

HOBBIES WEEKLY

MAY 21st. 1958

VOL. 126

NUMBER 3264

IN THIS ISSUE

	Page
Model 'OO'-Gauge Footbridge	97
A Forecasting Card Trick	98
Learn to Swim — 4	99
Dials and Drives	100
The 'Exploding' Battleship	102
Making a Sawing Trestle	103
Hobbies' Crossword No. 16	103
Simple Paper Sculpture	104
Making Money with a Camera	105
Collectors' Club	105
Model Fire Alarm	110
Tea-pot Stand Patterns	111



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

★ FREE design inside

THIS authentic design for a footbridge makes a useful addition to 'OO'-gauge railway layouts. It is in the form of a covered way, to be used with platforms.

Quite simple in construction, the width is suitable for use with a double track. Those working with a kit will find the windows ready printed on transparent material and full-size diagrams of

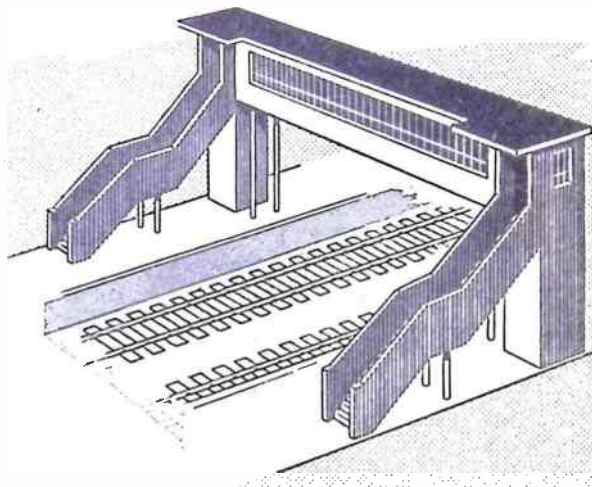
MODEL 'OO'-GAUGE FOOTBRIDGE

the windows are given on the design sheet for those working with their own materials.

All the parts are shown full size on the design sheet. Arrows indicate the direction of the grain of wood, but where plywood is used, these directions can, of course, be ignored.

Trace the various pieces from the design sheet and transfer them to their appropriate thicknesses of wood by means of carbon paper. Next cut them out neatly with the fretsaw and clean up well with glasspaper preparatory to assembly.

Commence by making up the assembly



shown in Fig. 1 on the design sheet, forming the bridge part consisting of pieces 1, 2 and 3. Fixing throughout will be by gluing.

The end towers and stairs are made up as shown in Fig. 2. The stairs (pieces 8) are glued between pieces 4 and 5 and then pieces 6 and 7 are glued in place. The towers, of course, are made up as a matching pair — one right and one left. When assembled these are glued to the bridge section.

● Continued on page 98

A FORECASTING CARD TRICK

HERE is a simple card trick requiring only a minimum of preparation but which can even be done in the presence of your audience, and while it has actually a mathematical basis you may use it most successfully as a clever feat of forecasting. There are one or two methods of presentation as will be shown but in this instance it will perhaps be better to explain the full performance, starting with the preparation.

Take a full pack of cards in the left hand counting off into the right hand as though you were checking the number in the pack, or looking for the joker — which is discarded — and while doing this simple preparation all you are required to observe and note is the suit and value of the 34th card. Memorise this card, and it is quite a good subterfuge to withdraw the joker with a remark that it will not be required. When the cards are transferred from the left hand to the right they will be reversed of course, and the card you have memorised will be the 34th from the top, but you should proceed with the counting to the last card.

Now place the pack, nicely squared up on the table asking your opponent to cut, somewhere about halfway, a less amount is of no consequence, but a cut taking more than 26 cards may upset our trick. Here you will have to use your wits if your opponent takes too many, perhaps by asking for another cut which is not quite so greedy!

Your opponent is now asked to shuffle the cards he has cut and while he is making a very thorough job of this you may write down the suit and value of that 34th card on a slip of paper. Fold this paper very securely, and for a really good effect it could be placed in an envelope, sealed and passed to some other person for safe keeping until the trick is completed.

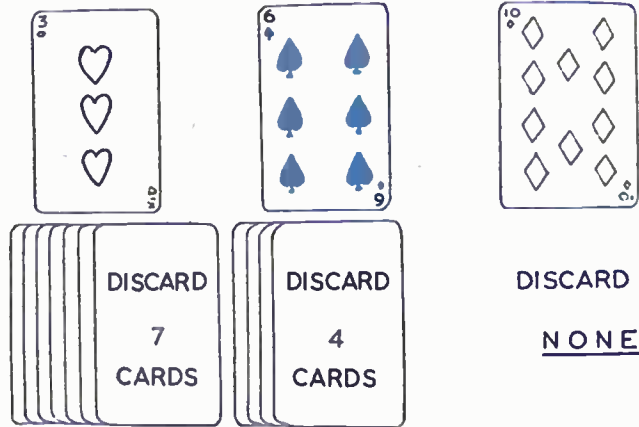
With the cards shuffled and the forecast made, you now ask your opponent to select any three cards, placing them face downwards on the table and returning the remainder to you. This remainder must be placed on top of the balance of the pack. You should note that it is possible to ask three different persons to select a card if you wish to modify the presentation. Moreover, you may either manipulate the rest of the proceedings yourself or allow your opponents to assist. For clarity we will assume that you now hold the cards with the exception of the three laid face downwards on the table.

The first choice should now be revealed by the selector and as many cards discarded as will bring the value to 10.

For example, in our illustration the first card on the left is the three of hearts, so we count off seven cards from the pack, we count off seven cards from the pack, laying them alongside. The next card is the six of spades, requiring four cards to be discarded, but whenever a ten or any picture card appears none whatever are discarded. It is not necessary to

revealed for after discarding the cards as mentioned you may ask your opponent to turn up the next card and reveal it to the entire audience. At the same time you may request the sealed envelope to be opened and the correct forecast proclaimed.

This is a splendid self working trick



place the discarded cards alongside the selected ones, but here they are thus shown by way of an example.

Now ask for the total of the spots on the cards, again counting any picture as ten, and then discarding an equal number. In our illustration we should have counted off, seven, four and none, but now we should discard a further nineteen, that is, the total of the spots on the three selected cards.

And this is now the point where your amazing powers of forecasting are to be

that can hardly go wrong and it will be seen that your opponents may be allowed to take part in the discarding of the cards, but *not* before you have taken back the balance of the pack after cutting and the selection of the three cards. It is essential that this half of the pack be placed on top of the others or the position of that 34th card will be disturbed and the trick will fail. And by the way, you might keep the secret of this trick to yourself. (S.H.L.)

Continued from page 97

'OO'-Gauge Footbridge

Next paint the inside of the bridge (white is suggested) and glue the windows in position. The roof (piece 9) can next be glued in place and the columns, consisting of $\frac{1}{4}$ in. round rod (pieces 10 and 11) added where indicated. The columns can be fixed into the assembly by first drilling and gluing, or can simply be glued in place.

Before fixing the roof of the bridge, small figures could be placed inside, looking out of the windows. Some workers might prefer to hinge the roof, so that changes could be made to the position, etc., of these various figures.

Kit No. 3264 for making the 'OO'-Gauge Footbridge contains plywood, round rod, stripwood, etc., and specially printed windows. Obtainable from branches or Hobbies Ltd., Dereham, Norfolk (post free), price only 4/11.

The footbridge should now be finished by painting, and the colour scheme will, of course, depend upon individual preference and on the other buildings in the layout.



WE now come to the crawl stroke, probably considered by most to be the 'real' swimming stroke. Although more speedy than the breast stroke (and also more fatiguing!) the latter is of great value as a general stroke and should never be neglected. In fact it is better not to attempt the crawl until you feel quite happy with the breast stroke.

Probably the most satisfactory approach to the crawl is through the 'dog paddle'. This has little value of its own but is an excellent introduction to the more difficult stroke.

The dog paddle employs the true crawl leg movement and this should be practised first. Hold on to the bar, as when you practised the breast stroke leg kick, and stretch your legs straight out behind you, feet together and pointing backwards. Now turn the feet slightly inwards and move the legs up and down rather like a swinging walking movement (Fig. 1).

The driving force should come from the hips and the knees allowed to become somewhat limp. The result of this is that on the downward movement the lower part of the leg drags behind the thigh, but flicks straight when the latter is moved upwards. This gives a flexible, whiplike thrash with the practised swimmer, although do not worry if you cannot achieve it very well at first. The feet should be kept pointed slightly inwards and their up and down movement should be about 12 to 15 ins. The heels only, however, should just break the surface; violent leg splashing so often seen is a fault resulting from kicking the feet out of the water, and thus wasting energy.

