$in. by $\frac{3}{8}$in. iron. Drill two holes in the iron link the correct distance apart and drive the screw eyes through these into the rudders.

Steering Gear

Lines for steering are tied to the screw eyes, and crossed so that the line attached to the left rudder comes to the right side of the boat, and vice-versa. The ends of these lines can be passed through screw eyes or small pulleys, fixed to the sides of the platform at convenient spots.

Now give the whole pontoons two coats of best lead paint all over, enamel the iron links, and well grease the hinge pins.

The platform consists of sides and ends, joined to a stout floor of T. and G. boards with screws. Note the fore ends of the sides are curved and taper from 6ins. high at the front to 4ins. at the rear. Fig. 6 shows part of the platform and how the mast is supported.

These supports are cut from 1in. thick board, are 4ins. by 12ins. and shaped as shown. The top one is screwed to the front of the platform, the bottom one to the flooring. Holes are bored of a size to admit the mast freely but without wobble.

A low seat is provided. This is a 9in. wide board, of at least 1in. thickness. A back is recommended for comfort and is a 4in. wide rail, screwed to side supports near each end. Fit the supports at a slight backward angle, and as a strong joint to the seat is very necessary, groove in $\frac{1}{4}$in. deep and screw from beneath, as in Fig. 8.

The ends of the seat fit between strips of wood each side, as shown in dotted lines, so that it can be shifted along to the most convenient position. Fix the platform to the cross bars with bolts and nuts.

The Mast and Boom

The mast is a length either of straight grained spruce or bamboo, about 2ins. diam., tapering to 1½ins. at the top.

The boom is similar, or can be a trifle less, say 1½ins. diam. To each end of the latter fit a screw eye. To hook the boom to the mast, drive in a screw hook, as seen in Fig. 1.

At the top of the mast, fix a hook on which a pulley block can be hung for raising the sail. A little below this fix a hook each side for the mast stays to be attached to. Similar hooks are screwed in the pontoon, as shown in Fig. 1. This illustration also shows how the mast stays (strong lines), are fitted.

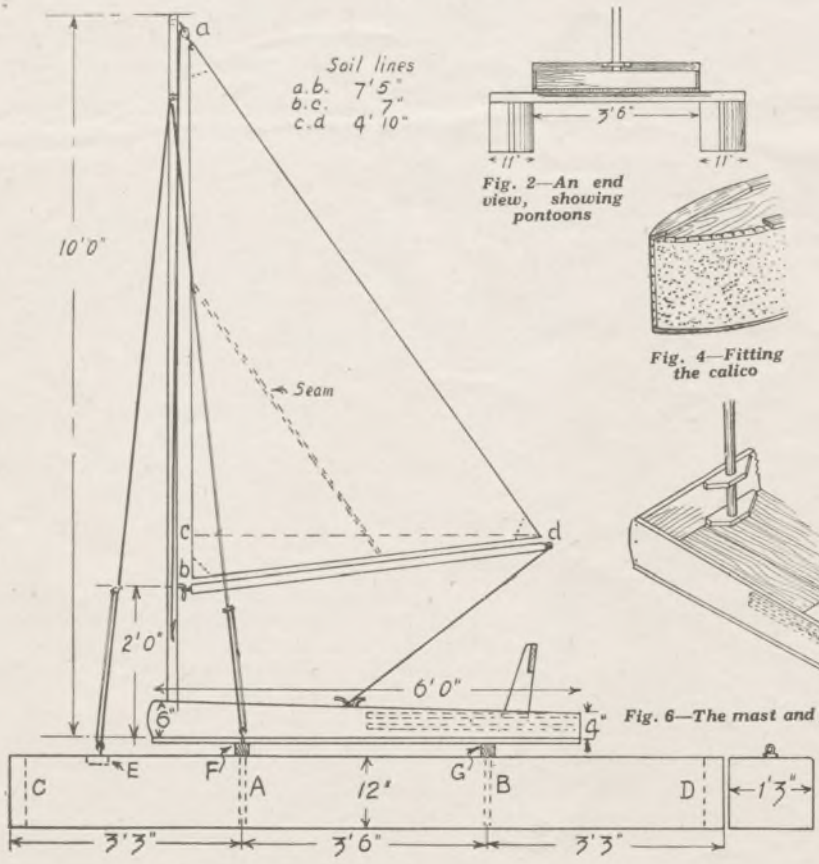


Fig. 1—A side view with helpful dimensions of craft and sail

Fig. 2—An end view, showing pontoons

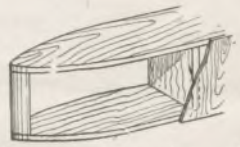


Fig. 3—Cutaway view of pontoon showing construction

Fig. 4—Fitting the calico

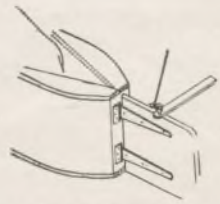


Fig. 5—The pontoon rudder

Fig. 6—The mast and pontoon detail

Fig. 7 Screw fixing

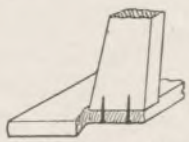


Fig. 8—Seat supports

Calico will do for the sail, a pattern of which should be cut out of paper. No difficult job this if done the proper way. Paste a few sheets of paper together to form a large enough sheet, and mark off line A, B on one edge.

At the correct distance from b, mark off point c, and from there and at right angles to a—b draw c-d. Connect points a-d and b-d, and cut out.

Lay the calico flat and free from creases, place the pattern over with the edge a-d against the selvedge edge of the calico, pin to it, and cut out the material, allowing 1in. all round for hemming.

In each angle insert a small piece of material to strengthen the corners, and hem all round, inserting a length of cord in the hems along a-b and b-d. At intervals of 9ins. fix brass eyelets for lashing to the boom and mast.

Two widths of the material will be required to make up the full width of the sail, and the join should run parallel with edge a-d. The catamaran is now completed, except for minor details.

The platform, etc., should receive two coats of paint or varnish, also varnish the mast and boom. A cleat should be fixed near the bottom of the mast to which the line, used for raising the sail in position, can be secured.

A similar cleat should be fixed to the side of the platform to hold the line which controls the movement of the boom.

Cutting List

	No.	Length.	Width.	Thickness.
Pontoon boards	4	10ft. 0ins.	11ins.	1in.
Division pieces	4	0ft. 10ins.	11ins.	1½ins.
Posts	4	0ft. 10ins.	4ins.	2ins.
Cross bars	2	5ft. 4ins.	2ins.	2ins.
Platform sides	2	6ft. 1in.	6ins.	1in.
Ends	1	3ft. 4ins.	6ins.	1in.
Ends	1	3ft. 4ins.	4ins.	1in.
Rudders	2	1ft. 0ins.	15ins.	½in.
Seat	1	3ft. 4ins.	9ins.	1in.
Seat ends	2	1ft. 0ins.	4ins.	1in.
Back rest	1	3ft. 4ins.	4ins.	1in.

2½ sheets, 5ft. by 4ft. of ⅛in. or 3/16in. plywood for pontoon sides.
60ft. 1in. T and G floorboarding for platform.
30ft. ⅛in. by 1in. strip and 60ft. ⅛in. by 3in. strip for covering pontoon edges.
12ft. ⅛in. by 1in. strip for seat guides.

PHOTO COMPETITION WINNERS

THE number of entries for this month is a little disappointing, seeing that we are offering prizes for a variety of subjects of a very simple nature—namely Sports, Landscapes and Gardens. The quality of the work, too, is not as good as we have had in the past.

