

HOBBIES WEEKLY

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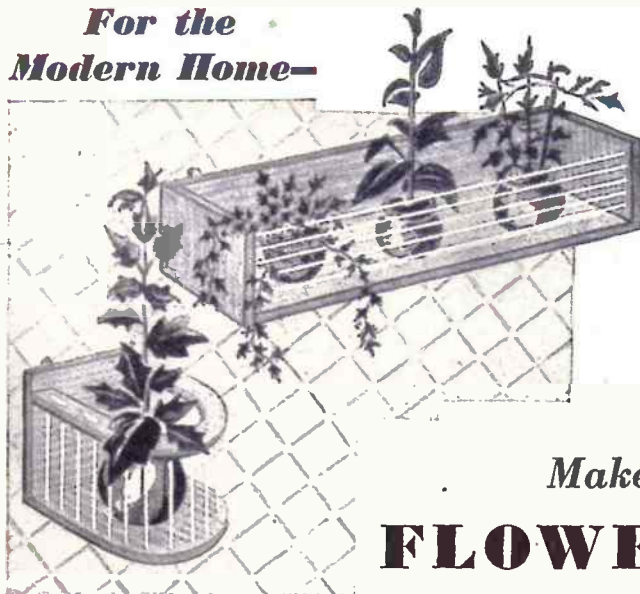


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*For the
Modern Home—*



TH**E**R**E** is no doubt about the fact that plants and flowers help to 'furnish' the modern home, but unsuitable holders can spoil the effect and ruin an otherwise contemporary appearance.

Many of us are always on the look-out for something new and outstanding, and will at once recognise the possibilities of these attractive vases and

holders. The examples shown here will suggest various ways of using them to best effect. They can be hung on a wall, stood on a window or made to stand on suitable articles of furniture.

Attractive Vases

The vases can be obtained from Hobbies Ltd., Dereham, Norfolk, price 1/8 each, post free. They are attractively glazed in a pleasing shade of green. They

are suitable for displaying small posies of short-stemmed flowers and are large enough to take small plants in thumb pots. An illustration of the vase is shown in Fig. 1.

Simple Construction

The construction of the holders is quite simple. They are cut from $\frac{1}{2}$ in. or $\frac{3}{4}$ in. wood and are glued and pinned together. The main measurements are shown in Fig. 2. Notice that the floor and the back go between the ends.

The ends are drilled at $\frac{1}{2}$ in. intervals as shown in the diagrams. Add two bracket eyes to the back for hanging. The bracket eyes can also be obtained from Hobbies Ltd., price 1d. each.

Finish off the box part by polishing, varnishing or painting, and then add the

Make these attractive

FLOWER HOLDERS

cord at the front. There is no need to buy expensive cord, a plain white one will look very tasteful. Tie a knot in one end and proceed to thread through as shown, completing with a knot and cutting off close.

The second holder is intended for one vase only and is made up from three pieces of $\frac{1}{2}$ in. or $\frac{3}{4}$ in. wood as shown in Fig. 3. Cut the shaped pieces out with a fretsaw, leaving tenons on the U-shaped

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

*For Modellers, Fretworkers
and Home Craftsmen*



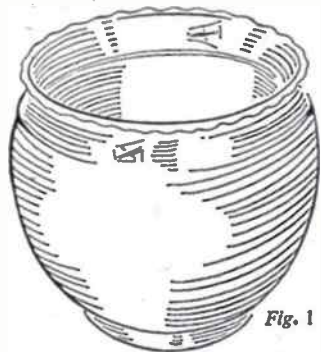


Fig. 1

piece for fitting into the back. Drill holes all round for the cord which will be added later.

Glue and pin the base to the back and then glue the U-shaped piece in position. Complete the painting or varnishing and then add the bracket eyes and cord. (M.h.)

CAN YOU BEAT IT?

WE have had a letter from a 67-year-old Tranmere reader who has been doing fretwork for 57 years and is now helping his two grandsons to perfect their art in this ever-fascinating hobby. For him it has, incidentally, been a profitable hobby, as he has sold many toy forts and doll's houses made from Hobbles designs. And he is still using the same hand-frame bought when he was ten! Can you beat it?

• Continued from page 133

'Windmill' Wind Vane

half-lapped at their centres and pinned. To each arm is then screwed or nailed thin metal sails about 6½ ins. long by 2½ ins. or more wide. After they are fixed, carefully bend down each piece so that the wind will act upon them when they are finally fitted to the sail bar. This is clearly shown in Fig. 9.

A distance piece, consisting of a piece of brass or copper tubing, is put over the sail bar, after a metal washer has been slid on this, to fit up against the front of the mill. A second washer is then slid on to meet the outer end of the tubing, and the sails then put over. Finally add another washer, then put in the sail bar a small wire nail, the head of which

must be filed flat on one side only to act as a lynch pin to keep the sails in place. The latter should revolve freely around the bar, a little grease being added to make for free movement.

Fig. 8



The finished mill, with sails, etc., complete, is now placed over the central pivot of the base and care must be taken to leave a clearance between piece (E) and the floor (C), so that the whole top

portion revolves freely to meet the action of the wind.

As a wood preservative, creosote may be used for all parts of the mill, but paint would look more pleasing and add a bit of colour to the garden. Light brown paint with black lines to represent boarding, windows, etc., may be adopted, with green, perhaps, for the

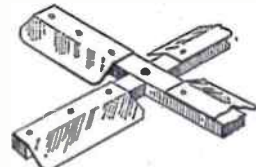


Fig. 9

roof and sails. The base of the mill must have a very secure holding on the post. Iron angle brackets to go underneath the platform would answer well for this purpose. (S.W.C.)