When you have got the right idea, take your float again and try crossing the bath, using the float as you did for the breast stroke. Until practised, your legs will soon tire.

The next stage is to perform the dog paddle instead of using the float. The leg thrash is exactly the same and the arms are alternately pushed forward to full stretch, pulled down through the water under the centre line of the body, bent up under the chin and thrust forward again, always below the surface (Fig. 2) This will enable you to keep your head

Learn to swim — 4

THE CRAWL

comfortably above water and will help to propel you along. Again practise this until you can do it with ease, keeping up your leg thrash continuously.

We will now return to standing at the side of the bath in order to learn how the dog paddle arm movements are modified into the true crawl. As for the breast

clears the surface (Fig. 4).

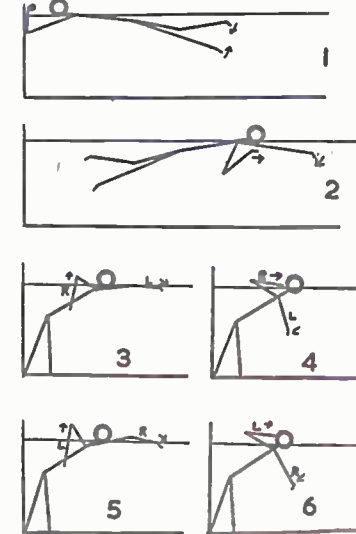
2. Carry your arm forward, still keeping your hand limp until it is extended beyond your head (Fig. 5). Whilst doing this, turn your head to face the right side and breathe in (through the mouth of course).

3. When your arm is fully extended (but not stretched) gently slide your hand into the water and commence the pull under the centre line of the body, turning your head to the front once more and exhaling into the water. The pull is made with a slightly cupped hand and a straight arm (Fig. 6), until the latter has moved through approximately a right angle, when the pull becomes a push by bending the elbow slightly, until your arm is once more nearly at your side.

Whilst the arm pull has been taking place, the other arm will be lifted out of the water and carried forward as already described, except that the head is kept central. Breathing in is carried out to one side only, always as the arm on that side is 'recovering', i.e., being carried forward. Which side that is a matter of personal preference, found by experiment.

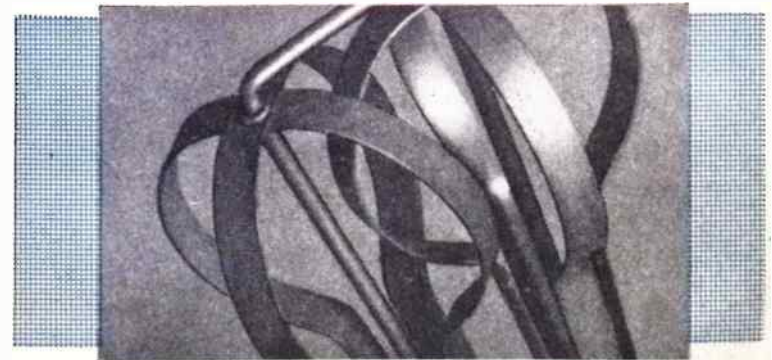
You can now launch yourself once again across the bath and try out the complete stroke. Start the leg thrash first and then the arm movements. Your first crossing (if you get so far!) will probably be a struggle, but, once again, practise. The usual six beat crawl makes six leg strokes for each complete arm cycle, three for each arm. Do not worry about this at first; you will later be able to acquire the correct rhythm.

The next article in this series will deal with back strokes



stroke, lean forward with your shoulders under the water but now with your arms by your sides.

1. Lift one upper arm, say the right, allowing the lower arm and hand to hang limply and relaxed until the latter just



PUZZLEPIC. What is it? See page 110

DIALS AND DRIVES

THE tuning drive and dial fitted to a receiver serves useful purposes in addition to improving the appearance of the panel or cabinet. It allows stations or wavelengths to be marked, so that a required programme can be selected. Or, with simple receivers, it has a numbered scale (usually from 0 to 100, or 0 to 180) so that the readings at which stations are found can be recorded in a station log. In addition, the reduction drive simplifies tuning, which can be very critical when the control knob is fitted directly to the condenser spindle.

A reduction drive is not required with a crystal set, because tuning is not very sharp. It is thus only necessary to fit a control knob, with pointer, to the tuning condenser. A knob about 1in. to 2in.

frame. A projecting lug on the drive must be held motionless, and this can be arranged by fitting a long bolt, with lock nuts, as indicated.

By F. G. Rayer

Such drives may also be used with condensers having a mounting bush, the condenser then being fitted to a bracket which is set back slightly from the panel. The drive is locked to the condenser spindle with a set screw, and a pointer can be fitted. Because of their low cost, simplicity, and small size, such drives are much used.

A cord drive of the type shown in Fig. 2 is also much employed in modern re-

to improve the grip, and is kept tight by the spring, which is fitted to a small hook on the drum. The drum is locked to the spindle in such a position as to allow the usual 180 degrees rotation.

Fitting dials and scales

With most receivers, the tuning scale and pointer appear in a cut out in the panel or cabinet, glass being used to keep out the dust and improve appearance. The aperture in the panel may be round, square, or rectangular, to suit the type of dial, and receiver. A piece of glass large enough to cover the aperture completely is fitted behind the panel, as in Fig. 2. Four small screws, with cardboard washers under their heads, will hold it in place.

The tuning scale or dial is fitted between

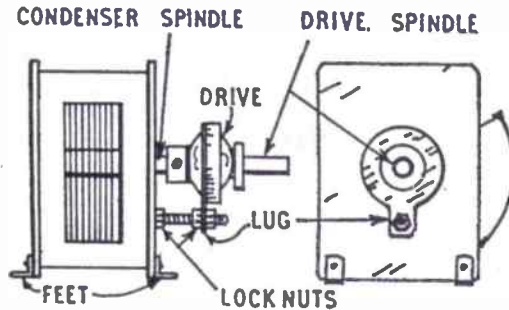


Fig. 1—Fitting an epicyclic drive

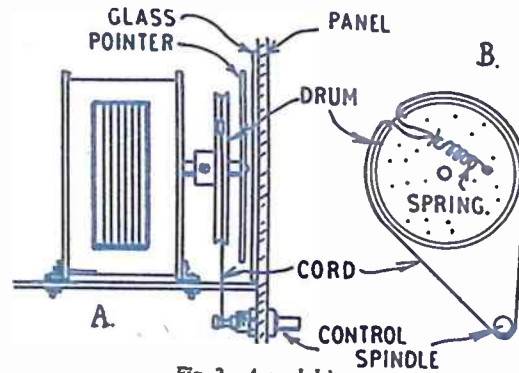


Fig. 2—A cord drive

pointer and drum, having a small central hole for the spindle. Metal and card dials can be obtained for this purpose. Or a dial can be drawn up upon strong, white card, and held in position by small blocks between it and the panel.

Fig. 3 shows a simple scale for a circular dial, the left-hand half being marked in wavelengths from 200 to 550 metres. This is for the usual M.W. band. With dual-wave sets, the right-hand half would usually be marked in long wavelengths from 1000 to 2000 metres. An alternative is to use a scale numbered from 0 to 100, which can be used to log stations on short waves. Or wavelengths may be marked for one or more S.W. bands, to suit the receiver.

If desired, the scales may be left blank, and the tuning positions of stations marked on, as they are found. Or such station indication marks can be added in addition to a wavelength scale. However, a lot of unnecessary markings only

tend to result in a confusing and untidy dial, and wavelength markings alone have the advantage of neatness. Stations may be located, against a wavelength scale, by referring to a list of programmes and stations, such as those in the 'Radio Times', which from time to time gives wavelengths of overseas stations.

If a ready-made dial is purchased this, will already have stations indicated. If these markings are to be correct, the receiver must be fitted with the tuning condenser and tuning coils produced by the same supplier. If not, all the stations may be found to tune in at positions other than those marked. (It is to some extent possible to make a home-wound coil match up with such markings, by ex-

half the circumference of the drum, when using the ordinary type of condenser which rotates through 180 degrees. A fairly large drum is thus required, for a long dial.

When using home made coils and dials, it is not difficult to obtain quite accurate wavelength markings, if a graph is plotted. To do this, a temporary scale is fitted, marked from 0 to 180. For a circular dial, a cheap protractor, with a hole drilled for the condenser spindle, will be excellent. The pointer is fitted so that it indicates 180, with the condenser fully closed.