Some of the entries really do not quite answer to any of the subjects and we should like all competitors to watch this point because they might be entering a very fine photograph but be spoiling their chance of a prize by sending it in when there is not a class for that subject. For instance, a study of a dog cannot compete in a landscape class, and such a print should be kept for competing in a class for animals.

The Prize Winning "Snap" in the Open Section

The Open Section

In the Senior Class the first prize goes to G. E. Hewitt of Gainsboro', for "Young Beekeepers have confidence." We are stretching a point here because it could be a garden scene or even a sports subject. Photographically, it is very good, as regards exposure, developing and printing.

The second prize is awarded to W. Evenden, of Ashford, Kent, for "Springtime." A pleasing picture, which would have been much better if horizontal instead of upright.

D. Waddingham, of St. Albans, made a very good attempt at a difficult subject, which would have been greatly improved if the amount of foreground could have been reduced. It rather overpowers the view.

Junior Section

In the Junior Section the first prize must go to Peter Bloomfield, Reading, for a snap of Goring-on-Thames. This is a nice little picture, but it would have been better without the tree on the extreme right where all detail is lost.

Second prize is taken by James Grayshan, of Bradford, for the "Drawbridge and Moat at Wells." Here again the trees overhead are lacking in detail, largely because they are under exposed.

Prizes have been sent to the winners, and we hope all those not fortunate now will try again in the remaining competitions. There is still an opportunity.

Lots of interesting things in these SCOUT NOTES

What to Look For

ALTHOUGH a happy camping month, August is tinged with sadness as far as nature is concerned, for it tells us of the first approach of Autumn. Our friend the Robin will be heard telling you in song of this imminent change of season.

However, it is a very pleasant month and troop or patrol funds may be augmented by fruit picking or helping with the harvest. Either of these occupations proves a pleasant means of doing a good turn to the farmer who loans you his field. Do not forget to look for Harvest Mice nests in the corn.

The stripping of the fields of their crops will drive many of the animals (stoats, weasels, game, etc.) who spend the summer therein back to the woods and forests. To huntsmen August means the starting of the cubbing season.

Duck and Grouse shooting begins this month, and, for those who do not mind going out early in the morning, mushrooms may be gathered. A good breakfast dish this for camp, but make sure they are mushrooms before you eat them.

The Camping Month

ONCE more the camping month of the year has come round again and good camping is my sincere wish to you all. There are so many campers of various sorts about now that it behoves all Scouts to put on their best behaviour and not abuse the privileges allowed them in order that the many restrictions on camping which are found to be necessary may not be applied to the Scout movement.

Remember that how you conduct your camp this year may mean everything to the Scouts ten years hence. For bad camping will mean more restrictions and so future generations will suffer for your sins of omission.

There is a very interesting little pamphlet issued by H.Q. on "Camping Rules" and I strongly advise all who have time to send for one or ask your Scoutmaster to lend you his copy. Study this and carry out the suggestions therein and you need have no fear of visiting Commissioners.

Camping Hints

A BIRD cage covered with muslin and hung under a tree makes an ideal cool safe for butter, etc., while at camp. The muslin keeps out flies and other insects and if hung in the shade keeps things fresh and cool. Hang out of reach of animals.

A suitable tree and a few boards and lashing and a fine lookout can be made. If a rope ladder is used also it can be drawn up and the look-out made inaccessible.

A layer of brown paper between two blankets or under a bed greatly increases the warmth of the sleeper.

Great difficulty is often experienced in loosening the joints of lightweight and other tent poles. Polish the joints with blacklead and this difficulty is soon overcome.

Fat for frying should be thoroughly hot before using. When the top of the fat begins to smoke a little—that is the time to put your food into it. Insufficiently hot fat causes the food cooked in it to taste of grease.

Smile and Win

EVERY Scout should obey the eighth Scout Law and as we are now starting our regular monthly competitions again, here is one which will give us an opportunity of judging whether you are a really good eighth law scout or not.

Send in on a postcard what you consider the best joke you have heard lately and a handsome prize will be forwarded for the best effort. Consolation prizes will be awarded as well.

Address your entries to "Scout Competition" Hobbies Weekly, Dereham, Norfolk, and send them in by August 13th.

Some of those jokes heard round the camp fire must be worthy of reproduction and we will publish the best one submitted in our October issue.

I don't want you just to copy one out of another book because that wouldn't be fair. There must be lots of tales you will actually hear—well, write them out and send on to me.

Air Raid Precautions

IN view of the National interest in A.R.P. (the abbreviation for Air Raid Precautions) I intend giving a few notes on this subject month by month. Scout readers of this magazine may thus be ready in case of an emergency to offer their services in the various capacities set out for Youth Organisations.

Many older members of the Scouts will remember with gratitude the services rendered by Scouts during the last war and although we hope and believe that such a catastrophe will not happen again it will be in accordance with our Scout Motto in being prepared to help should the necessity arise.

We will start off with a very brief survey of the various gases likely to be used in warfare. Gas in the A.R.P. sense is "Any chemical substance solid, liquid or gas used in warfare for its irritant or poisonous effect on the human body."

Note, therefore, that gas can, in this instance, be a solid, a liquid or a gas.

(To be continued)

The Skipper

The amateur electrician should know these
POLE-FINDING DEVICES

THOSE of our readers whose work is concerned with accumulator charging, primary batteries, dynamos, electroplating, etc. no doubt will often have found the need for quickly determining the polarity of a circuit when making connections, as it is especially important to see that the current passes the right way round, otherwise it may cause considerable damage to the work in hand. As, for instance, an accidental reversal of accumulator polarity when being recharged.

To guard against such occurrences there are various kinds of "Pole-finders" available, and although the experienced electrician may not often have need of them they are indispensable to the amateur.

Battery Polarity

Often the trained electrician will be able to determine without test which is the positive terminal of a primary battery from his knowledge of its construction. But those who handle batteries infrequently may not always remember

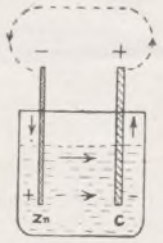


Fig. 1—Battery Elements and Poles

Fig. 2—Effect of current on Compass needle

that of the two "elements" in a battery it is the one which is acted upon most rapidly—that is, wastes away more quickly—that is the negative element.

Consequently, its outside terminal will always be the positive pole in the circuit. Fig. 1 will explain this apparent contradiction, and make clear the distinction between "elements" and "poles." Here there are two simple elements of Zinc (Zn.) and Carbon (C.), standing in a jar containing dilute sulphuric acid.

The Action

The zinc, being chemically acted upon by the acid, becomes electro-positive (+) to the carbon (—) in the solution. If the terminals of the two elements are connected together by a wire as shown by the dotted line, current would flow round the circuit in the direction shown by the arrows.

But if current goes in at one end of an element it must come out at the other. Hence the carbon is negative in the cell but its outer or terminal end is positive to the circuit as a whole, the positive being the terminal at which current leaves the cell.

Nearly all primary batteries in commercial use have carbon for one of the elements and we know therefore that carbon not being chemically acted upon its outer terminal will always be positive.

Accumulator Polarity

With the ordinary lead-acid accumulators it is also easy to determine the polarity from inspection, provided the plates are visible and not sealed in. For the positive terminal will be that attached to the chocolate coloured set of plates, while the negative pole will be that connected to the grey set of plates.

In such cases as this, a casual glance is sufficient, but when the battery elements are sealed into an opaque case with only the terminals visible, and perhaps the original marking to distinguish the polarity has disappeared, it is then that some form of polarity finder becomes essential.