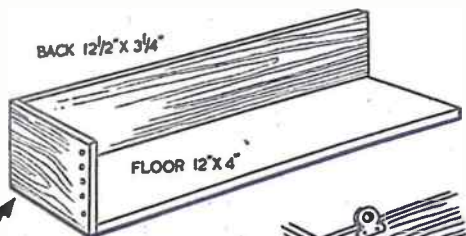
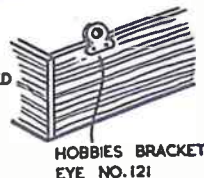
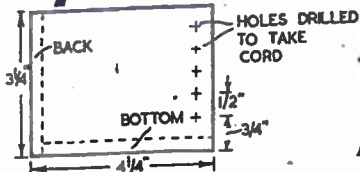
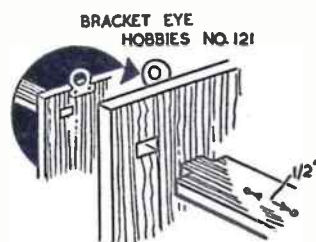
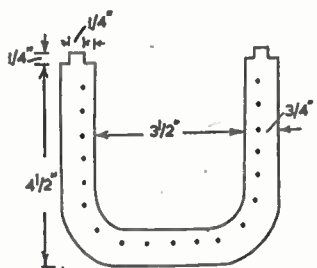


Fig. 2



HOBBIES BRACKET EYE NO. 121



BRACKET EYE HOBBIES NO. 121

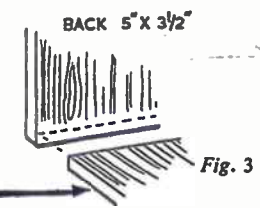
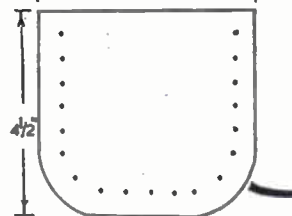


Fig. 3

FOR AMATEUR PHOTOGRAPHERS

Taking Portraits Out of Doors

INDOOR work with powerful lighting equipment is by no means essential for portraits, as good informal portraits can be taken outside with great ease. Shots of this kind can give lasting satisfaction, and are always interesting to look back upon.

Several kinds of outdoor portrait are possible. First, there is the type which shows the head and shoulders of the sitter only, against a neutral background containing no detail whatever. Then there are portraits which give a fairly clear indication of the 'setting'—which may be by the sea, a country scene, or so on. Finally, there is the type of picture where the setting or background plays quite an important part. Such shots may consist of a child at play, an adult engaged in some characteristic outdoor activity, etc. Each method has its own advantages.

Sitter Only

This most resembles the usual type of professional portrait, where a blank wall or curtain is frequently behind the person photographed. Exactly the same results may be achieved outside, with the important difference that the much stronger lighting enables even the simplest camera, with small lens, to be used.

In some cases it is possible to obtain a 'blank' background by keeping the camera low, so that the head and shoulders of the subject are outlined against the sky. When attempting this, a sharp watch should be kept to make sure that rooftops, trees, etc., do not show in the picture. If the situation is fairly high and open, no difficulty should arise from this.

Another method is possible with cameras having a lens of fairly large aperture ($f/4.5$ or bigger), where the depth-of-focus is small. The subject should be placed some distance from a fairly evenly lighted surface such as a wall, and be focused sharply. The background will then be so out of focus that it is quite indistinguishable.

This method cannot be used with box cameras or cameras with small lenses, unless the background is almost blank, such as with a concrete wall. With brickwork, the smaller aperture of the lens will increase the depth-of-focus and the bricks would be visible, spoiling the result. Indeed, with such cameras it is usually best to choose a background which helps to form the completed picture, since it cannot be eliminated by focusing, as with cameras having lenses of large aperture.

When background details are in-



Full sunshine, but taken in the shadow of trees. With a larger aperture the background would be even less important.

cluded a portrait is less formal in nature, but often more interesting. Usually the background should be simple and inconspicuous, consisting of large masses such as trees, or a distant view of beach, etc. The background must be secondary to the subject. If other people are

included in it, they should be in the far distance, and the subject should occupy most of the picture area. With this kind of shot it is usually best to include more of the subject than merely head and shoulders.

With focusing cameras, the subject should be in sharp focus, and other matter a little out of focus, so that the subject stands out sharply. The scene behind the person photographed should be as pleasant as possible and different viewpoints can be tried to see which is most satisfactory.

With young people, animals, toys, etc., can play a great part in the picture, giving an air of naturalness and helping to put the subject at ease. This secondary subject matter must not take up too large a part of the picture, however, because the real aim is a lifelike, sharp, large-sized photograph of the person concerned.

Light and Exposures

Very dull weather is best avoided, even when the lens and film would permit of a suitable exposure, because the results are likely to be flat and lacking any sparkle. On the other hand, direct sunshine is very seldom satisfactory. If the person faces the sun directly, the eyes will be slightly closed, while shadows may arise beneath the nose and chin, if the sun is high. If side-

• Continued overleaf

MAKE IT FOR THE CHILDREN

A Colourful Spinning Top

Full-size patterns are on page 143



THE top illustrated is intended to be spun with the fingers. The coloured discs are dropped over the spindle to give a variety of pleasing colours when spinning.

The top consists of a spindle and a piece of ½ in., ⅓ in. or ¼ in. wood cut to

the size shown on the pattern page. Drill the centre hole, or cut out with a fretsaw before cutting round the outline.

The six designs shown are marked on to thin card and coloured in with poster paint or water colours. Keep the colours bright and clear. They can be coated with clear varnish if necessary.

The top is painted bright red and allowed to dry well before using. As a variation from the one shown you could try them in various sizes and thicknesses of wood. (M.p.)

lighting is used, the shadows are likely to be so deep that the final print will be unsatisfactory.

