

# HOBBIES WEEKLY

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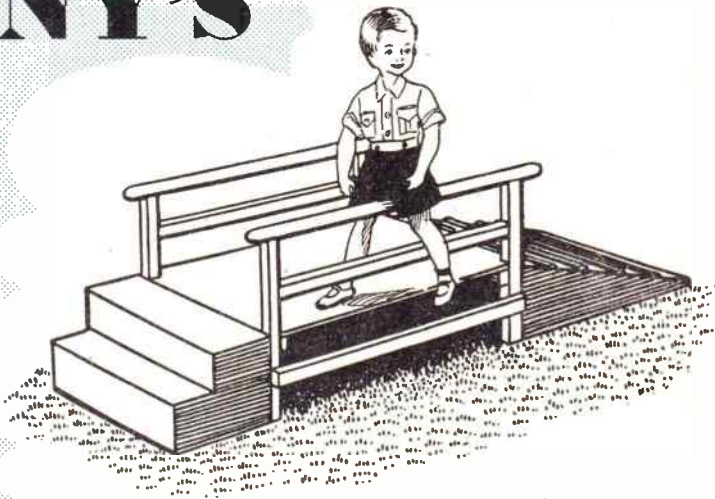
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All correspondence should be addressed to the Editor, Hobbies Weekly, Dereham, Norfolk

## JOHNNY'S GYM

*Make this  
Climbing Frame  
for  
young children*



**T**ODDLERS of two or three years will find plenty of amusement in this climbing frame. They will climb and tumble about in any case, so they might just as well tumble in safety on the lawn.

The 'Gym' consists of three sections as shown in the diagrams 1, 2 and 3. The steps are made up in box form to the approximate measurements indicated. There is no need to stick rigidly to these

sizes, obviously a deviation of a few inches will make little difference to the finished article. Use  $\frac{1}{2}$ in. or  $\frac{3}{4}$ in. thick wood for the steps and assemble them as shown in Fig. 1. It is not necessary to use glue as nails or screws will give sufficient strength.

The sloping ramp consists of two  $\frac{1}{2}$ in. thick triangular shaped side pieces as in Fig. 2, and two pieces of  $\frac{1}{2}$ in. plywood. These form the ramp and the base. In

the diagram these latter pieces are shown made up from narrow pieces of wood but giving the same effect. Four pieces of  $\frac{1}{2}$ in. half round beading are screwed across the ramp to provide a foot hold.

The central platform is detailed in Fig. 3. Make the rails and uprights from 2in. by  $1\frac{1}{2}$ in. wood and slightly round all edges. The handrails must be rounded off along the whole length and smoothed down with glasspaper.

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

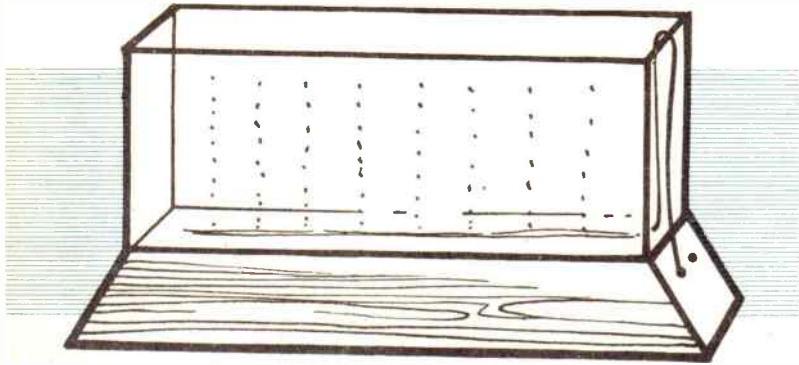
World Radio History

4<sup>ID</sup>  
2



For your aquarium

# AN AUTOMATIC AIR PUMP



**T**HE installation and maintenance of an aquarium is a most popular home interest, and numerous articles describing the making and setting up of a tank for pet fish, from the humble goldfish to the fabulous tropical species, have appeared from time to time in the technical press.

An automatic air pumping system is an undoubted improvement to any aquarium, be it small or more pretentious, as it follows, naturally, that a constant steady supply of air will ventilate the water, keeping it in fresh condition, will provide improved living conditions for the fish, and, whilst obviating the need for frequent cleaning of the tank, will thus cause less disturbance to its inhabitants.

The greatest drawback to such a system is usually its cost, but the air pump here described can be made by any handyman in an hour or two for a few shillings, and, as an added advantage, it will cost nothing to run.

First, obtain a biscuit tin measuring 9ins. by 8½ins. by 5ins. This is a standard size, but any tin of convenient dimensions could, of course, be used. Carefully solder from the inside of the tin all joints and corners in order to render the tin absolutely airtight. In one side of the tin drill two ¼in. holes. These are to take two valve sockets (obtained from two discarded cycle inner tubes) and these sockets should be soldered when fixed in the holes, to ensure airtight joints. Make sure that the valve sockets face the correct way, as shown in Fig. 1.