Most of these devices are quite simple, but they do not seem to be very familiar to most workers. Some are electro-magnetic, others are electro-chemical in action. The latter are the more sensitive where small current values or low potentials are concerned.

Magnetic Pole-finders

The first of these is the Compass Detector. Any ordinary compass with a freely pivoted needle about 1½ins. long will serve the purpose, and if held directly underneath and parallel with a wire forming part of the electric circuit it will

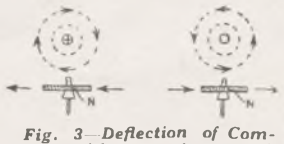


Fig. 3—Deflection of Compass with current reversal.

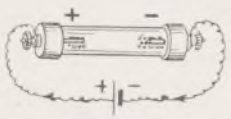


Fig. 4—Liquid Pole-finder

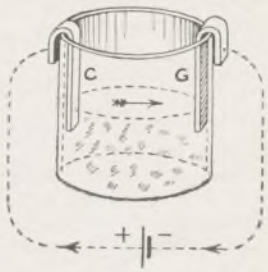


Fig. 5—Polarity test with Lead strips.

deflect either to the right or the left when the circuit is closed, according to the direction of the current, thus indicating the polarity.

This is explained by reference to Fig. 2 and Fig. 3, and depends upon very simple first principles. When a wire is carrying current it becomes the seat of a magnetic field, the direction of which depends upon the direction in which current is flowing.

In Fig. 2, A represents a battery, B C a straight wire, and N S a magnetic compass needle, the

wire being placed parallel with the axis of the needle when the latter is at rest, and as close to it as possible.

If the battery circuit is now completed current will flow from its positive + terminal through B C in the direction of the arrow heads, setting up a magnetic field around it as indicated by the curved arrows.

This field naturally reacts upon the poles of the compass needle and according to the laws of the magnetic circuit that "Like Poles Repel" and "Unlike Poles Attract" the needle will be deflected left-handedly in the direction shown by its dotted outline. If the current in the wire is reversed in direction the needle will at once deflect in the opposite direction.

Fig. 3 shows these two conditions looking at the north end of the compass needle end-on. The figure on the left represents current passing along the wire away from the observer, and that on the right the conditions when coming towards him.

From the deflection of the needle, therefore, the direction of the current will be known and the consequent polarity of the battery terminals supplying it.

Galvanometers as Pole-finders

There are some forms of galvanometers and voltmeters used for general testing purposes in which the deflections are due to the current affecting a small internal permanent magnet.

Such instruments usually have their terminals plainly marked + and —. If, when connected to the circuit, of which the polarity is unknown, the needle deflects towards the right it is proof that the wire attached to the positive terminal comes from the positive of the battery. But if it deflects in the reverse direction that wire which is attached to the marked positive instrument terminal will be the one connected to the negative battery terminal.

Such instruments as these can therefore be used as Pole-finders, if the above fact is borne in mind.

Liquid Pole-finders

This class of pole-finder depends upon the electrolytic effect of current upon certain chemicals in solution.

One form consists of a glass tube, sealed at both ends with metal caps which form the terminals, containing water made slightly acid to render it a conductor of electricity.

The metal caps have pins which project into the solution, and when a direct current is passed through the tube the water is decomposed into its two constituent gases, hydrogen and oxygen. The oxygen collects in bubbles at the positive, and the hydrogen at the negative terminal.

Since there is twice the volume of hydrogen as of oxygen that terminal which is the more thickly covered with bubbles will be the negative (Fig. 4).

Another Method

Another simple liquid test for polarity is to immerse two small strips of clean sheet lead into a jar containing accumulator acid (Fig. 5). After the current has been passing a short time one strip C will turn a chocolate colour, while the other strip G remains grey.

The chocolate strip is the one which has been attached to the positive pole.

Pole-finding Papers

It is not always convenient to deal with liquid pole-finders, and a very handy and portable type is that which takes the form of a chemically sensitised paper. Cut into strips and bound into small books this can be carried in the pocket and when required a strip can be torn out.

The strip requires to be moistened with clean water and the ends of the two wires to be tested laid upon it about a ½in. apart, when one pole will be permanently marked if the supply is direct current, but not if it is alternating.

One kind of test paper is the iodine-starch combination and in this the positive wire stains the paper purple where it touches. Another kind of test paper employs the chemical known as Phenolphthalein. This turns pink round the negative wire, but does not discolour at the positive.

How to Make

The iodine-starch pole-finding paper is easy to make up, the process being as follows. Dissolve half an ounce of saltpetre and half an ounce of potassium iodide in half a pint of warm water.

One ounce of starch is then made into a thick cream with a few drops of cold water, and half a pint of boiling water then poured on it stirring vigorously until it becomes "cooked." Add to this the ready-made solution of iodide while still warm, and stir well, the final product being very little thicker than water.

When cold, strips of white chemical filter paper ½in. wide are drawn through the mixture and hung on a line to dry. This is preferably done in the dark or the paper may discolour.

When quite dry, the paper strips may be cut into 2in. lengths and pinned together in packets or "books" of 25 or 50 leaves, secured at one end by a brass paper fastener. This paper is non-poisonous and may be moistened by the tongue when required for use.