For these reasons a bright yet sunless day is best. With present-day high-speed films, sunshine is not necessary, even with the simplest type of camera. Clear, strong daylight is best. If the sun is visible behind mist or thin clouds, this does not matter, but the sunshine should not be so strong that definite shadows are cast by any object.

When the sun is strong, it is best to move into the shadow of a tree or building, if a picture of this kind is to be taken. Usually, lighting will be good enough, especially if there are reflecting surfaces such as roads or light-toned walls nearby.

If sunshine cannot be avoided, as is sometimes the case, then the subject may be placed with his or her back to the sun. The face may then be illuminated with diffused light by giving the subject a newspaper or other reflecting object to hold or read. With this arrangement, the photographer must avoid direct sunlight entering the camera, or fogging is likely. This can be done by using a lens hood, or by careful positioning of the subject, so that the light is a little from one side. If correctly arranged, such back lighting can give very pleasing results.

Under average conditions, with good light, the exposure will be that given by the usual box camera—1/25th second at f/11. If larger apertures are used, for the reasons given, the exposures can be reduced in the usual way, e.g., 1/50th at f/8, 1/100th at f/5.6, 1/200th at f/4.5, etc. When taking the shot in shadow, some increase in exposure will be required if the subject is not well illuminated. In such circumstances, 1/25th second at f/5.6 will be about the exposure required.

The Subject

There is usually no need for the person photographed to keep absolutely still, as 1/25th second is usually possible out of doors, and this will halt slow movement. It is important that the subject be comfortable, however, and a sitting position is often best. The photographer should watch unobtrusively, while, perhaps, pretending that he is still making preparations for the actual shot, and try to catch the subject when the latter appears at ease, relaxed, and at his best.

The 'full face' type of shot directly from in front is seldom the best, though this depends upon the sitter's features. Many different angles can be tried and it is by no means essential that the subject direct his attention at the camera. With many people better results are obtained if the eyes are directed elsewhere, especially if some object is present in the picture upon which the sitter's attention may be turned.



In this type of shot the setting helps the picture.

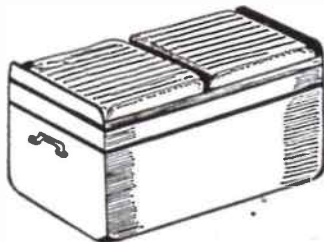
Before taking the shot the photographer should make sure that the subject really plays a great enough part, occupying one-third to half of the picture area. If not, then the camera

should be taken closer, especially if contact prints are to be made. With enlargements, this will not be so important, as unrequired material can be left out when producing the prints.

The need for accurate focusing should also be kept in mind, especially at apertures of f/8, f/5.6, f/4.5, etc. The distance between subject and camera should be measured if the photographer is doubtful about judging distances with sufficient accuracy, and the camera has no rangefinder or reflex focusing screen. With simple fixed-focus cameras, the camera must be kept at least at the minimum distance given by the manufacturer—usually 7ft. to 8ft. Alternatively, if a real 'close-up' is required, a portrait lens should be added to the camera, and the distance accurately measured. With such a lens, background material can be put well out of focus, giving a result almost as good, in this direction, as that obtained with a large aperture lens. Against this, however, is the point that perspective is distorted when the camera is very near the subject. Indeed, if the photographer has a choice of lenses, one of fairly long focus (6ins. to 9ins.) is best, with average roll-film sized negatives, because a large image will be obtained from a distance. (F.G.R.)

Make Use of the Old Tin Trunk

Says Victor Sutton



NEVER despise the old tin trunk which used to be packed to capacity for the annual holiday. I have made very good use of four of them recently with the result that I know just where to find certain ranges of goods. The second-hand dealer has no market at all for them and has to buy them when he clears a house of furniture. Apart from that, people these days cannot be bothered with cleaning them up and making use of them. I paid 2/6 for mine and that is about enough.

The first thing is to clean it thoroughly and eliminate any ugly dents. You can do this with a mallet and block of wood about 4ins. by 4ins. This operation, incidentally, will also bring off all the

cracked enamel or paint. A wire brush and glasspapering will soon give a clean surface. Two coats of really good flat priming paint are the best and soundest method of making sure of a good surface. For a dark shade I use brown or mid-buff, or if green, then a good deep green goes on first.

The handles are probably quite strong. Should you have to add new ones, however, then drill holes and secure the screws on the inside with a block of wood. The handles must be secure because of the weight when lifting.

Here, then, you have the storage for a set of crocks, books for the children, groundsheets, games, puzzles and garden equipment which is kept for use in the garden. These items will always be free from mildew, insects and certain dampness and can be stored, during the outdoor season, under any lean-to or verandah.

I have fitted one with a hardboard panel on the top and wooden ends as shown in the sketch. Some cushions were made up to fit and now there are two spare seats when unexpected visitors arrive.

FOR THE GARDEN

A 'Windmill' Wind Vane

MANY of our readers will, no doubt, like to make up the interesting windmill wind vane, shown in our sketch as a garden ornament. The mill is made up almost entirely of 1/2in. wood, and all parts are simply nailed together, holes being made for the nails before they are driven in to avoid the splitting of the wood.

The mill is fashioned on the lines of a 'post mill' and it is suggested that it be fixed to a post about 7ft. or 8ft. above

Next cut the circular piece (E) as in Fig. 3 and nail it to the top of the base. The pivot rod is about 9 1/2ins. long and it may be of hardwood dowelling pointed at the top and with, perhaps, a round-head screw put in. The mill is so made that it revolves about this pivot, all being made clear from the section shown in Fig. 1.