A graph is drawn with its horizontal divisions numbered from 0-180, and its vertical divisions numbered from 200 to

probably prove most convenient for this purpose:

West	206 metres
Midland	276 "
West	285 "
Welsh	341 "
Scottish	371 "
North	434 "
3rd Prog.	464 "

The dots are then joined. With some tuning condensers they will lie in a straight line, but other condensers give a smooth curve. When the graph is completed, dial readings for 200, 250, 300, 350, 400, 450, 500 and 550 metres may be read off it, and marked on the 0 to 180 receiver scale. A new scale, marked in wavelengths, can then be

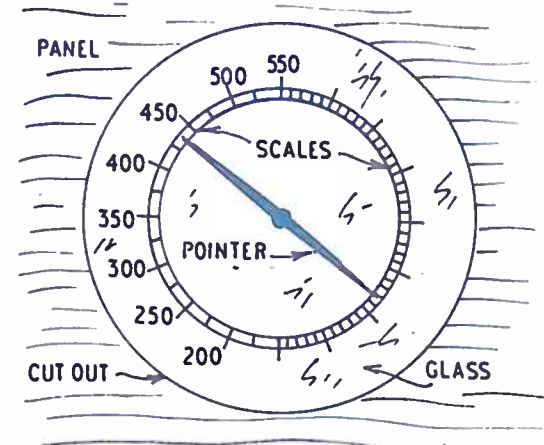


Fig. 3—Tuning scales

perimenting with the number of turns. But even if correct readings are achieved at one part of the scale, they may be wrong at other positions, especially if the tuning condenser is of the wrong type.)

Vertical scales

A cord drive like that in Fig. 2 is often used with a straight tuning scale, which may be arranged vertically or horizontally. The cord is longer and passes round small pulleys, as shown in Fig. 4. The pointer may be a stout, straight wire, soldered to a small piece of metal which can be clipped upon the cord.

This method allows a large dial to be used, and condenser, control spindle, and scales can be situated as desired, a long cord connecting pointer, drum, and spindle. The panel aperture is only large enough to show the pointer and dial or scales. Such an arrangement is often found in commercially manufactured receivers, and is easy to fit up. The overall length of the scales must equal one

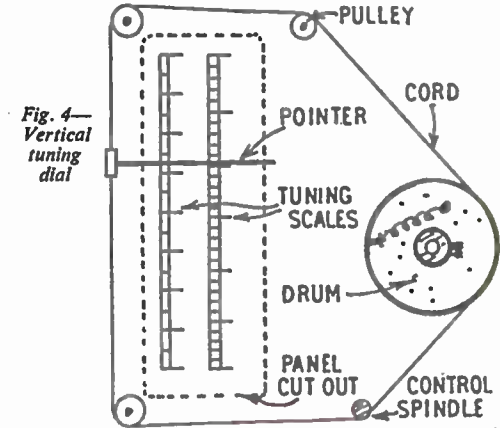
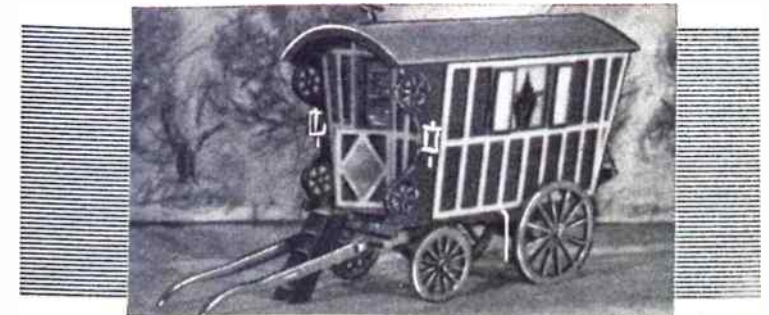


Fig. 4—Vertical tuning dial

traced from this.

For long wave, a scale of sufficient accuracy may be drawn by tuning in the Light Programme on 1500 metres, and Paris on 1829 metres. For short waves, the various bands can be identified by listening to station announcements, many of which will be in English.

NEXT WEEK F. G. RAYER WILL WRITE ABOUT CONDENSERS AND RESISTORS

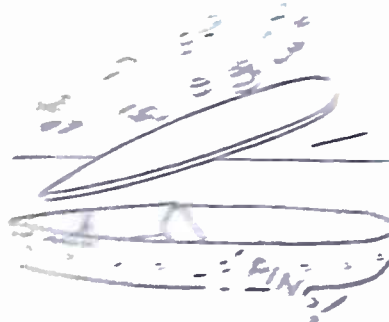


Mr. H. Eason of 34 Parliament Road, Middlesbrough, made this delightful model of a gipsy caravan in coloured perspex.

It is Hobbies Design No. 2896, the wood kit for which costs 12/11. The design and instructions only cost 1/-.

Exciting game to make

THE 'EXPLODING' BATTLESHIP



By E. Capper

I think very often in this country and a good never game a way to make. One that never does it appeal. A lot of making it a model. Ammunition can be anything from marbles to tin or gut. When you hit the target area - a peg slightly protruding from the boat's side - a terrific 'explosion' occurs, scattering the boat's fittings flying in all directions.

First of all, get an ordinary mousetrap. Then make a simple rear end as shown so that the mousetrap fits snugly with approx. 1/2 in. clearance from the sides.

Make a frame for the mousetrap, 2 1/2 in. wide and with strengthening pieces of wood fixed at each end. Fix it together snugly with glue and pencil pins. A piece of wood 1/2 in. long by 1/2 in. wide by 1/2 in. deep is usually sufficient.

Making the catch

On the mousetrap you will find a catch - a length of wire, bent down by its end being forced into a hook when the trap is closed. Remove this catch and in its place make up a different kind of catch, as shown in the enlarged drawing.

It is made of sheet metal, approx. 1/16 in. thick. The part through which the screw locates is made flat with a tongue piece that will hold down the spring arm of the trap in the same manner as the catch you removed.

The other end of this catchpiece is turned up at right angles, to come parallel with the inside of the boat's side and approx. 1/2 in. away.

The mousetrap can now be fixed permanently inside the hull by being held with a wood screw as shown. Fix the

new catch in the position shown, by drilling a hole through the flat piece and sliding with another wood screw. The catch must revolve freely in this pivot hole. Also the catch must be packed up from underneath with washers around the pivot hole screw so that it lies level with the spring arm. You will need therefore a screw approx. 1/4 in. long for this fixing.

Safety pin spring

A light spring must now be fitted to keep the catch arm in place over the trap spring arm when same is loaded. A simple type can be made from a cut safety pin as shown. One tang of the safety pin should rest on the edge of the flat catch piece whilst the other tangs keeps the tension by being located to rest against the hull strengthening piece. Adjustment of the mechanism is most important. The tongue on the catch piece should rest on the spring arm when loaded but sufficiently to hold it down. Similarly, do not have tight tension on the safety pin spring. Aim at a combination that works that as soon as the catch receives the lightest touch, it releases the spring arm, making it fly back as required.

Adjustment of the mechanism is most important. The tongue on the catch piece should rest on the spring arm when loaded but sufficiently to hold it down. Similarly, do not have tight tension on the safety pin spring. Aim at a combination that works that as soon as the catch receives the lightest touch, it releases the spring arm, making it fly back as required.

Through the boat side and directly opposite the right-angled turn of the catch piece, drill a 1/16 in. hole. Into it, fit a 1/2 in. length of dowelling. Make it an easy fit for this is the target area and as

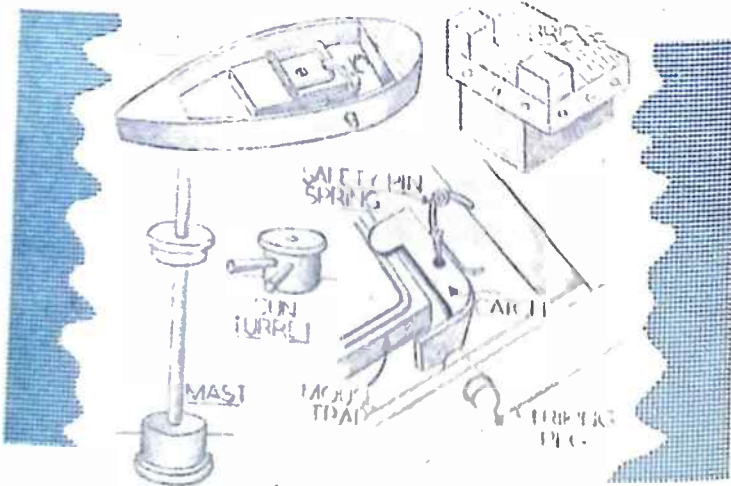
can be seen, anything striking this peg will in turn make the peg touch the catch, which in its turn will release the spring arm. This arm, with an eye higher than the boat's side, and its terrific speed, will scatter anything in its way.

It only remains to make the boat's fittings. A deck should be constructed of 3-ply wood, made of a size to lie flat over the hull. A captain's bridge can be made from scrap blocks of wood, masts and gun turrets can be made from cut cotton reels and dowelling, funnels made from cardboard rolls.