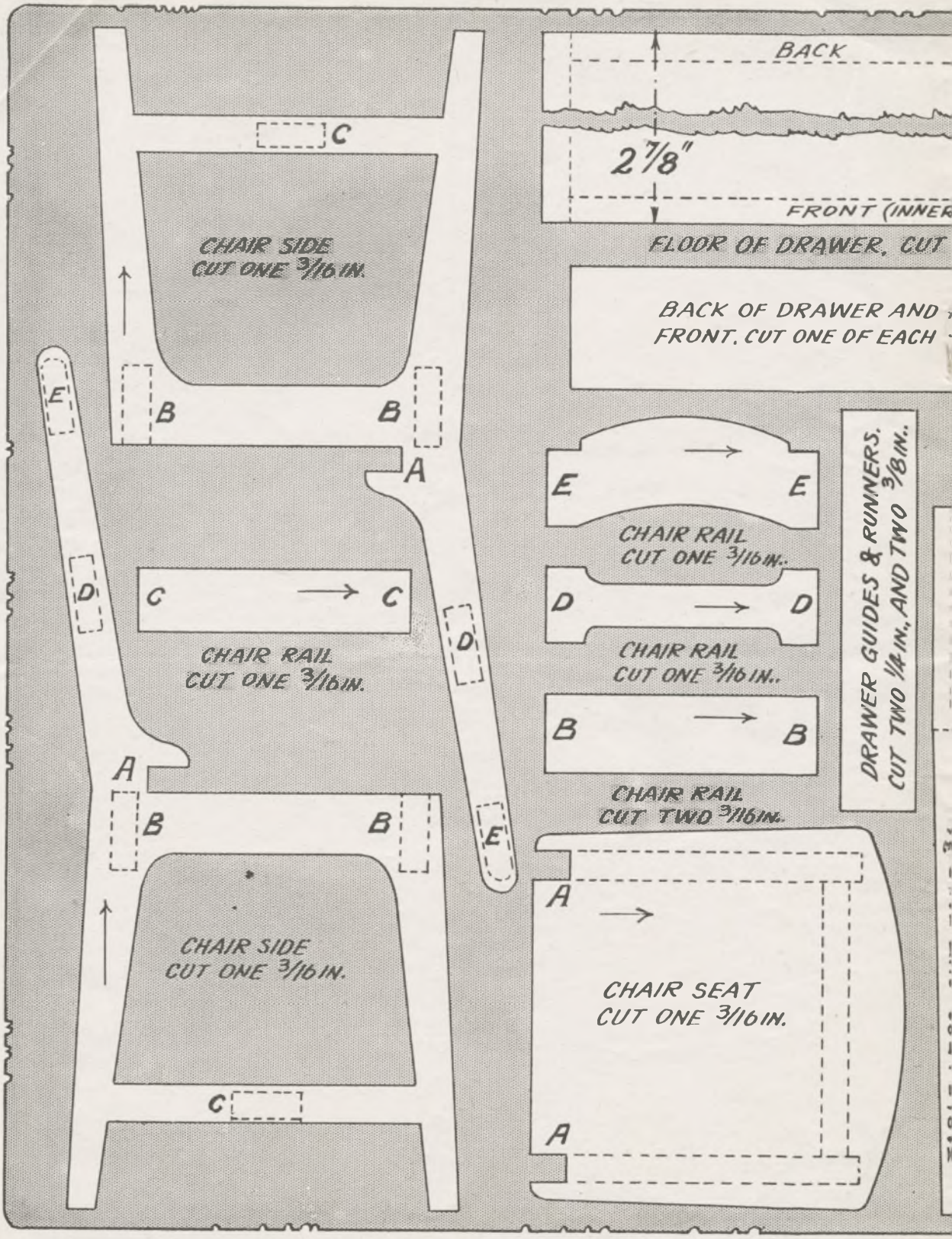
Neon Polarity Indicators

Finally there are one or two devices on the market, such as the "Voltascope" and the "Test-o-Lite," which consist of small neon gas-filled bulbs with two flexible electrodes or spike contacts in series with a very high resistance.

The primary use of such instruments is to trace faults in wiring, and to distinguish between the "live" and the "neutral" side of a circuit.

They also serve to show the difference between direct and alternating current, as either contact will cause the lamp to glow when applied to the terminal of an A.C. circuit, but only one if it is D.C.

The latter peculiarity makes it possible to use the instrument also as a polarity indicator when the circuit is supplied with direct current.


BACK
2 7/8"
FRONT (INNER
FLOOR OF DRAWER, CUT
BACK OF DRAWER AND
FRONT, CUT ONE OF EACH
DRAWER GUIDES & RUNNERS.
CUT TWO 1/4 IN., AND TWO 3/8 IN..
CHAIR SIDE
CUT ONE 3/16 IN.
CHAIR RAIL
CUT ONE 3/16 IN..
CHAIR RAIL
CUT ONE 3/16 IN..
CHAIR RAIL
CUT TWO 3/16 IN.
CHAIR SEAT
CUT ONE 3/16 IN.
CHAIR SIDE
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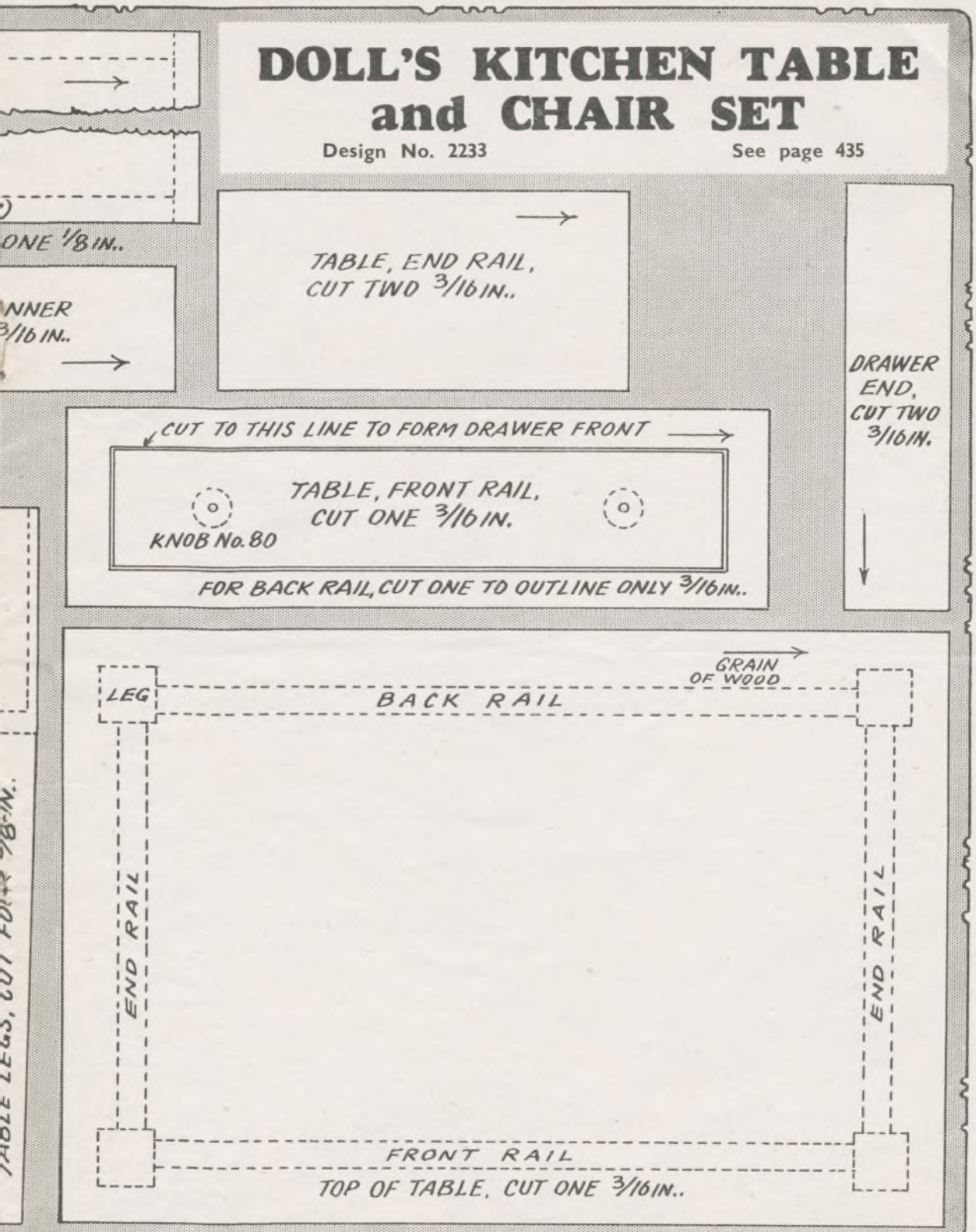
A
B
C
D
E

DOLL'S KITCHEN TABLE and CHAIR SET

Design No. 2233

See page 435



COMBINED GARDEN FRAME AND TOOL SHED

ALL keen gardeners need some kind of shed to hold their tools and implements. Even those already possessing one may well prefer to build something smaller and more compact for their tools and so be free to use the original shed for more extensive use. It is surprising how small a shelter will hold all the necessary tools for garden use.