The mill consists of the front (A), the back (B), the floor (C), the upper floor (D) and two plain sides. The method of construction is plainly given in Figs. 1, 4

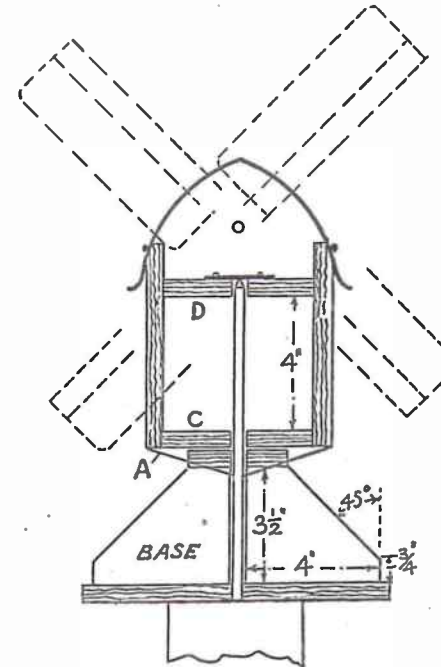
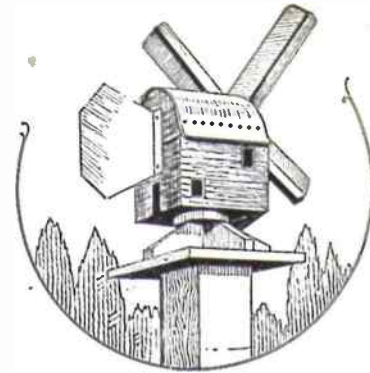


Fig. 1

ground. The model is built up on a main stout wood platform about 9ins. square and cross-battened for strength if necessary.

Making the Base

The base of the mill consists of the four pieces indicated in Fig. 1 and nailed to the platform as in the detail Fig. 2. First set out in pencil the actual plan of the pieces as they will be fixed, and then bore holes through the platform and partly into the base pieces. Bore a 1/2in. hole in the centre of the platform for the insertion of the upright pivot rod as shown.

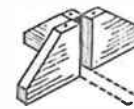


Fig. 2

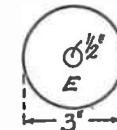


Fig. 3

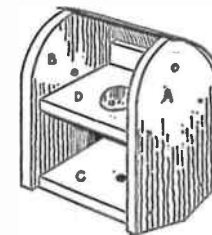


Fig. 5

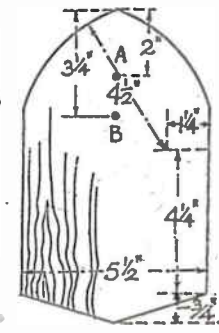


Fig. 6

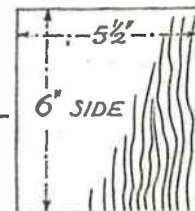
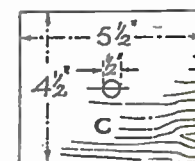


Fig. 7

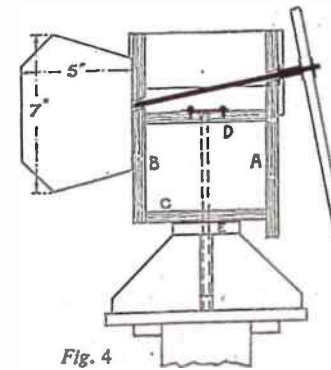


Fig. 4

and 5. All the measurements are given for the front and the back (A and B) but it must be observed that the lower edge of (A) is brought to a point, whereas that of the back is straight. Note also in Fig. 6 that the holes for the sail bar are differently placed, hole (A) being in the front and hole (B) in the back. This is further explained in Fig. 4. Pieces (C) and (D) are identical in size, and over the centre hole of piece (D) is fixed a metal disc to act as a rest plate for the pivot below.

Cut two sides to the measurements given in Fig. 7, and nail them between the pieces (A) and (B). The roof of the

mill may be cut from ordinary household tins and closely nailed to the front and back gables and along the sides as shown. Next fit and fix the wind vane at the back of the mill. Use thin iron for this, turning up one edge to receive the nails as in Fig. 8.

Measurements of the vane are given in Fig. 9. The sails are made as shown in Fig. 9. Two pieces of wood about 1/2in. by 1/2in. and about 15ins. long are

Continued on page 130

AMATEUR BOAT BUILDING

By R. H. Warring

SINCE they are about the cheapest of small craft, ply-skinned dinghies are very attractive as a first attempt at amateur boat building. At the same time it should be appreciated that a simple dinghy is not necessarily the ideal 'general purpose' craft—too small for operating on anything but sheltered waterways and, generally, strictly limited in performance. However, with a limited pocket, they can be a lot of fun for a start.

If a dinghy is to be made a good weight-carrier, and at the same time

assist in straight running when being rowed or towed.

Thus, with a few relatively simple alterations, we have improved the appearance of the pram and made her a better craft for handling. At the same time the curve needed for the bows is still within the limits which can readily be achieved when applying the plywood skinning.

Experience has shown that plywood

and acts as a rudder for steering purposes.

A Sailing Dinghy

If you want a sailing dinghy, however, you will require additional stability in the form of a centreboard which can be let down through the bottom of the hull to provide an extended 'keel' surface. To preserve a watertight hull the centreboard itself is mounted in a wooden case, which must, obviously, be fitted carefully and accurately. Once again the advantage of purchasing a kit of parts is appreciated, because prefabricated dinghy kits of this type normally include a made-up centreboard case ready to fit and glue into a matching slot already machined in the hog or keel.