To play the game proceed this way. First, load the mechanism, by holding down the spring arm of the trap with the tongue of the catch piece. Work from the rear of the hull and keep the fingers of your other hand on the outside of the hull in case the spring arm flies back, accidentally.

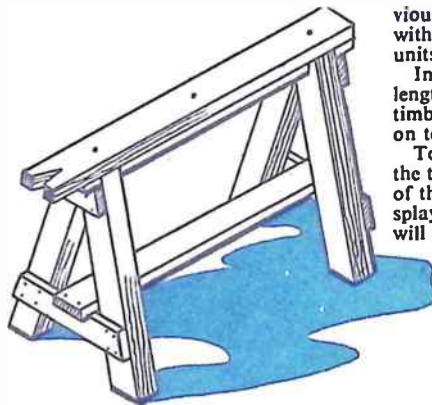
Marbles as 'ammo'

Place the deck on the hull and then the boat's fittings. Competitors, should be at least six feet away from the boat. Marbles are the best ammunition. It is best to place the boat on the floor, approx. 1ft. from a wall. Remember, when an 'explosion' occurs, the fittings will fly everywhere. So try and arrange an open space, free from furniture if you do not want to hold up the fun by continually searching for the pieces every time a direct hit is scored.



Useful equipment

MAKING A SAWING TRESTLE



By Finlay Kerr

A sawing trestle, like the one illustrated, is a very useful piece of equipment for the home handyman. When carrying out general repairs about the house it can be easily carried to each job and used as a small workbench for sawing, planing etc. A useful feature about this trestle is that it is provided with a detachable hardwood top which can be periodically replaced as it becomes worn. The V-cut at one end is useful when sawing and can also be used as a vice for holding a door upright whilst stripping the edges.

Simple construction

The construction of the sawing trestle is quite simple and should present no difficulty. Although the top is best made of hardwood the remainder of the trestle may be constructed in softwood. To make the appearance of the completed trestle more pleasing it is advisable to plane the timber smooth. The measurements given in the accompanying sketches will produce a handy sized trestle but if you are very tall or short then by all means alter the measurements to your own requirements.

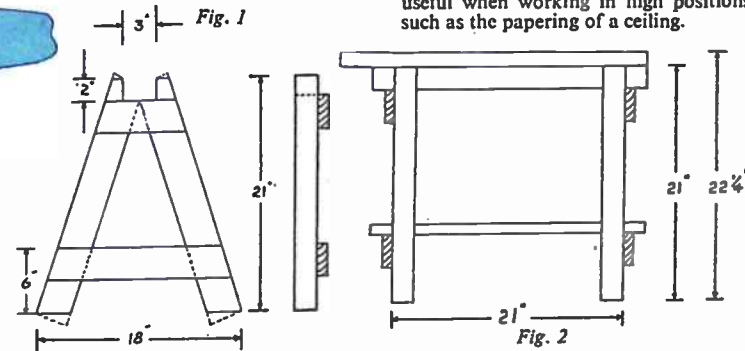
The four legs are made from 3 in. by 2 in. timber. Set out each pair of legs in the manner shown in Fig. 1 giving a 'spread' of 18 ins. at the bottom and making a small housing at the top to suit the 3 in. by 2 in. cross-beam. Once the legs are cut to shape they should be secured together with 3 in. by 1 in. bearers to form two leg units.

After this, cut the top cross-beam 2 ft. 1 in. long from 3 in. by 2 in. timber and insert into the two housings pre-

viously made in the leg units and secure with a few nails. The positions of the leg units are shown in Fig. 2.

In order to prevent the legs splaying lengthways, a piece of 3 ins. by 1 in. timber cut 2 ft. 1 in. long should be nailed on top of the bottom bearers as shown.

To complete the constructional part of the trestle, cut off the projecting corners of the legs flush with the top beam and splay the bottom of the legs so that they will fit squarely on the floor.



Hobbies' Crossword No. 16

Figures in parentheses denote the number of letters in the words required.

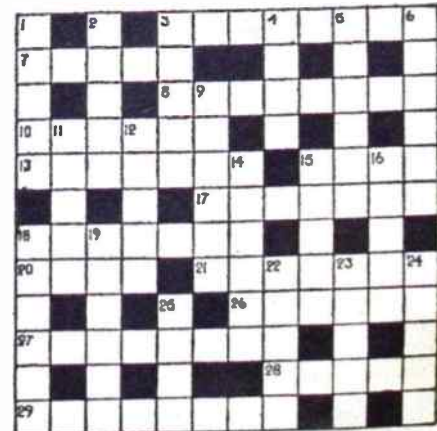
ACROSS:

- Soda hire (Anag.) (8).
- Old woman who is credit to one (5).
- Salaries for churchmen (8).
- Weapon of artist at the seaside? (6).
- At a stretch, it's lace perhaps (7).
- A number hastened to get a measure of fish (4).
- The attendant starts a spectacle (7).

DOWN:

- It is made by the sportsman and settled by the customer (5).
- Ancient name for Jaffa (5).
- Move the trees (5).
- This fiend ends up a nervous wreck (4).
- Continental lady who has no cars for her make up (6).
- The animal starts to agree (6).
- Suitable prize for a three-legged race? (6).
- Arabic god (5).
- An Eastern religion (5).
- An English king who didn't rule the waves (6).
- May be Irish, Scots or Welsh men (5).
- It shows an inclination to some degree (5).
- Variiegated like an old quilt (6).
- He gathers the fruits (6).
- Circumstances alter them (5).
- Is a girl the result? (5).
- He is senior in Church (5).
- Passport piece (4).

- Father has only a scrap of cloth on but is a model of excellence (7).
- A tuck to get attention (4).
- Drawn out from a cute lid (7).
- May be seen on a mortar board (6).
- Apt vices for those in confinement (8).
- Avoid the grasping person (5).
- Maybe seen on sailing ships but rarely on human beings (8).



SOLUTION WILL BE GIVEN NEXT WEEK

SIMPLE PAPER SCULPTURE

NORMALLY we regard sculpture as applying to solid wood or stone, and when using paper as the medium the term is not quite correct. Actually, our basic material is folded and scored in such a way that we can

By S. H. Longbottom

produce three dimensional effects, and considerable strength is added by folding. The craft is exceedingly useful for making decorative garlands, ornaments and properties for amateur theatricals.

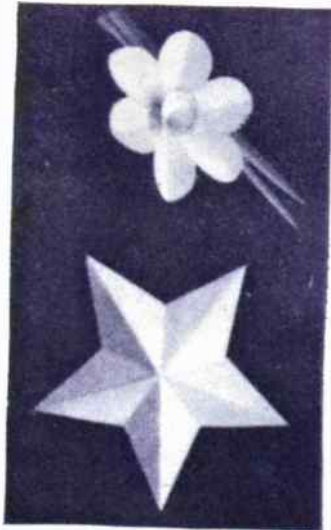


Fig. 1—The completed star and sculptured daffodil as described.

For our purpose we shall need some reasonably tough paper and you will find plain white drawing paper or cartridge paper quite suitable. White is a popular choice, for it can be tinted with water-colours if necessary, but you may use coloured papers if they are strong enough. In the models shown some parts were made of thin manilla type paper.

At some time or other you may have idly folded a long strip of paper concerning a fashion into a small narrow strip. Held firmly at one end such folds will open out like a fan, and while this is an elementary illustration it reveals that by folding in the opposite directions we are

able to produce the third dimension.

Razor blades and pen nib trimmers are useful for this craft, while scissors are helpful for both cutting and curling the paper.

We have mentioned the use of scissors for curling, an effect often required to

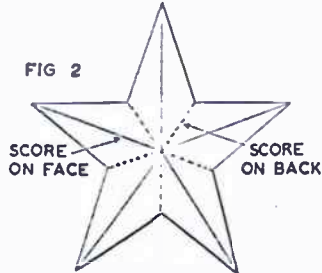


FIG 2

by drawing a rule across the back of the slashed paper which should be laid on a soft base.

As a simple experiment you are recommended to start with a star or flower as shown in Fig. 1. The star is made as shown in Fig. 2 by preparing five sections, the angle of each being 72°. Where the unbroken lines are shown, scoring should be done with a blunt tool on the face, but where the broken lines are shown scoring must be done on the back. The paper is then creased accord-

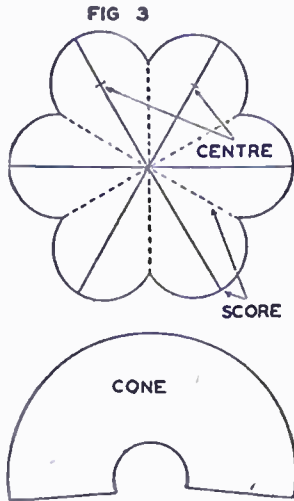


FIG 3



Fig. 4—A simple mask of a boy. The nose is formed from a small tube of white paper.

produce hair styles, wool for sheep, or the centres of flowers. Here the paper is slashed and laid over the left thumb while the blade of the scissors is drawn across the other side of the paper, making a curl towards the blade. Repeated application of the scissors blade will make the paper curl into a full circle. A similar effect may be produced

the cone at the back and covered with thin paper wrapped round and round.