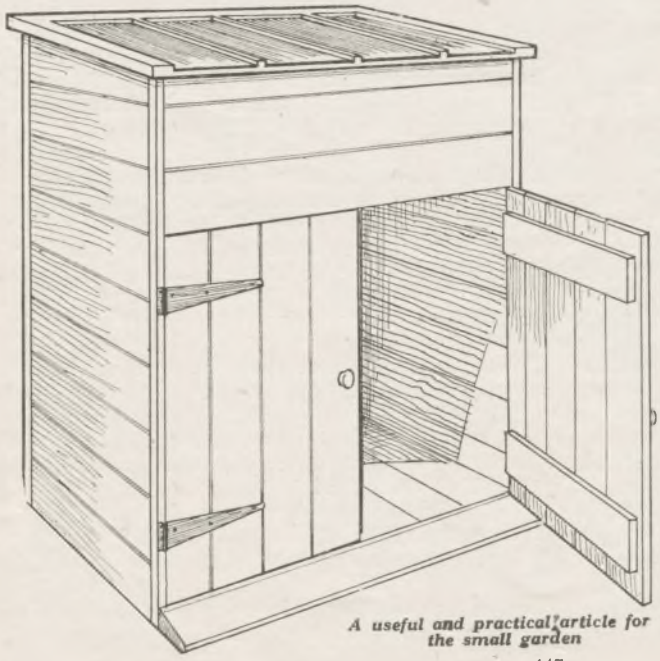
The one illustrated, for instance, will hold garden roller and grass cutter, as well as spades, etc., and is provided with a compartment above, glass covered, for urging on seeds in the spring and storing plants through the winter.

Its construction is quite simple, any amateur carpenter can make it, and not expensive as it can be built in red deal.

To Suit Your Needs

First, as regards dimensions. These must vary according to what the shed is required to shelter. The height can be calculated by adding the distance A-B to that of the compartment above. Distance A-B can be anything reasonable, say 3ft., if only such tools as spades, etc. are to be housed. If, however, taller tools are to be stored, then the height should be increased accordingly.

Do not make it too much though or it will be inconvenient to reach the compartment above. In certain cases it will be better to increase the length of the shed so that tools, with long handles, can rest horizontally.



A useful and practical article for the small garden

As regards length, 3ft. or so will be enough, unless both roller and mower are to be accommodated as well as the tools already mentioned.

If in doubt, take the combined widths of roller and mower, add a foot and make the total the length of the shed. Simple enough.

The Floor

Make the floor first. This consists of 1in. thick T and G boards nailed to 1in. by 2in. battens. The boards can run lengthwise or back to front but, in either case, the battens must be short of the front edge of the floor to allow the bevelled step to fit beneath. Make the floor the full length and depth of the shed.

For the ends cut enough lengths of 1in. matchboarding to make up the height and nail to side battens of 1in. by 2in. stuff. The top is sloped off as seen in Fig. 2. Keep the battens 1in. short of the bottom edge. At A nail across a 1in. sq. fillet.

The two ends are now placed at either end of the floor, the battens actually resting on the floor, and are nailed to the edges of the floor boards. Turn over carefully and drive nails through the floor into the battens.

Back and Front

The back and front boards (matchboards again) are nailed across. The front boards only extend down to the batten A. Both back and front do not reach the full length but only to the end battens, therefore they are nailed to them.

This will leave the cut-ends of both side and end boards exposed so in the angle thus left nail a 1in. sq. fillet down. See detail of back corner, Fig. 3.

Fig. 1 shows a perspective view of the construction, the angle fillets mentioned being cut away one side to reveal the ends of the boards they cover at the front corners.

Ventilation Holes

On the inside, nail a fillet along back and front, level with fillets A at the ends. The boards, forming the bottom of the top compartment, are nailed to these fillets.

Four holes are bored through this bottom near each end to allow air to circulate from the cupboard space beneath. A division is useful. T. and G boards will do for this, nailed to the bottom of the compartment and the back and fixed between beads to the floor. Fig. 1 shows the whole at this stage and should make all clear.

The bevelled step is a piece of 2in. by 4in. wood, shaped as in Fig. 4, the back edge being rebated 1in. wide to fit beneath the floorboards and the top bevelled off as shown.

Trim it each end to fit round the angle fillets at the corners, fit in place and secure with nails through the floor. It may be mentioned that the provision of this step is to facilitate running in the roller and mower. It can be omitted if those implements are not included.

The two doors are plainly shown in the general view of the completed shed. Just T and G boards, nailed to battens and hinged with T hinges, as shown. Now for the rooflight which forms the lid.

This should measure 1in. larger all round than the shed. Make the sides and back of 1¼in. by 2½in. wood and the front piece ¾in. by 2in., fit together to form a frame with a halved joint at the corners, well glued and nailed, as in Fig. 5. The intermediate bars, three of which will be required, are ¾in. by 1¼ins., and are notched into the back rail and rebated to fit over the front one as shown.

To form a rebate for the glass, fix ⅜in. by ¾in. beads, or slips, round, as shown in the cross section, Fig. 6. The beads should be level with the front rail.

Hinge the frame to the back of the shed with 1in. by 2in. steel butt hinges and let it overlap 1in. all round.

Cover

In favourable weather the lid should be raised for ventilation, and to keep it up, cut two pieces of wood 12ins. long and fix one each side with a screw, as at B. These, when raised, will support the lid quite well. This completes the woodwork.

Give the underside of the floor and battens a coat of creosote to protect against damp. Then apply a coat of paint to the shed, inside and out.

To glaze the lid, first press putty in the rebates, then lay the glass on top and press well down until the putty is only ⅛in. thick. Strip off superfluous putty squeezed out underneath and drive in a few sprigs over the glass to keep it firmly down. Now apply a finishing coat of paint all over.

In cold, frosty weather a small lamp should be kept lighted in the shed. This will warm the air sufficiently to ward off any danger to the plants arising from frosts.

Only a small lamp is needed, and it can be placed on the floor where no danger of fire is likely to occur.

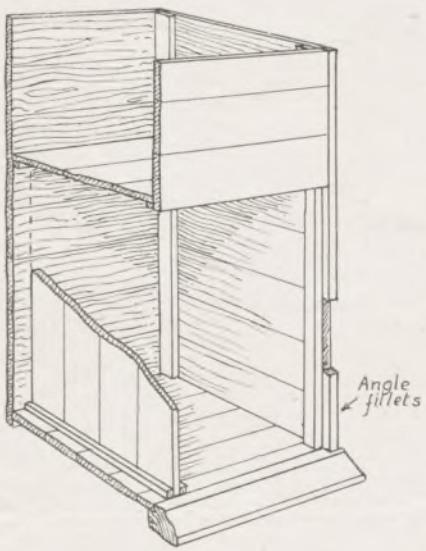


Fig. 1—Perspective view of construction

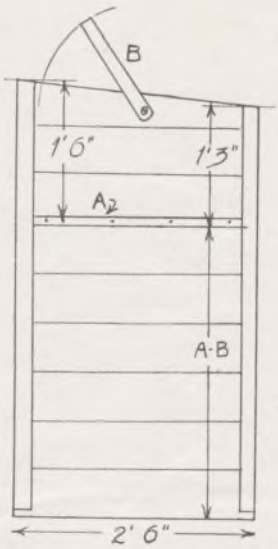


Fig. 2—Ends of shed

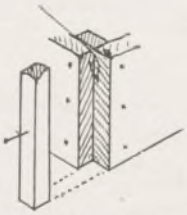


Fig. 3—Corner detail

Fig. 4.—Bevelled step

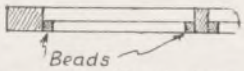


Fig. 6—Cross section through lid frame

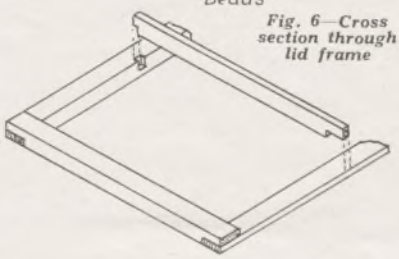


Fig. 5—Jointing glazed lid

Galleon Bases—(*Continued from opposite page*)

Four square feet glued on at the corners underneath add to the finished appearance. Frequently, a plain box or casket can be greatly helped in appearance by adding a more or less decorated base (see Fig. 4) how this can be done. If the box is square or oblong and with square sides, a shallow box without a bottom is first made to the same size as the casket itself. Add a top to this box and around the four sides is then fitted Hobbies No. 24 moulding.