On a small dinghy a single lugsail will be sufficient for sailing purposes. Extra fittings will include mast, mast step, gaff and boom, rigging and fittings and, of course, you must also have a rudder and tiller. Exclusive of sail and fittings, extra cost for a sailing dinghy works out at about £5. To this, add a similar amount for the sail and about the same again, or slightly more, for all necessary fittings and rigging. That will represent between one-half and two-thirds the price of a new, ready-made sailing dinghy of the same type—and you will pay for that saving with something like forty to fifty hours of work.

'Slabsided' Construction

If you are not concerned with sailing, then you can go for a slightly bigger dinghy at about the same price. Using 'slabsided' construction an extra foot or so can be added to the length of the 'weight-carrying' pram, so that we have a pointed bow, in the conventional manner. The flat bottom will give lots of stability, but she will be more sluggish to pull than the pram and also drive slower with the same size of outboard. Nevertheless, this type of craft would be ideal for river fishing, with or without a motor. Cost? Well, again you can get kits of fishing dinghies of this type for about £22.10s. and you need even less building time on account of the straightforward construction. Say about 15 to 20 hours, exclusive of the time you spend painting or varnishing to finish.

There is one other big advantage associated with small dinghies. They are quite portable—a pram weighing about 90 to 100 pounds, usually; the other type a few pounds more. That means that it can easily be carried by two people for launching purposes, or pulling out of the water. More important

● Continued on page 138



This 11 ft. fishing dinghy can easily be carried on the roof of a small car. Note the simple 'slabsided' construction. Such a craft would be rather too sluggish to sail

kept small in length, the plan shape generally approximates to rectangular. Some concession is usually made to appearance, and so the sides are invariably curved. But both bow and stern are squared off. The result is an essentially 'utility' hull shape, normally referred to as a pram dinghy.

Small Skeg

Now a pram dinghy with flat sides and a flat bottom would handle very sluggishly in the water. Curving the bottom and rounding off the bow will make her much better in this respect. In fact, it does not matter now that the bow is blunt for this flat section, the bowansom, is now clear of the water when under way. The addition of a small keel on the underside of the hull will

sheet will bend dry around quite sharp curves. If particularly severe at any point, however, there is a danger of the skin cracking when pulled down to a final fit. This can be avoided, and the whole process of bending plywood made easier, simply by pouring boiling water over both sides of the ply panel before bending to shape. This is the whole extent of any 'steaming' likely to be required in the construction of simple dinghies. Curves of the chine and gunwale members are shallow enough for 'dry' bending.

A small pram dinghy can easily be rowed, or powered by a small outboard motor (if you want, and can afford, a 'miniature' power boat). No rudder is necessary either for rowing or power. In the latter case the whole motor swivels

An Easy-to-Make Retort Stand

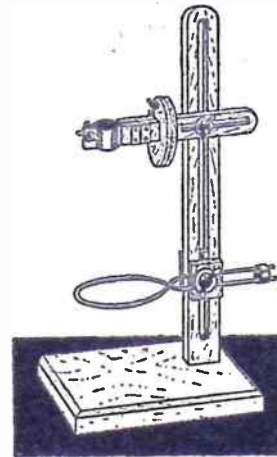


Fig. 1

WITHOUT a retort stand, one cannot get very far beyond the test tube stage. Unfortunately, as every chemist knows, these stands are expensive. Yet with a fretsaw and a few odds and ends, the serviceable retort stand shown in Fig. 1 can be made easily. To buy a stand of similar dimensions would cost anything from fifteen to twenty-five shillings.

As will be gathered from Fig. 1, wing nuts and bolts take the place of the usual tommy screws. Vertical adjustment is provided by a slotted pillar and horizontal adjustment by a slotted slide in the case of the jaws and by parallel wires in the ring. The jaws open and close by means of hinged strips of wood and are secured by the wing nut. Turning of the jaws through the necessary 90 degrees is effected by two discs; the rear fixed and bored with a hole to take the bolt, the front slotted so as to allow it to slide past the bolt prior to fixing in the desired position.

Construction

A start should be made with the stand and pillar (Fig. 2). The base is cut 5 ins. by 7 ins. from 1 in. wood and given a ¼ in. chamfer for neatness. The slot to house the base of the pillar measures 1 in. by ¼ in. The pillar is cut from ¼ in. wood and has an overall length of 18 ins. The centre slot is ¼ in. wide. Balsa cement should be used to fix it into the base, for this resists the water and aqueous solutions which inevitably get on to stand bases from time to time.

If you intend to use the stand to grip large flasks containing a lot of liquid, extra weight must be given to the base. This is easily accomplished by letting in a sheet of lead beneath it.

Constructional details of the whole clamp are set out in Figs. 3 and 4. The face and back discs are best made first. They are both of 3 ins. diameter and are cut from ¼ in. wood. The curved slot in (A) is ¼ in. from the edge and is ¼ in. wide. The jaw slot shown in the centre is 1 in. square.

Disc (B) is drilled with a ¼ in. hole in the position shown. The slot to take the

The slide (E) is 1 in. wide by ¼ in. thick, and has an overall length of 4 ins. Its slot is ¼ in. wide. Fig. 3 shows the front view of the discs. The slide is balsa cemented in the rear of disc (B). The butt end of the slide should, of course, be flush with the front face of the disc.