Insert the two valve units (complete with valve tubing) and screw tight with the milled nuts, but in one of the valve units make a pin hole in the valve tubing exactly over the hole in the pin of the valve unit. This hole will allow a

slight leakage of air through the valve unit.

Now place the lid on the tin and solder this in position. We now have in the biscuit tin an air container with provision for a slight leak of air through one valve socket. To test this, take a

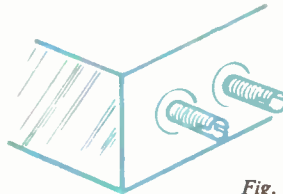


Fig. 1

cycle pump and pump air into the tin, affixing the pump to the intact valve pin. A slight leakage of air should seep through the remaining valve, and the pin hole should be adjusted accordingly.

Now obtain a length of valve tubing, about 3ft. or 4ft. long, and block up one end of this with a piece of wood. At this blocked end make pin holes in the tubing about 2ins. apart, and connect the other end to the leaking valve pin in

the side of the biscuit tin. Insert the blocked end of the valve tubing into the aquarium, and run the tubing along the floor of the tank. If the biscuit tin has been pumped full of pressurised air a steady escape of air bubbles should be seen arising from the punctures in the tubing on the bed of the tank.

The automatic air pump has commenced working.

If the reader is the proud possessor of a large aquarium, two biscuit tins can be connected together by means of a small pipe, as shown in Fig. 2, but this extension of the capacity must be undertaken before the lids are soldered on, and care must also be taken to ensure a perfectly airtight and soldered connection at each end of the connecting pipe.

With one biscuit tin it will be found necessary to pump once every two weeks, but with two, one pumping will last approximately three to four weeks.

Finally, to hide the tin or tins, a mount, as illustrated can be made for



Fig. 2

the tank from plywood. This mount should not be beyond the capacity of any home woodworker, and presents no special features beyond the provision of two drilled holes, one to take the valve tubing running to the tank, and the other to take the pump connection.

The mount should be rubbed down with glasspaper and finished to suit individual taste. (P.P.)

## How to Draw Rockets and Spaceships

**T**HIS is the latest handbook in the 'How to Draw' series of Studio Publications and for some it will be the most intriguing of the forty-three so far issued. Chas. Sargeant approaches his task on a strictly scientific basis, but, as the subject itself demands, stimulated imagination is chiefly necessary to record in visual form the conceptions of shape, outline and apparatus when dealing with space travel of the future.

There is much that is quite factual in the letterpress, all of it absorbing stuff, but the drawings, especially those built

up on data preconceived in the artist's mind and not, therefore, established fact, are entirely 'out of this world' and should act as a spur to any young designer of the future. In short, this work cannot hope to fix design or pattern; its aim is to inspire and to convince the young artist that his canvas is as vast as space itself, to urge him to blueprint his own ideas in charcoal and launch them into space.

Published by The Studio Ltd., Hulton House, Fleet Street, London, E.C.4—Price 5/-.

# UNDERSTAND VALVES

**M**ANY different valves exist, but all function in a somewhat similar manner. No particular difficulty need arise in understanding how a valve operates, or in noting pin connections for the few types which are most popular for home-built receivers.

The simplest valve consists of a filament and anode (or plate) fitted in a glass envelope. The filament is heated from a battery or other source of current, thereby becoming red hot. It then emits electrons which pass across to the anode, forming an electric current. This current is always from filament to anode, because the anode is not heated, and does not emit electrons which might flow to the filament. The valve thus lets current pass in one direction

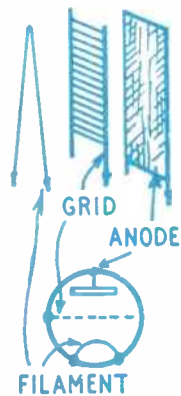


Fig. 1—A triode valve

only (from filament to anode) and is termed a rectifier, or diode.

## Triode valves

These were most often used in receivers, and have a grid placed between filament and anode. Fig. 1 shows this, with the symbol used for triodes.

Current still flows from the heated filament to the anode, but in doing so the electrons have to pass through the mesh of the grid. If a very small negative voltage is applied to the grid, this reduces the flow of electrons passing through to the anode. Very small changes in grid voltage can cause large changes in anode current. Amplification has thus taken place, the signal at the anode being much stronger than that at the grid.

With a 1-valve set, the signal picked up by the aerial would be taken to the valve grid. This would be heard, much amplified, in phones wired to the anode.