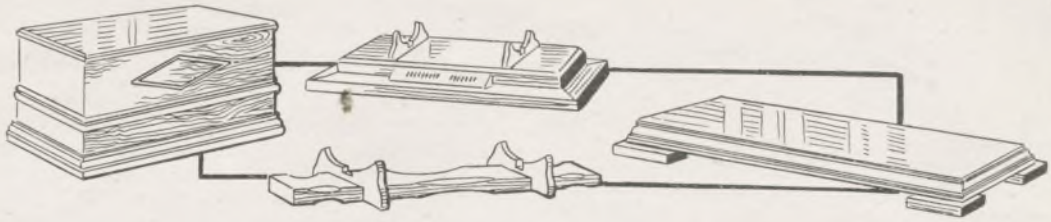
Around the base of the sides a heavier moulding (Hobbies No. 21), gives a really solid appearance. The angles inside the shallow box are strengthened by angle fillet.

For galleon bases, plain oak could hardly be beaten, although a light staining often softens them down. Painted bases seldom look so good as stained or varnished ones.

A base for a cabinet or an intricate casket would look well if ebonized and then varnished.

If the base described in Fig. 3 is to take, say, a waterline model of a liner, then the top surface should be painted to represent the sea, either oil or poster colour being used for this purpose.

BASES FOR MODEL GALLEONS



WE have from time to time been asked to supply designs for the bases of model galleons, ships engines, etc., and this week we are giving a few suggestions which may be worked up.

In Fig. 1 is shown a good all-round type of base, where, to form the lower member, four pieces of thick wood are mitred up and glued, and a second thicker piece put on the top to give solidity to the whole.

The upper member must be set out to allow a margin around the under base, and should be either chamfered around the top or rounded off.

Shape to the Hull

The actual rests for the galleon must, of course, be shaped to correspond with the hull of the boat. The true shape can be got by first cutting a cardboard templet and testing it against the model in hand. Then, transfer the outline to the wood and cut round with the fretsaw.

In Fig. 2 we show two plainer types of bases, but which require perhaps a little more work and fitting. The base at A consists of a long strip of wood, the length ,of course, being set according to the length of the model.

At certain distances from each end of the strip, sinkings are cut with the tenon saw or fretsaw as shown in the diagram in the circle at the top. Into these recesses the uprights are glued after being shaped and fitted.

Recess Shapes

The shaped chamfers along the edges of the middle strip should be marked out for length and width and cut in with a sharp chisel. There is a recess made in each upright to fit that of the base so that a perfectly strong joint results.

In the larger circle in Fig. 2 (B), another base of similar design is shown. In this a flat strip is adapted with rounded ends, but no cut out recess, and the uprights are simply glued and screwed through to it.

The Simplest Form

This base is undoubtedly the simplest to make and requires but little wood. For models of a different type from galleons, we should suggest a base of perhaps a little heavier make, as no doubt the length and breadth will be much greater.

The detail of one angle of a built-up base is shown in Fig. 3. In this base there is a frame of flat deal wood halved together at the corners and glued and screwed together.

On this frame is glued and nailed a sheet of sound plywood cut exactly to the same size as the frame. Then on all four edges around this is fixed a moulding of such width that the deal frame and half the thickness of the plywood are covered.

A base of this construction is very strong, and sizes up to 24 or even 30 inches by about 6 to 8 inches in width, can be made this way.

For, say a 24in. length of frame, the deal strips should be not less than 1¼ins. wide, and above this length the frame should be strengthened in the middle by a cross rail half-lapped into the long side rails.

Moulded Edging

Hobbies No. 303 Moulding which can be got in ¾in., 1in. and 1½in. widths, make admirable edge finishings for a base, while for a heavier type of base, Hobbies No. 17 moulding would be very suitable. In using the mouldings, mark and cut the mitres accurately.

(*Continued on opposite page*)

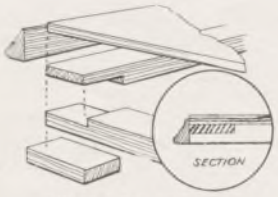


Fig. 3—Base framing

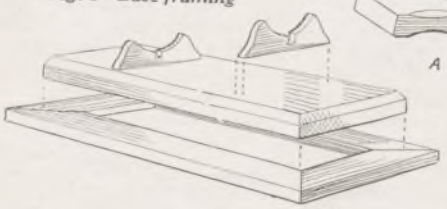


Fig. 1—Framework and supports

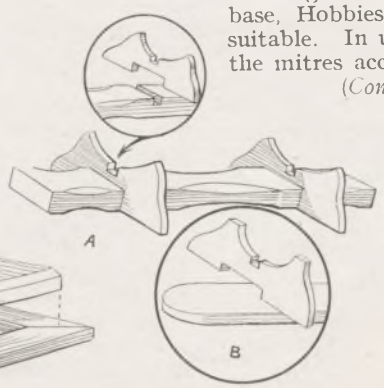


Fig. 2—A simple shaped base

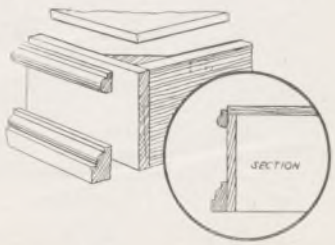


Fig. 4—A box formation

Some of the jobs for you in THE GARDEN IN AUGUST

The Vegetable Plot

SPRING sown onions will need attention during August. In the warmer parts of the country and in early situations these should be lifted and laid out on shelves to dry before storing.

Where the onions are not yet ready for lifting the tops of the thick necked bulbs should be bent over for a week or two when they will be ready to be taken up for drying and storing.

It is a good time to make a sowing of winter onions. The bed should be well prepared and made firm as onions more than most plants need a really firm seed bed.

If a sowing of cabbage was made early last month the young plants will be ready for thinning, if the weather is dry they should also be well watered now and again.

Thin the Spinach

Another vegetable which will need carefully thinning at this time is July sown spinach. August is also the best month for cutting and drying many favourite herbs. When cut the herbs are hung to dry in a cool shady position.

Tomatoes will need looking after just now to get the best from them. Under ordinary weather conditions the fruit should be ripening steadily and it is a good plan during the first ten days of this month to stop the plants.

The best method of stopping is to cut off the top of the plant so further growth is prevented at the last fully open truss of flowers.

This truss will, if the weather proves kind, mature its fruit, but in a poor weather season this is not to be expected. After the plants have been stopped in this way they will send out a number of side shoots, as soon as they show themselves these side shoots should be removed or the plants will become choked up with foliage.

Finish planting winter greens and late broccoli as early in the month as possible. If the weather is dry when the planting is done well water the plants in to give them a good start, because they will never altogether overset a check at this stage.

Among the Flowers

IN the flower garden it is a big mistake to leave flowers to die on the plants unless the seed is wanted. Many plants will quickly leave off flowering if seed is allowed to begin to form, while if the flowers are cut as soon as they begin to fade or before this they will keep flowering freely for weeks. Also dead flowers on plants quickly make the garden look untidy.

The present is a good time to increase many varieties of pansies. This is best done by carefully separating from the parent plant the small rooted side pieces or tufts, avoiding hollow stemmed pieces for this purpose.