The wooden parts (C) and (D) of the jaws are cut from 1 in. by ¼ in. strip. The right-hand screws of the hinge pass right through into (C). Balsa cement should also be applied to the inner face of the end block of (D) where it contacts (C), so as to give complete rigidity. The fitting together of these parts is best left

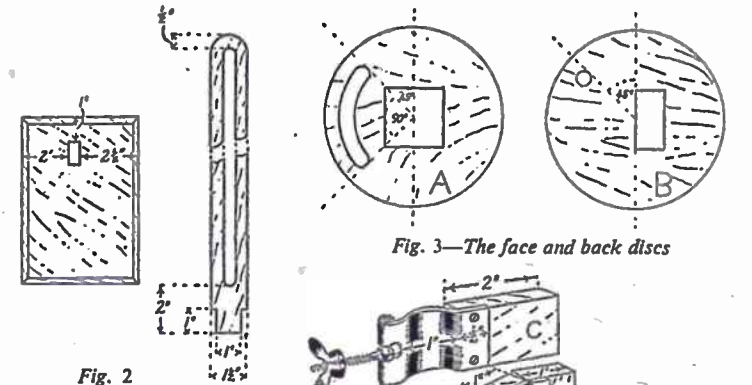


Fig. 3—The face and back discs

Fig. 2
The base and pillar

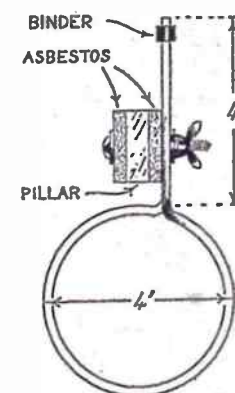


Fig. 5—The ring

slide is 1 in. by ¼ in. and cut to the side of the centre line, as shown. By slipping in a wing nut and bolt, the principle of movement of the clamp will readily be seen.

until the metal mouth strips of the jaws are in position.

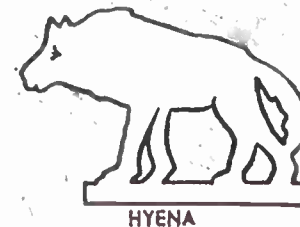
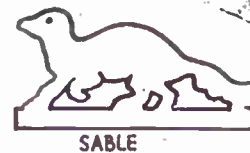
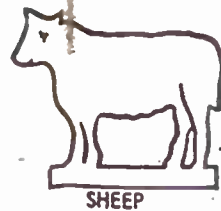
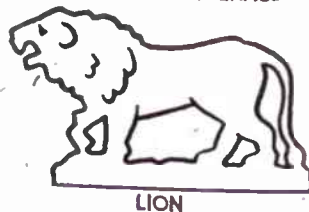
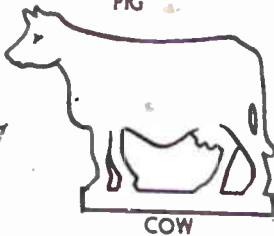
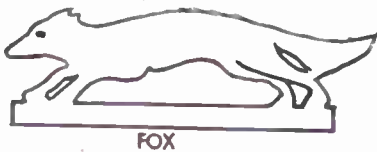
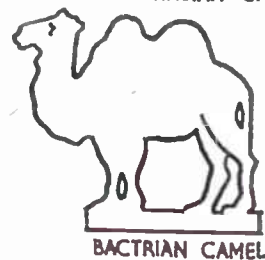
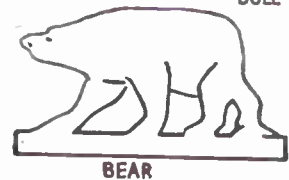
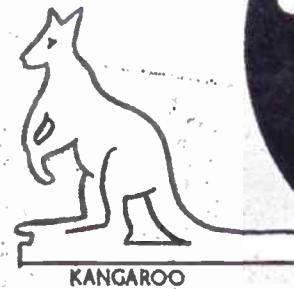
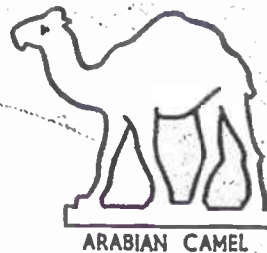
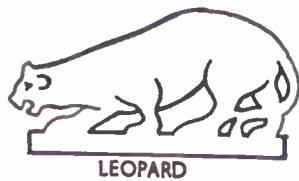
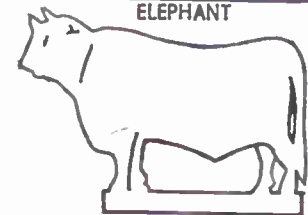
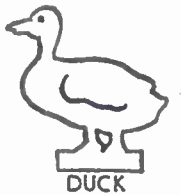
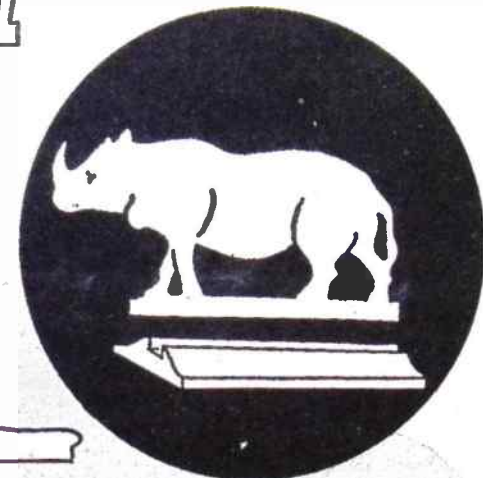
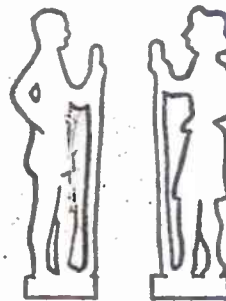
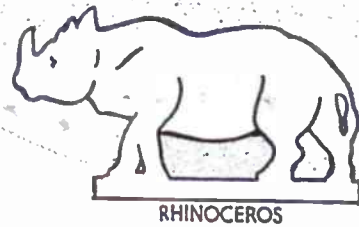
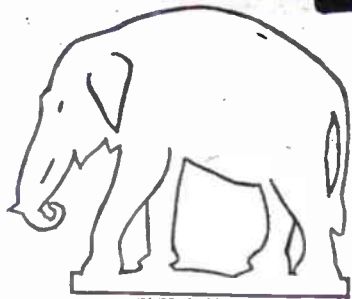
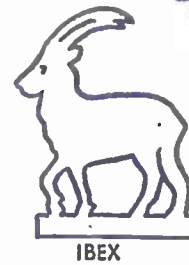
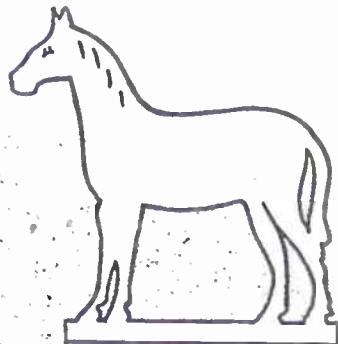
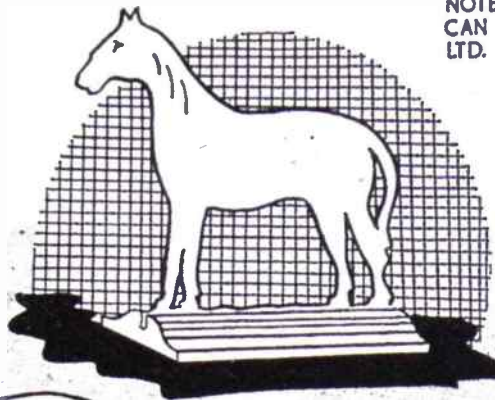
These mouth strips are cut from stout brass sheet. The curve in each is ¼ in. deep, this giving a combined mouth diameter of ¼ in. when completely closed. The upper strip is hammered round a nail and fitted with a ring-headed bolt. This allows a convenient swivel removal of the bolt and consequent easy insertion and removal of a flask or tube. Cut off the surplus of the pointed end of the nail and tap over to secure it. The open slot in the lower strip is ¼ in. wide. The inner faces of the curves should each be lined with a thin sheet of cork, secured with balsa cement.