Strap leaves, typical of the daffodil, are easily made by cutting strips of paper, tapering at one end and making a score mark down the centre for strengthening. If folded slightly on the score-mark the leaves will stand perfectly upright.

You may make many different types of sculptured flowers by using the same base. Instead of a trumpet centre you may fasten curled strips through a hole,

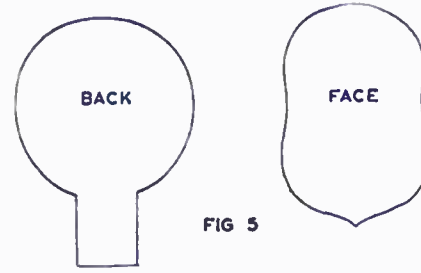


FIG 5

or a smaller version of the same pattern may be fixed inside a larger. Leaves may vary considerably and the oval shape of the privet is useful for garland decoration. This type may be made singly or in pairs and attached to paper wrapped wire as foliage, but do not forget to score down the centre of the leaves.

All manner of masks for decorative purposes may be made and they may be humorous or otherwise. Here you may allow your imagination full scope and you will find pictures a helpful source of inspiration for the basic details. Let us now deal with the preparation of a simple mask as shown in Fig. 4.

Adding the features

Reference to Fig. 5 shows the two main parts required, a stiffener for the back complete with neck, and the shape for the face. The eyes, nose and mouth, eyelashes and ears may be added as desired. In this instance thin manilla card was used for the back and face. Other parts were made from white paper while the hair and eyelashes were produced with black paper, the latter being slashed as will be seen. Different treatment of the eyes can produce various effects as small experiments will show and you are strongly recommended to study cartoons, making them into sculptured faces. When the features have been attached by gum to the face the latter is glued to the back stiffener by applying glue to the top and bottom, bulging the face a little in the centre so that the effect of round cheeks is produced.

A different, and more solid form of sculpture is shown in Fig. 6. The basic shape along with the various parts may be seen in Fig. 7. The parts are covered

down the centre in each case and only half stuck to the face shape. This will give the appearance of depth.

The basic shape is produced by taking a piece of paper folding in half and one half of the face sketched. On opening at the fold you will have a balanced pattern which can then be transferred to the thin card. It is useful to draw a pencil line — later erased — down the centre of the face so that the nose and eyes may be attached in the correct positions, but remember that you can make your own

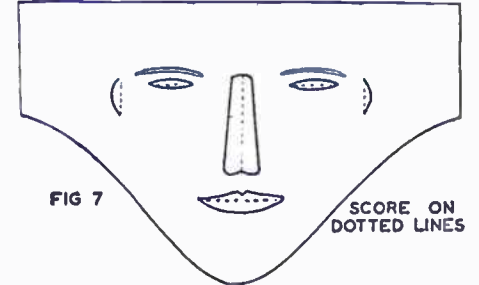


FIG 7



Fig. 6—A conventional type of paper sculpture showing how hair is curled.

modifications to this basic shape.

After sticking on the various parts the two wings of the shape are glued together at the back and attached to a tube of the same material to give the appearance of a neck.

In our example we have tried to illustrate a young lady with rather curly hair and this was made by using three separate pieces of white paper duly slashed and curled.

Take a strip of paper, equal in width to the forehead but no deeper than the face, making several slashes with the scissors to form a fringe about 2ins. long. Now with the paper held between the thumb and scissors blade, gently draw the latter outwards and the fringed ends will curl. Start at the side of the

paper furthest away from you making a few curls at a time and you will quickly produce the required fringe. Two or three pieces should be prepared in this manner and then attached inside the mask with gum. Add the first so that the curls overlap the top rim of the face, the next so that it piles on top of the first and so on. If you wish, a long piece of paper can be taken around the back of the head and you may finish off by adding a hat.

You can make paper sculptures from drawings of all kinds provided you try to consider them in terms of three dimensions, using the principle of scoring and folding. They make novel masks for decoration or display. It may be mentioned that not only do many shops use this papercraft method for window display work but it is also to be seen in the roundabout at the beginning of BBC Children's Hour on the television screen.

* In next week's issue we shall des- *
* crib how to make an illuminated *
* showcase for your favourite model. *
* Also network pattern and other *
* usual features. Make sure of your *
* copy. *



MAKING MONEY WITH A CAMERA

Try these sources for profit says J. Chalk

(Photo: courtesy Ilford Ltd)

THE art of photography makes an interesting hobby. Unfortunately it can also be an expensive hobby, so, while experience has to be paid for why not also make it pay?

Experience, coupled with the regular advice in *Hobbies Weekly* can ensure the high standard necessary when offering prints to prospective purchasers. It is now up to you to seek these customers, who may well be among one or more of the following groups:

PARENTS — Listen to gossip and read through your local newspaper to quickly learn of babies born in the locality. Then write, or preferably call, on the parents showing them a sample of your portrait work. If a commission is agreed upon it usually results in a sizeable order as parents enjoy sending copies of photographs of their baby to friends and relations. Make a note of the day the baby was born for a return birthday visit.

HOUSES — Estate agents can often be persuaded that photographs of property they have for disposal give a far better description than many words. Also, a house which by its very appearance shows that the owner is proud of his possession may well mean that the owner would like a record of his property for his album and to show friends.

PETS — Contact all pet owners, and in this respect pet shops can be an enormous help, as this group usually love to have photographs of their animals. Try to build up a reputation for photographing all pets, not just the dog and cat favourite. Whenever possible pose the pet in an interesting setting and get expression into the picture. This can easily be achieved by getting the pet to perform its favourite trick. Pet shows are a wonderful hunting ground, for not only is there a good collection of pets

but each is in the peak of condition and the owners know it!

NEW BUILDINGS — Photograph local buildings from different angles as they are being built. When the building is completed you have two possible customers — the owner and the builder. It makes fine advertising material for the builder and interesting history for the owner. Should the opportunity arise try to photograph the site prior to development. It is surprising just how often such a photograph will prove useful in local matters.

CALENDARS — Greeting card, calendar and diary manufacturers are always on the look-out for new pictorial and amusing scenes. Requirements vary enormously so first check to see which each manufacturer uses, then send off a sample. They may well ask for the negative and unless it is a photograph that has future possibilities there is little point in refusing.

AMUSEMENTS — Having obtained permission from the respective managers, visit local swimming pools, skating rinks, dances and stage shows with your camera. When people have enjoyed their amusement they like to be reminded of it at some later date by glancing through their albums. At such gatherings it is as well to take the money with the order as normally the post is the distribution medium.

ADVERTISEMENTS — Make a note of all the shops which advertise in your local newspaper then take photographs of the fronts of those shops. Then, when developed, ask the owner or manager if he is interested in buying so that blocks can be made to improve his advertising, also suggesting that you are most willing to take internal photographs for advertising a sale of any special line that he has.

DO-IT-YOURSELF — Whenever you construct anything, especially if it be a new design, then photograph the various stages of completion. When selling do-it-yourself material, photographs are an invaluable help.

CLASSES — Included in this group are the riding schools (a horse always seems to make a good picture), evening classes where a practical subject is being taught, and dancing classes. In the latter the parents, pupils and teachers are good buyers, but remember not to disrupt a lesson. Always keep the negatives of the young pupils as some may well one day become famous.

MATCHBOXES — For special events print portraits or other subjects to the required size and paste or staple on to matchboxes or booklet match covers. They are a profitable novelty.

STAFF WORK — There is always an occasion when a local newspaper could use the services of another photographer. It may be because the staff photographer is ill or on holiday, or it may be because equally important events are taking place at the same time in different locations, but it does not matter as long as the editor knows he can rely upon you to fill a gap when called.

WEDDINGS — All brides love a record of HER day. Because of this a wedding photographer cannot afford to make errors so often welcomes a second camera. While he takes the official photographs you wander around taking the more informal shots. These often result in a better record of the event and are eagerly sought by the bride and guests. The normal method is to work on a commission basis with the photographer.

SPORTS — A camera at a sporting event is always an asset. Even in school sports it can settle squabbles should they arise following close heats. Offer free prints to the school magazine or organisation for publicity and you have lost nothing as the action shots sell well, especially if a record has been broken.

MAGAZINES — Magazines and newspapers are becoming more and more pictorial minded. It is not only the unusual news or accidents with a caption that are required, but also photographs to illustrate articles. Because of this carry a camera whenever you travel and photograph the castles, beach scenes, monuments, ships, villages, churches and any oddities. If reproduction rights only are sold then you can sell over and

Continued on page 110

Be snap-happy with ILFORD films!