These small tufts will quickly begin growth again if planted in a cold frame, but if you have not one of these a very big proportion will grow and do quite well if carefully planted in the positions they are wanted to occupy out of doors. Especially if they receive attention with the watering can should the weather be dry while they are getting a hold in their new positions.

Dealing with Pentstemons

Those who have some fine plants of pentstemons of which they wish to take cuttings so that they have a supply for the following season will need a cold frame or glass in some form.

Strong side shoots of well seasoned wood should be broken from the parent plant and the lower leaves removed. A few pots will be needed and after making a horizontal cut just below the lowest joint the cuttings should be inserted round the sides of a pot. The pots are best filled with a light sandy loam.

If only very small pots are at hand one cutting may be inserted in each pot, but usually the cuttings will root more quickly if placed at the side rather than in the middle of the pots.

If there is only one cutting to a small pot it will be easier to move the plants to larger pots later without checking the growth. The cuttings

should be well watered and placed in the frame which is closed down and shaded in bright sunshine.

Later Handling

When the cuttings are rooted the lights should be lifted in mild weather but closed and protected during frost. About March the plants should be placed in larger pots and about the second week in May they may be planted where they are to flower.

Plants grown in this way will flower before those raised from seed or by division of the roots.

A cutting of Pentstemon and how to insert round a pot

Hollyhocks may be increased by cuttings during this month as may also fuchsias and cuttings of hardy shrubs may be taken and inserted for rooting now.

Fruit

As soon as raspberry canes have finished fruiting the old canes are best removed. Late strawberries will be well over by now and if not begun earlier a start ought to be made with getting the beds clean and in good order at once.

The best way to get rid of the rubbish is to burn it, the old leaves of the strawberry plants should be cut off and burned at the same time.

Testing for Ripeness

A few early varieties of apples and pears are ready at this time, but if the fruit is wanted for eating or for storing it is a mistake to gather it before it is really fit.

The best method of testing fruit to find out whether or not it is ready to gather is to lift it on the palm of the hand while still on the tree.

If a few fruits are tested in this way and four out of six part from the tree without being gripped or twisted it may be taken for granted that the apples or pears on that tree are ready and may be gathered for storing or eating.

Cooking apples are sometimes gathered before they are ripe, for use at once, but it is only a waste of the fruit to gather for storing before it is fully fit.

Try the novelty of having a HIKE AT NIGHT

FEW people know of the pleasure and excitement of hiking at night, but for experienced hikers there are few expeditions giving more fun. For a first hike choose a short summer night.

Even at mid-summer nights are often very cold and it is a good idea to have a hot drink before leaving, whether hiking from home or from camp.

A warm pullover is a distinct asset and it takes up very little room in a rucksack. Do not attempt a long hike to begin with. The secret of not tiring oneself out is to go easy, and keep going. Walk slowly enough to give the slowest member of the party a chance to keep up, but don't dawdle !

Keep Together

The party should endeavour to keep together for even familiar ground is confusing in the dark. Marshes, over-grown ditches and undergrowth hold dangers for the unwary, and for this reason it is wise to use routes well-known to yourselves for the first few hikes.

Trees and other objects cast weird shadows in some lights and even the most confident stalwart may find he possesses nerves !

A rucksack is very much more convenient than a haversack for carrying kit even on a very short hike. It is put on your back and it stays there wherever you may happen to scramble, whereas a haversack slips round and gets in the way.

On a night hike you will need to carry an extra pair of stockings (in case you step in that bog !), a warm pullover, a map and compass if you think you will need them and, of course, some food.

Midnight Cooking

You may be tempted to take only chocolate and sandwiches with you, but you will probably find, that a hot meal at one o'clock in the morning is most welcome. Besides, cooking your own meal adds to the fun !

In the very early hours of the morning vitality is at a very low ebb and spirits are inclined to flag. The excitement of lighting a fire and cooking a meal in the open and in the middle of the night helps to add a dash of adventure and keeps up the enjoyment of the hike.

Suitable Food

There is no need to name here various hike dishes, but choose those which are simple and do not need much cooking, at least, for first attempts at night hiking. Fruit and chocolate should be included on your menu.

The coldest part of a summer night is between two and half-past two, just before dawn begins to break. Try to be on the road again by then.

Saturday night is possibly the most convenient time for a night hike as there is a better possibility of a good rest on the following day.

Here are some practical hints on PREPARING WOOD SURFACES

A GREAT many young woodworkers often spoil otherwise splendid pieces of work through not knowing how to prepare the wood properly for its finish. Just planing and glasspapering is not enough—unless the article is some rough affair of no great importance.

But, taking things that are important, such as furniture, the preparation demands all the skill one can muster. Even if the wood is cheap, soft stuff like deal, it must be made beautifully smooth and free from waves and tears.

These, though some sometimes invisible to the eye, always show up pretty badly under the coating of paint, enamel, varnish or polish, and in consequence, marks one down as a very careless worker.

Preparing Soft Wood

Fortunately, it is easy to learn and improve upon one's capabilities, providing you have the determination and the correct implements. For timber like pine and deal, a wooden smoothing plane and several grades of glasspaper, together with the cork block (or one made from wood faced with lino) would suffice.

Now, if you look closely at machine-planed timber and move your finger tips lightly over the surface, you will find minute waves or hollows running across. This is due to the rotor-cutting " irons " of the planing machine.

Though planed, therefore, the wood is never quite ready for use. Having selected the best (face) sides of the various parts of the article you are making, mark such with an X or by a looping curve running to the edge that has been straightened and squared.

The smoothing plane must be keenly sharpened and set finely. The cutting edge of the iron, incidentally, must be slightly—very slightly—concave. If too concave or straight, it will cause a series of hollows and streaks upon which glasspaper will have little effect.

When working with deal and other soft wood, the cover of the cutting iron should be adjusted to about 1/16in. from the cutting edge.

If the grain is coarse and dotted with " live " and " dead " knots, the adjustment must be as fine as possible—not too fine or the shaving will crinkle up and gather tightly at the mouth of the plane. The whole iron should be also wedged in to project the minimum. That is the secret of good smooth planing.

Mind the "Flat" Grain

Before planing a board, always look at its edges to see how the " flat " or surface grain is running. If straight with the thickness of the board you can plane it right or left, but if, for instance, it is *leaning* towards the right, it must be planed in that direction, while the other side is planed the opposite way. This saves " digging " up the grain and causing yourself unnecessary labour and bother.

When planing, do it methodically and conscientiously. You have, at the outset, only to remove the wavy marks set up by the planing machine. Roughness around knots should be given special care.

You should try to remove one complete shaving from the board—that is, from head to foot. If very long, shave from the foot to the centre (raise the plane up here) and carry on to the head end. Always shave from left to right of the board, not up the middle or here and there.

This means general evenness and coarse, medium and fine glasspaper will do the rest. Some workers rub the coarse paper across the grain, then with the grain, the medium and fine grades being rubbed with the grain only.

Use of a Scraper

With hardwood like oak and mahogany, a good wooden or iron smoothing plane, plus a scraper is essential. Unlike that of deal, the cover of the iron must always be set fine, particularly with the mahogany which has usually " cross " grain patches.

By having the plane cutter razor keen and adjusted the minimum, you can abolish all care about the grain direction. A really well set plane will shave just as easy against the grain as with it.

Naturally, however, there are bound to be slight marks and roughness, but such can be corrected with the scraper. This, as you might know, is an oblong piece of sheet steel about 5ins. by 3ins. by 1/16in. thick.