● Continued on page 140

NOAH'S ARK ANIMALS

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A Depth Gauge for the Gardener

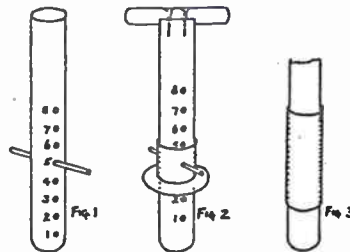
THERE are a few gardeners who have what is known as 'green fingers', whereby everything they plant in the garden is a success. Their seeds may be sown at the wrong season, plants put into poor soil or bulbs placed too deep, but they all seem to grow with great vigour.

On the other hand, however, many gardeners follow the advice of the expert. Bulbs and seeds must be sown at the correct depth to obtain satisfactory results, and it is for them that the gadgets described have been devised.

It would not be advisable, for instance, to plant the anemone at the same depth as a daffodil. The first needs barely 2ins. of soil to cover it, whereas the daffodil should be planted much deeper.

Quite a few people cannot judge the depth of a hole very accurately and to them a gauge that can be pre-set and will produce a series of holes exactly alike in diameter and depth is a real boon. A very simple gauge is made from a length of round wood about

By A. F. Taylor



2ins. to 2½ins. in diameter and marked off in inches. It is essential, of course, to carefully watch the marks every time it is pushed into the soil. A better version is to drill a ¼in. hole at every 1in. mark and insert a short length of dowel rod at the number required as shown in Fig. 1. It is then only necessary to push the gauge down until the dowel is level with the soil to obtain the correct depth for planting.

The improved gauge shown in Fig. 2 is easier to handle and more accurate. The main bar, made of hardwood if possible, has a semi-circular piece cut out of the top end, into which a handle about 6ins. long is securely screwed. A flanged ferrule or tube slides up and down the graduated bar to mark the correct depth, and this is secured with a dowel rod as before. Make the ferrule from a piece of tinplate and have it about ¼in. larger in diameter than the bar, so that it slides easily. The flange need not be more than 1in. wide and is soldered on to one end of the ferrule.

A very useful bulb-planting gadget for use on powdery soils can be made on similar lines. Make a longer tin tube to slide easily over the bar as shown in Fig. 3. The tube is pushed to the bottom of the wooden bar and the two inserted into the soil together. When the bar is withdrawn the tin remains and keeps the loose soil from filling up the hole. This allows the bulb to be planted with ease, after which the tin is withdrawn.

Continued from page 134

Amateur Boat Building

still, it is small enough and light enough to travel on top of the family car, so you can take it with you on holiday, or to and from the nearest waterway at week-ends.

Portability is often a major problem with amateur boat builders, especially those living miles from the sea or the nearest river. Even if they leave the boat on the water once launched, they have to get it down there in the first place. My own 14ft. runabout had to make the sixty-mile journey to the coast loaded on to a borrowed five-ton lorry.



A small pram dinghy—light enough to be carried about!

A Trailer is Best

Boats nearly up to this size can still be loaded on to car roofs for transport, but the usual scheme if you do want to travel them from one site to another, is to use a trailer. The boat sits securely on the trailer, which in turn is hitched to the back of the car—and away you go.

Any small craft above about 12ft. long needs trailing if you want to transport it from place to place. You can get an 11-footer on top of an 8 horse-power car, but that is about the useful (and sensible) limit. Anything which gets too big even to trail is probably too big for the amateur builder anyway, unless

he already has some experience in small craft construction or lives 'right on top'

of the water. People have built 20ft. cabin cruisers in their backyard and then found that the cost of getting them down to the water is nearly as much as their material bill. Others—even though it does seem so obvious—have not discovered until after they have built the job that it is impossible to get it out of the garden or shed without knocking down various walls and going to immense trouble and expense on this account. Some, in despair, have let their efforts remain as a rather unusual 'garden shed', with the sole satisfaction that they have 'built a boat'.