See for yourself what Ilford films will do for your camera. Millions of happy snappers have proved to themselves that Ilford films make all pictures better and good pictures brilliant. So whatever make your camera is, give it a chance to show what it can really do—ask for Ilford films and be happy with every snap.



CARRY A CAMERA AND TAKE FACES AND PLACES



TV ROUNDABOUT No. 3179
As on TV. Goes round with the music. Movement No. 1, 18/3 extra

- *****
* Choose from these tunes *
* No. 1 Movement (18/3) *
* G Blue Danube *
* J Bells of St. Mary's *
* V Merry Widow *
* W Tales from the Vienna Woods *
* No. 2 Movement (19/10) *
* R Happy Wanderer *
* S Teddy Bear's Picnic *
* No. 3 Movement (17/6) *
* T Clementine *
* U Here we go round the Mulberry Bush *

MUSICAL Kits by

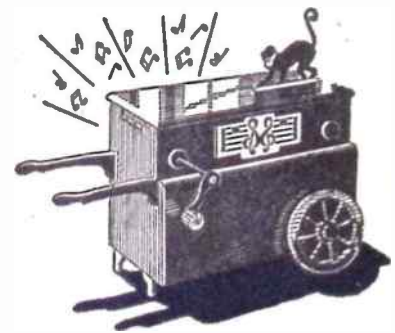


with a never-failing appeal

Delightful, practical novelties which play the tune of your choice. Kits and musical movements from branches, etc., or post free by using coupon.



MUSICAL TAVERN. No. 3222
A savings box which plays a tune when a coin is inserted.
Musical Movement No. 2, 19/10 extra



TOY BARREL ORGAN No. 3216
Also useful as a trinket or cigarette box. Musical movement No. 3, 17/6 extra

To Hobbies Ltd., Dept. 99, Dereham, Norfolk.
Please send Kit No. _____
Musical Movement (G, J, etc.) _____
P.O. for _____ enclosed
Name _____
Address _____



THE Malays proper inhabit the Malay Peninsula, and almost all the coast regions of Borneo and Sumatra. They all speak the Malay language or dialects of it. They write in Arabic characters and are Mohammedans in religion.

There is a wide, colourful range of material for our stampevised story of Malay. We will begin our collection with North Borneo's 1894, 1 cent pictorial depicting a native chief (5d. used).

The youth of Malaya are often very handsome, but later in life they lose much of their good looks by bad habits and dissipation. At an early age they chew betel-nut and tobacco. They suffer much privation and exposure in their fishing and other excursions; in fact, their lives are often passed in alternate starvation and feasting, idleness and excessive labour which results in premature old age and harshness of features.

Dyak customs

His native independence is shown by his preference for primitive aboriginal implements, despite the fact that he sees around him plenty of far better ones brought to his door by European settlers on the shores of the Archipelago. This conservatism was demonstrated by the Dyaks long refusing to chop wood after the European fashion and even imposing a fine on those who did: this in spite of their conviction that the European V-shaped chopper was superior to their own.

Some appropriate stamps: Johore 1922, 1 cent dull purple and black — Sultan Ibrahim (1d. mint). Selangor 1935, 1 cent black — Mosque (2d. used). North Borneo 1950, 8 cent red — Map (4d. used). 15 cent blue — Native Sea Craft (6d. mint).

The native wooden plough, drawn by one or two buffaloes and guided by a stout single handle, is a simple age-old contraption, the coulters being made out of a piece of hard palm-wood. The maize seed sown broadcast, is harrowed in with an equally rudely fashioned wooden

harrow. North Borneo 1939, 1 cent green and brown — Buffalo transport (8d. mint), 1909, 8 cent black and red — Native ploughing (6d. used).

The chief occupations are the making of sago, coconut oil and the collection and preparation of the betel-nut. Main agricultural crops are rubber, coconuts,



rice, pineapples, coffee, tapioca, tea, tobacco and miscellaneous fruits and vegetables.

Gold is found in small quantities, chiefly in Pahang. Over half a million tons of coal for their own use is mined annually in Selangor. Malaya (Japanese Occupation) 1943-45, 1 cent green — Tapping Rubber; 2 cent emerald — Fruit; 30 cent olive — Sago Palms (set: 2/- mint) North Borneo 1950, 3 cent green — Coconut Grove (2d. mint).

The houses, supported on poles several feet above the ground level, are often from 200ft. to 300ft. long and 40ft. or 50ft. wide. The floor is made with

strips of split bamboo, pleasant to walk upon and, when covered with a mat, an elastic bed to lie upon. Entry to the dwelling is by ladder to a broad platform in front of the house and a favourite lounging place for the inhabitants in fine weather.

Most villages have their 'head-house', a large circular structure to serve as a lodging-place for strangers, a sleeping

MALAYA

—By R.L.C.

place for unmarried youths, a trading post and the general council chamber. Papua 1932, 1½d. black and lake — Native Houses (6d. mint).

The various Malayan states are policed by a mixed force of Indians and Malays, officered by Europeans. Papua 1932, 1½d.

black and orange — Native Girl (4d. mint). Papua and New Guinea 1952, 2d. blue — Native Youth (3d. mint); 3d. green — Native Policeman (4d. mint).

The following stamps of North Borneo are rare: 1883, 1 cent orange — £10 mint. Surcharged '8 cents' vertically, 8 cents on 2 cent brown — £22 mint, £12 used. Surcharged 'Eight Cents', 8 cent on 2 cent brown — £8 mint, £4 used. 1889, Inscribed 'Postage and Revenue' 8 cent green — 4/6d. mint. Surcharged in words, 8 cent on 25 cent grey-blue — 40/- mint, 45/- used. 1891, Surcharged in figures and words, 6 cent on 8 cent green — £120 mint, £100 used.

NEARLY 1,000 MEMBERS

The number of readers who have become enrolled members of the League of Hobbyists is approaching the thousand mark. With every post bringing in fresh applications and suggestions, it has been decided to open the following departments:

Air Transport Labels, Astrology, Bus and Tram Tickets, Cigarette Packets, Circusiana, Heraldry, Badges and Crests, etc., Pets, Post Cards, Railway Porters, Snuff Boxes and Salt and Pepper Shakers.

The above subjects will be featured in future in issues of the magazine — immediate advice may be obtained from the

secretary.

Our first Australian member was Mr. Bill Robinson, 35 Hartley Street, Carrus, N'th Old Aust. He collects match labels and would like English pen friends. Other members come from Africa, Malaya, Portugal, U.S.A., Sweden, Finland, France, India, Germany, Greece, etc.

To one and all — in this country and abroad — we hold out the hand of friendship.

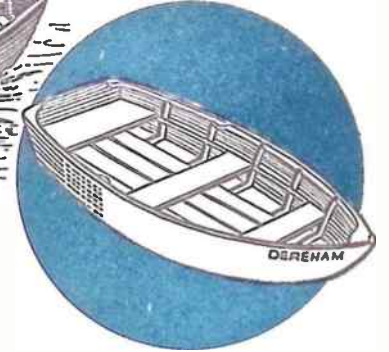
Grateful thanks to all members from the hon. secretary for their co-operation and encouragement.

YOU CAN BUILD 'DEREHAM'

A Sturdy 10ft Dinghy

Design by P. W. Blandford

For river or sea — oars or outboard motor — carries three persons and kit — light enough for two to lift. A detailed drawing showing the main frames, transom, stern and other parts full size for easy working costs only 8/6, and full building instructions are given free.



Get started on yours today

Write to: The Editor,

HOBBIES WEEKLY, DEREHAM, NORFOLK

BE TALLER

In 12 days or money back. New gland and spinal discovery increases height 2 to 5 inches. 'I have gained 4½ inches in height. My weight increased from 9-stone 4-lb. to 10-stone 3½-lb.—P.D. Increased 3 inches'—H.G. Guaranteed harmless. Full course 10/6 (or \$1.50). Air Mail 16/3. Details 2d. Sent under plain cover. J. H. MORLEY, 28 (H/100) Dean Rd., London, N.W.2. Practical Courses, all subjects. List free.

HEAR ALL CONTINENTS WITH H.A.C. Short-Wave Receivers

Suppliers for over 18 years of Radio S-W Receivers of quality. One-Valve Kit, Price 25/- Two-Valve Kit, Price 50/- Improved designs with Deneco coils. All kits complete with all components, accessories and full instructions. Before ordering, call and inspect a demonstration receiver, or send stamped addressed envelope for descriptive catalogue. 'H.A.C.' Short-Wave Products (Dept. 22), 11 Old Bond Street, London, W.1

KUKLOS ANNUAL. Indispensable cyclist's handbook. Tours, resthouses, money-saving hints, 3/- post free. — Burrow, Publishers, 2 Imperial House, Cheltenham.