The longer edges are filed square and flat and dressed on an oilstone. The edges are turned over with the back of a gouge or a piece of smooth steel rod so the " burr " is sharp and cuts into wood similar to the keen edge of a broken piece of glass.

How a Scraper is Held

The scraper is held firmly on the wood before you with both hands, the thumbs being pressed behind it close to the bottom or cutting edge. The pressure of the thumbs keeps the edge steady on the timber as you push the scraper forward to bring forth tiny, extremely fine shavings. Hold the scraper at an almost upright angle so the " burr " eats into the wood.

After scraping, use the three grades of glasspaper to make the surface even smoother. A fourth grade is sometimes used, this being No. O or No. OO.

When scraped and glasspapered, some cabinetmakers " lift " the grain and possible dents by damping the wood surface slightly with a wet rag, then scrape and glasspaper it again when the wood is dry.

SPORTS SILHOUETTE

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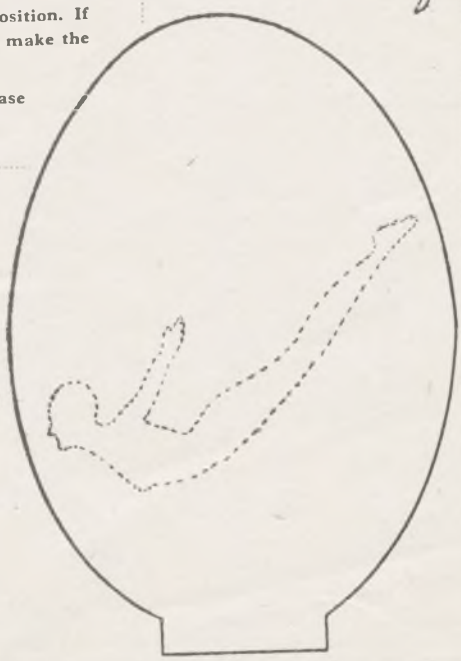
The sports figures can be cut from thin wood (1/16in.) the ivorine (cream) or xylonite (polished black) composition, sheet bakelite or similar compositions.

The background should contrast with the figure—polished black ground for ivorine cut-out, etc. Ebony colour polish very suitable.

Line in the figure more, if you can draw, or leave in plain outline. Glue the overlay part on securely and in proper position. If a polished surface, scratch it to make the glue hold.

If you wish carve out the base to make stud tray.



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French Celebrities

FRANCE has issued a very large number of stamps lately which have had the portraits of various men. In some cases, these stamps have had the portrait of men of world-wide fame, and when this has been the case then it has been easy to write up the lives of these celebrities in such a

Pierre Loti

way that all who read will appreciate why they should appear on the stamps which go through the post.

The difficulty is now that there are a few which can hardly be termed world-famous, but as philatelists we are very liable to be asked who is this man who is portrayed on this stamp. And to answer that you do not know anything about him is rather weak.

So this time we have to consider a few names and faces which have appeared, and about which we may expect to be questioned.

The first illustration is of the charity stamp value, 50c. plus 20c. It shows a portrait of Pierre Loti, or at least, that is the name given on the stamp. Actually, it is only the pen name of the French Novelist Louis Marie Julien Viaud.

He was born at Rochefort, on Jan. 14th, 1850. In 1867 he entered the French Navy, and became a captain in 1906. In 1879 he produced his first tale, "Aziyade." It is a story of the Bosphorus, and it is the Bosphorus forming the view which appears on the left of the stamp.

In 1880 came "Rarahu," which was reprinted in 1882 as "Le Mariage de Loti," the story of an Englishman and a Tahitian girl. This work won for him instant popularity, but curiously enough his books are lacking in much that goes to make up a plot.

In 1886 he wrote "Le Pecheur d'Islande" In 1923 he died on June 10th, having been a member of the French Academy since 1891.

Another Frenchman who has been similarly honoured is Leon Gambetta. He was born at Cahors on April 2nd, 1838, and he studied law at Paris. Turning to politics, he was elected to the Chamber of Deputies in 1869.

After the Emperor's surrender in 1870 at Sedan, he became Minister of the Interior and of War, in the Government of National Defence. He escaped from Paris in a balloon, and went to Tours where he did a great deal to arouse the French against the Germans.

He is regarded as one of the founders of the Republic, because through newspaper efforts he did so much to strengthen the constitution.

He was elected President of the Chamber in 1879, and was Premier from 1881 to 1882. An accidental wound from a pistol brought

Leon Gambetta *Jean Charcot*

about his death in 1882; the last day of that year actually.

The third illustration shows another Frenchman who has earned the right to have his portrait on the postage stamps of his country. It is Jean Charcot, who captained the "Porquoi Pas" which was lost with all hands off Greenland last year.

Below the name is seen the inscription 'Société des Oeuvres de mer' and this informs us that the stamp is issued in aid of a charity for merchant seamen The premium of 35c. goes to this, the postal value being 65c.

Great Men on Stamps

IT is some little time since we considered some of the lives of the great men whose portraits appear on postage stamps. A year ago, July 20th, 1937, Guglielmo Marconi passed away.

Italy has honoured this great man with an issue of three stamps, 20, 50 and 1 lire 25 centesimi. The design is a very plain one, but the man portrayed was surely one of the most important men of the world.

Count Marconi

He was born at Bologna on April 25th, 1874, and his mother was Irish. Marconi took out an English patent and made his first demonstrations from the G.P.O. St. Martins-le-Grand, London, in 1896. The next year he was invited by the Italian Government to superintend the erection of a land station which was able to communicate with Italian battleships. A company was also formed in England to take over his patents except in Italy.

In 1900 Marconi built a long-distance station in Cornwall which successfully sent messages to Newfoundland. He served in the Italian Army and Navy during the Great War.

He began experiments with the short waves which led to the 'beam' system of long distance and directed wireless transmission. He owned a yacht called the 'Electra' and many of his experiments have been made from this.

In 1909 he was awarded the Nobel prize for Physics, and he was made a Senator in 1915 and a Marquess in 1929. Through his death a year ago science lost a splendid research student.

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A Flying Model

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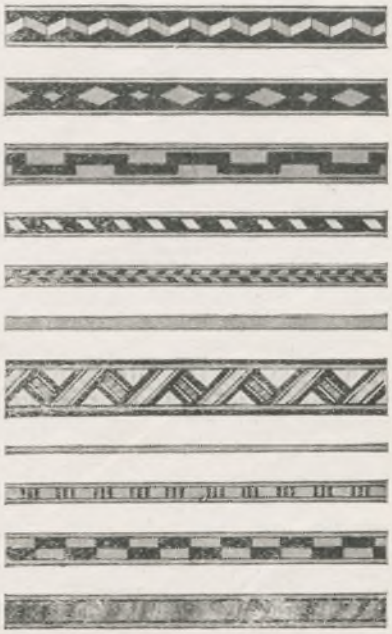

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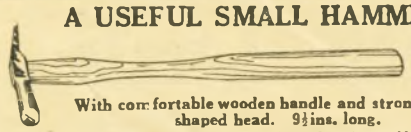

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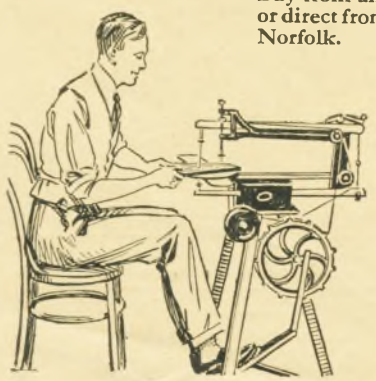

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