Building a boat in itself can be lots of fun, but the real fun starts from the time you first take her out on the water. Just be certain before you start that the size of boat you choose suits both your pocket and the facilities available for building and transport.

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World Radio History

REPLIES OF INTEREST

Stains on Pottery

I MAKE and collect pottery and rare china, and have some pieces of Wedgwood blue and white, also green and white, and some of the pieces are stained. Can you suggest some way of removing the stains without damaging the coloured backgrounds? (G.F.—Oxford.)

THE difficulty in advising a treatment for the stained china is that the nature or origin of the stains is unknown. If, for example, the staining agent is water soluble, it is most probable that prolonged immersion in clean slightly warm water will loosen the stain. If the stain is of a greasy nature, then washing with a mild detergent solution — for example, Tide — or a chemical cleaner such as carbon tetrachloride, neither of these should affect the colour, but a preliminary experiment is, of course, desirable. Another plan is to immerse the article in a bran poultice, that is, cover it completely with warm moist bran and leave for a long time for the bran to draw out the stain. Fullers earth can be employed in a similar manner. Either of these methods is very slow, and must be repeated time after time to draw out the stain.

Query about Concrete

I INTEND to cover a wooden upper floor with layer of concrete 1½ ins. thick. This has to be made impervious to water. I mean to do this by adding sodium silicate to the concrete. Can you please advise me as to the correct mixture, and advise on any other points which may arise? (P.F.—Newcastle.)

IT is more usual, we understand, to coat the concrete when laid with the silicate of soda, but there seems no objection to mixing it with the water used for the concrete. You will need a hydrometer to test the dilution. Mix the silicate with water until a reading of 1250 to 1300 is obtained on the hydrometer.

Colouring Brickwork

I INTEND to rake and point the soft mortar joints on my outside walls, and at the same time I would like to freshen up the appearance of the bricks. I understand this can be done by mixing Copra, size and red ochre, but am not sure of the proportions I should use or how to mix them. I would also like to know what

proportions of cement and sand I should use for pointing, and how I can get a light white finish in contrast to the red bricks. (D.G.—Gosport.)

TO colour the brickwork previous to pointing, a wash of 1lb. of green copperas to five gallons water is necessary for yellow bricks, or 1lb. Venetian red and 1lb. Spanish brown for red bricks. Mortar for pointing, one part cement to one part sand. For white 'tuck' pointing, white lime putty is required. To prepare this, pure lime is slacked with water and strained off; consistency should be that of cream. It is then mixed with washed silver sand, proportions being two to three of sand to one of the lime.

Draughty Windows

MY pre-war farm cottage has iron window frames which are not draught-proof. Can you recommend anything to remedy this? (W.B.—Swanley.)

A LENGTH of rubber strip off an old inner tube, stuck to one window frame and wide enough to overlap the gap between it and its companion, should prove effective. It can be stuck to the metal with thick shellac varnish. Spread the varnish on both frame and rubber, and press hard

• Continued from page 135

Easy-to-Make Retort Stand

When these two brass strips are screwed into position, (C) and (D) may be screwed and cemented together as previously indicated. The complete jaw component may then be balsa cemented into the front of disc (A), being brought flush with the rear face of the disc. After inserting the wing nut and bolt between the two discs, the clamp is complete and ready for putting on to the pillar by another wing nut and bolt.

For the ring (Fig. 5), a length of ½ in. or ¾ in. iron wire will be needed. After the circle is bent in, the ends are crossed, turned through an angle of 90 degrees and brought parallel as in Fig. 1. To prevent any opening out, a short section of suitable diameter brass tubing is pressed into an oval and slipped over the ends.

together as long as possible, or better still, cover with a long wood strip and cramp the whole tightly with two or more of those small metal cramps, so useful in the home.

Light from Transparent Tape

I WAS recently (while working in the dark-room) using Speedfix transparent tape to seal a film carton. I was in total darkness and noticed that as I pulled the tape from the reel it gave out a bright light. Could this ruin a film, and would you explain why it happens? (J.F.—Grimsby.)

THE light you mention arises when some kinds of tape are pulled away, especially if the action is rapid. It is a type of static electricity discharge, which may be caused by friction, etc. Usually it is so slight, and so localised, that a film would certainly not be ruined. It is possible, however, for very small fog marks to be made by this means, especially if it arises by stripping off the securing tape which holds a film to its paper backing. If the film were rolled in its paper, and in a carton, no fogging would be possible, of course.

Sealing a Sink Waste

CAN you give me a compound for sealing a sink waste in a white sink? (R.C.—Kidderminster.)

THE usual cement for your job is a mixture of red and white lead, with linseed oil, to putty consistency. Let it alone for a day or two until it is dry, then as a precaution, cover with a layer of Metallix cold solder. This should prove effective.

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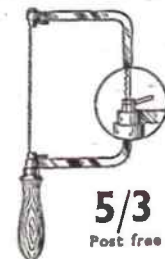
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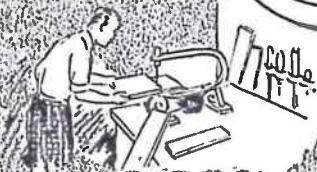
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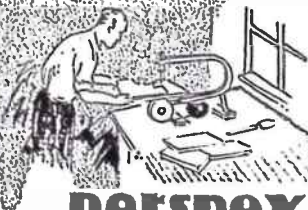
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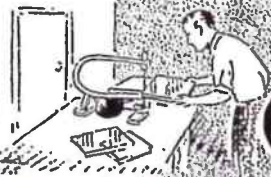
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