WHEELS (Hardwood and Rubber Tyred Metal), Cot, Pram and Doll's House Fittings and Papers, Beads, Transfers, Prints and other accessories. Stamp for new lists (Trade supplied.) New address: **JOYDEN CO.**, 91 Pepin Way, Brookmans Park, Herts.

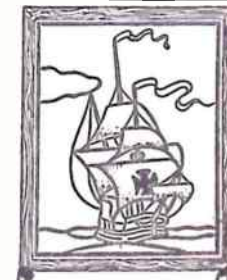
PAINTSPRAYING' HANDBOOK. Covers Car, Industrial & Flock Spraying. 3/6; post 4d. Catalogue of our Cellulose and Paints and all Allied Sundries 3d. — Leonard Brooks Ltd., 81 Oak Road, Harold Wood, Essex.

MODELS. You can make lasting stone-hard models with Sankey's Pyruma Plastic Cement. Supplied in tins by Ironmongers, Hardwaremen and Builders' Merchants. Ask for instruction leaflet.

MAKE A MUSICAL BOX for as little as £21/6. New kits and tunes available. Movements 14/9 post free. Please send 3d. stamp for free illustrated catalogue. — The Swisscross Co., Dept. B., 202 Tulse Hill, London S.W.2.

BECOME CHIROPODIST MASSEUR. Postal Schools, (Dept. 27) 48a Abbey Street, Accrington.

100 DIFFERENT stamps free! Request 3d. upwards discount approvals. — Bush 53 Newlyn Way, Parkstone, Dorset.



Pictorial Window Leading and Glass Colouring with

DECRA-LED

Make beautiful stained glass windows with the new Pictorial Kit. Containing lead, cement, 5 colours, paint brush, design (24"x18") full instructions. Choice of Gallies, Castles, Bridges and Dutch Boy scenes. Ideal for novel firecreens, door panels, landing windows, etc. Price 10/- complete Kit (add 1/6 postage). Guaranteed by the Good Housekeeping Institute.

Decra-Led Transparent Glass Stain. The new formula colour for all glass painting, or colouring existing leaded window designs. Red, Green, Blue, Amber, Brown and Frost, in 1/- jars and half pint 9/6 tins. The Art of Window Leading—a fine new book. 40 illust. Price 2/6 (6d. postage). All Decra-Led Products from local suppliers, or from sole makers. NORTH WESTERN LEAD CO., LTD., DEPT. 1, HYDE, CHESHIRE Tel.: Hyde 1234

Trade enquiries invited

* GREAT CAMPING OFFER *



BRAND NEW de luxe 'Safety' Tent. All colours. sleeping base x 4' 6" wide x 3' 6" high x 12' walls, all approx. Weight 3½ lb. Cash 55/-. or 4/- deposit and 9 monthly payments 6/-. 1 of 2/6. WITH FLYSHEET 83/6, or 9/3 deposit and 8 monthly payments of 9/9, 1 of 4/9. Both carriage 2/6. **TENTS, TERMS.**



1500 TELESCOPE SIGHTING INSTRUMENTS fitted with genuine scientific hand ground lenses are precision built and gratified for dead-ends are precision accuracy. Made for precise on sharp shooting accuracy. Made for precise sniper's action they represent an absolute bargain. Actual cost of production, without any profit, £119.8. **OUR PRICE** only 17/6d., post etc., 2/6. If you want to get a precise bead on anything, this is the instrument to do the trick. Limited offer only. Lists, Binoculars, Telescopes. Headquarter & General Supplies Ltd. (HOBW/12) 196-200 Coldharbour Lane, Loughboro Junc., London, S.E.5 Open Sat.

BRASS, COPPER, DURAL, ALUMINIUM, BRONZE

ROD, BAR, SHEET, TUBE, STRIP, WIRE 3,000 STANDARD STOCK SIZES No Quantity too small List on Application **H. ROLLET & Co. Ltd.** 6 CHESHAM PLACE, LONDON, S.W.1 Also at Liverpool, Manchester, Leeds, Birmingham

STAMPS FREE — Empire Packet including 5 Pictorials and 7 Victorians with approvals. — Robert J. Peck, 7A Kemp Road, Bournemouth.

ROY'S STAMP SERVICE — beginners and juniors specially catered for. Send 3d. stamp requesting details and trial. — 23 Adria Road, Birmingham 11.

EARN 100% PROFIT selling fancy jewellery. List of cheapest wholesale prices from — Cole, 37 College Avenue, Maidenhead.

25 STAMPS FREE to applicants for Bonus Approvals. 3d. postage. — Avelon Stamps, 67 Longton Avenue, S.E.26.

ISRAEL 1958 MERCHANT NAVY SET. The finest bi-coloured stamps Israel has issued. Offered absolutely free to approval applicants enclosing 3d. postage. — Yulivonmor Stamps (Dept. H7), 29 Layton Avenue, Mansfield, Notts.

MODEL FIRE ALARM

FOR this model you require a strip of brass and a similar strip of tin plate, each about 8ins. long and about 1/4in. wide, and cut at the ends as shown in Fig. 1.

Fix the strips together by bending over the ends and hammering them flat. You have then made a compound strip. Hold it in a Bunsen flame and it will bend into the form of an arc, with the more expansible brass on the outside of the curve. Take the flame away and as it cools it will straighten up.

Fix the compound strip to a wooden base (Fig. 2) by pushing it into the slit



Fig. 1

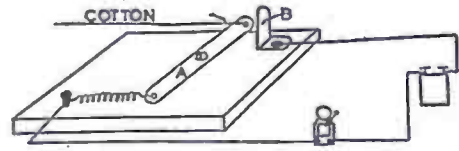


Fig. 3

in the upright (A) so that when it is heated it makes contact with the screw fixed on the upright (B). Join pieces of insulated wire to the screw and the compound strip and connect up to an electric bell and a battery. You can adjust the distance between the screw and the compound strip so that when the strip is heated to any desired temperature it bends, touches the screw, and rings the bell.

By placing the screw so that it makes contact on the other side of the strip and with an electric lamp serving the purpose of an electric heater, you will see how when the air cools to any desired temperature the strip straightens up, makes contact with the screw, and switches on the light. This is the principle of the thermostatic control of electric heaters for keeping the rooms at any temperature.

Burglar alarm

You can protect your property and scare away burglars in quite a simple way if you have an electric bell and a battery, and care to make the simple little device illustrated in Fig. 3.

(A) is a strip of metal fixed to a small wooden base by a single screw so that it is free to turn. It is held at one end by a small spring and the other by a length of thin cotton which can be stretched across the window or room where

the intruder may enter. He walks into the cotton, which breaks. The spring pulls the end of (A) into contact with the metal bracket (B), thus completing the electric current and causing the bell to ring continuously.

Dancing spiral

A dancing spiral which shows how

parallel conductors carrying an electric current in the same direction attract each other is shown in Fig. 4. The spiral (A) is made by wrapping about a yard of No. 22 D.C.C. wire round a piece of 1/4in. dowelling. One end of the spiral is connected to the terminal (B), and the other end just touches the surface of a little mercury placed in a small hole made in

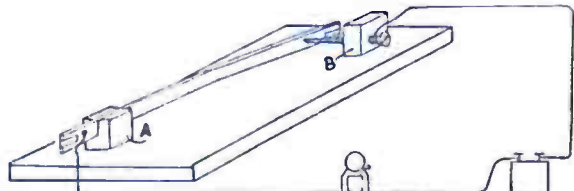


Fig. 2

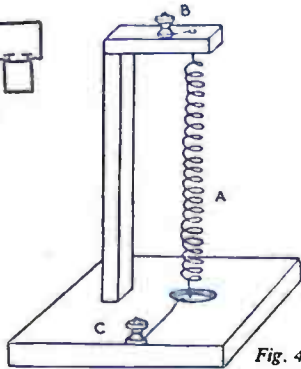


Fig. 4

the base of the wooden stand. The mercury is connected by means of a wire to the terminal (C). When a current is passed through the spiral, attraction takes place between consecutive turns of the spiral, since parallel currents are passing through these turns. The spiral is shortened and the circuit is broken at the mercury. The weight of the spiral then causes it to lengthen again and thus complete the circuit once more. This is repeated rapidly and the spiral dances up and down, constituting an automatic make-and-break switch.

(T.A.T.)

Continued from page 106

Money with a Camera

over again. Try to make the submitted photograph larger than the final reproduction will be, and submit on glossy paper when possible. Always print your name and address on the reverse of each print and enclose a stamped addressed envelope large enough to contain the photograph.

PARTIES — Seek an invitation to parties and other social functions. Even those people who do not usually bother about retaining photographs of themselves normally like to have one to record some such function.

AGENCY — Set yourself up as an agency by obtaining many good prints on a particular subject and then well adver-

tise the fact that you have them for hire.

In all the above two rules will help you to succeed; use imagination and make a note of everything you photograph. The two 'don'ts' are do not try to apologize for the fact that you are only a part-time photographer and do not quote prices that are too low because you lack confidence. Remember, you are not just selling paper with a picture on it but the knowledge to produce a photograph which means something to the purchaser.

The unusual angle photograph on page 99 is of an egg whisk.

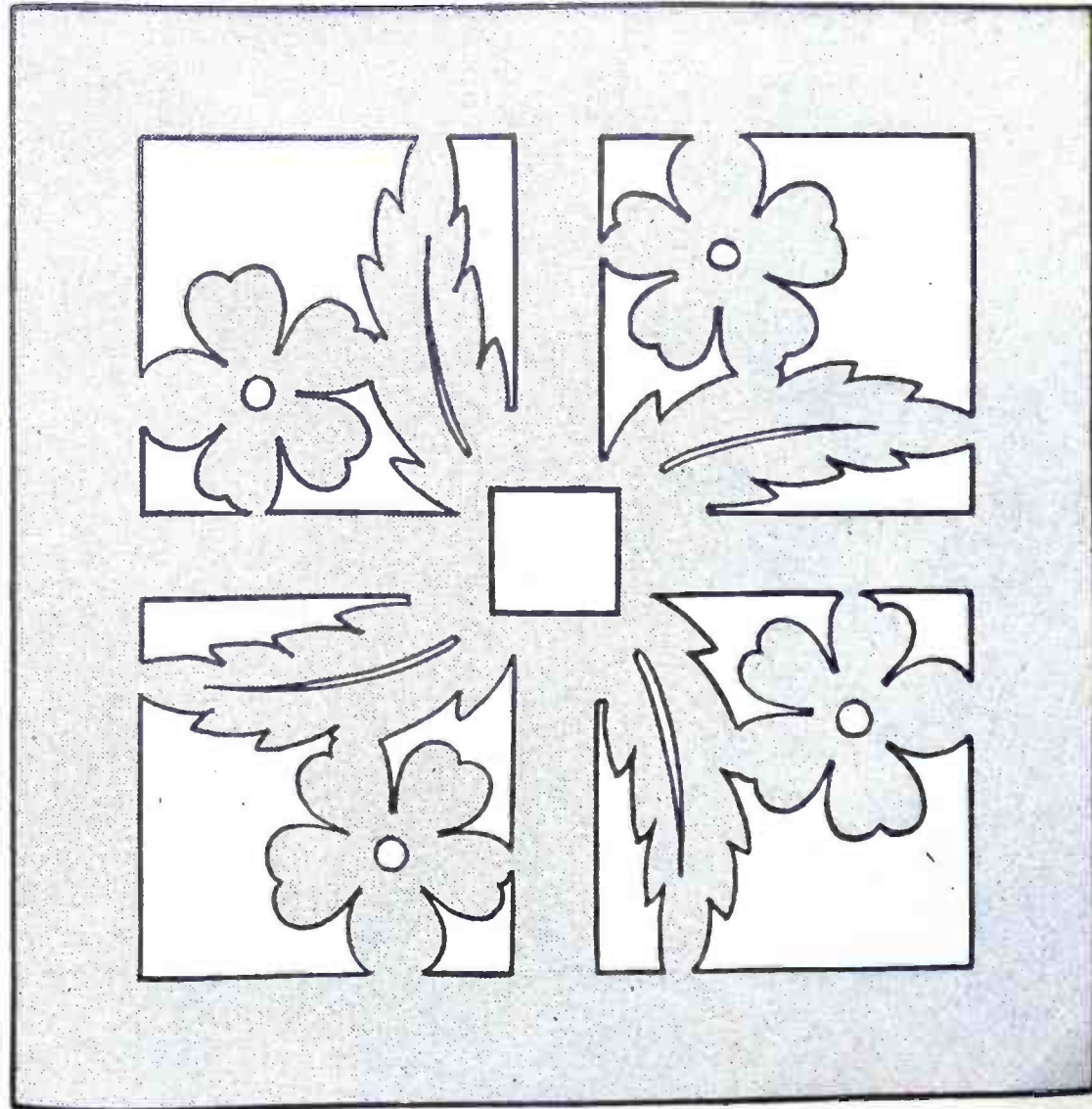
TEA-POT STAND PATTERN

DESIGNED specially for the young fretworker, this stand in 1/4in. wood can be made up in one evening. The interior portions which are cut away should first be drilled and cut

out. Then cut round the outline and clean up with glasspaper.

On the back, behind the design, paste a piece of leather cloth or any other material you can obtain. Finish off by

gluing four Hobbies No. 19 toes at the corners underneath. Wax polish should be used to bring out the beauty of the grain. (M.p)



The best tools you can lay hands on!

STANLEY BENCH PLANES

For the hardest and toughest work. Adjustable for coarse or fine work, and thickness and evenness of shaving. 9" long. 2" cutter.



No. 4 Plane.

THE STANLEY TRIMMING KNIFE

Cuts lino, hardboard, veneer, roofing felt etc. 1001 uses in the home and garden. Spare double ended razor sharp blades carried in handle. Available in 5 colours.



6/- complete with 5 blades and blade guard.

"YANKEE" HANDYMAN PUSH DRILL

A simple push action automatically turns drill point into wood, plastic, plaster or wallboard for screws, brads, nails etc. No splintering. Magazine handle holds four drill points—room for four more.



21/- complete with 4 drill points.

STANLEY

STANLEY WORKS (G.B.) LIMITED, RUTLAND ROAD, SHEFFIELD, 5

MAKE YOUR OWN

Kit 3209

All wood (including partly shaped neck) full-size plan, sixstrings, etc.

59/11

(Note reduced prices)



Overall Length 36½"

As shown on TV. Thousands of satisfied customers. Make your own first-class instrument.

From branches, etc., or post free

UKULELE

Kit No. 3260

Contains all wood, wire, strings, etc., for full-size instrument

24/6



To Hobbies Ltd., Dept 99, Dereham, Norfolk. Please send Kit No.

P.O. for enclosed

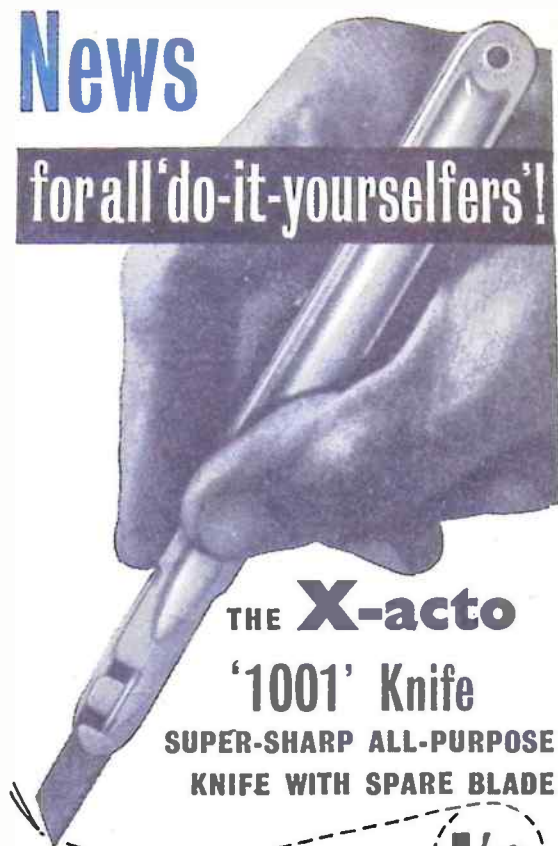
Name.....

Address.....

.....

News

for all 'do-it-yourselfers'!



THE X-acto

'1001' Knife

SUPER-SHARP ALL-PURPOSE KNIFE WITH SPARE BLADE

FOR ONLY **1/6**

Whether you're laying lino or model-building, pruning the roses or simply sharpening the office pencils, you'll do it better with the '1001' Knife.

Each X-acto '1001' has a carefully balanced steel handle—easy to grasp—and reversible blade, with another 'spare' in the handle—all for only 1/6. Spare blades are 3 for 1/-. Get an X-acto '1001' knife—from all good model shops and ironmongers.

Other X-acto precision tools

For greater accuracy there's a whole range of X-acto interchangeable blade knives—three weights of handle with a blade for every cutting job. Also plane, sander and modellers' tool sets. All precision-built for precision work, and so reasonable in price.

More skill at your fingertips with

TRIX X-acto

HANDYMAN KNIVES AND TOOLS

TRIX LTD. 5 CONDUIT ST. LONDON W.1.