With larger receivers, the signal at the anode would be applied to the grid of a second valve. It would thus be amplified again, and become powerful enough to work a speaker connected to the anode of the second valve.

*By F. G. Rayer*

The filament is often suspended from a small hook, as in Fig. 2, and the grid is usually all round the filament, not merely at one side, as in Fig. 1. The anode also goes completely round the grid. The anode and other electrodes can easily be seen in a clear glass triode.

A base is often fitted, with pins. Fig. 2

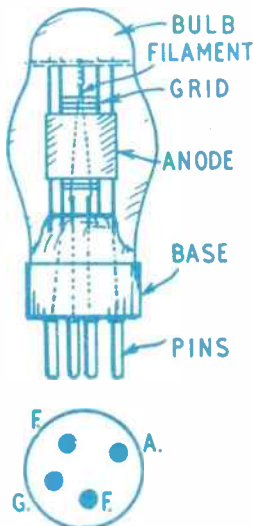


Fig. 2—A 2-volt triode

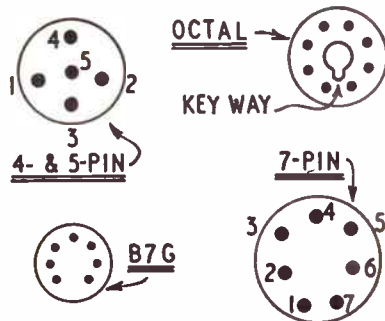


Fig. 4—Popular valve bases

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shows Filament, Grid, and Anode pin connections for English 4-pin valves. Some modern valves have pins set directly in the glass envelope. The pins are always so arranged that a valve can only be inserted in its holder in one position, so that the correct pins go into the various sockets.

The shape and size of bulb varies greatly. Miniature valves have very small tubular bulbs. Some valves have an outer metal shell, for screening purposes. With others, the glass is sprayed with particles of metal, for the same reason.

## Filament supply

The filament must receive its correct voltage. High voltages will burn it out, and low voltages will reduce the emission of electrons. Small modern battery valves often have 1.4 V. filaments, de-

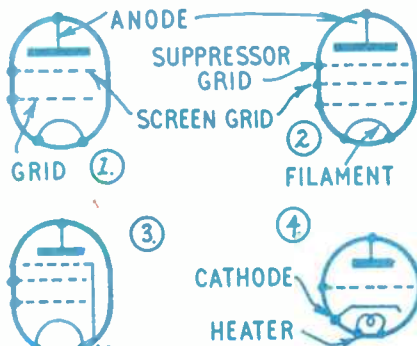


Fig. 3—S.G., Pentode and mains valves

signed to run from  $1\frac{1}{2}$  V. dry cells. Some output valves of this kind have 2.8 V. filaments, which can be run from a 3 V. dry battery (the actual voltage of which is not quite 3 volts). Or a number of valve filaments may be wired in series, for a 6 V. or  $7\frac{1}{2}$  V. dry battery.

The older type of battery valve was designed to run from a 2 V. accumulator, and is thus not very convenient for 'all dry' operation. Such valves give good results and are found in much ex-service battery equipment.

Most modern mains valves have 6.3 V. heaters or filaments, run from a mains transformer, mains dropper, or 6 V. accumulator (the latter being convenient for car-radio sets). However, many other voltages are used as well, particularly 4 V., 5 V., 12.6 V. and 25 V.

No valve should ever be operated with the wrong filament voltage.

### Grid and anode voltages

A low voltage is often applied to the grid as this allows the valve to work better. This is termed grid bias, and may be obtained from a small battery, or an auto-bias circuit.

The anode is given a positive voltage, so that it attracts electrons emitted from the heated filament. This, the high tension voltage, may be obtained from a battery, or from the mains. With the latter, a rectifier is added to obtain a suitable direct current from alternating current mains.

Valves have a maximum anode voltage, which should not be exceeded. This is about 67 V. to 90 V., with small battery valves, or 150 V. with 2 V. valves. With mains valves, 250 V. or more may be permitted. Most valves work quite well with lower voltages than the maximum, and such lower voltages are often used, to keep down the size of batteries, etc. Low anode voltages do not cause damage to the valves, but do reduce the amplification.

### Other valve types

More amplification is obtained when a further grid is placed between control grid and anode. This is termed the 'screen grid' and gives a screen grid or tetrode valve, shown at 1 in Fig. 3. The screen grid receives a fairly high positive voltage from the high tension supply.

To prevent electrons rebounding from the anode, a suppressor grid is employed, as shown at 2. The valve is then called a pentode. As the suppressor grid is often earthed, it may be wired directly to one side of the filament, inside the valve, as at (X) with valve 3.

Because screen grid, tetrode and pentode valves give better results, most modern valves are of this type. The 1.4 V. miniature valves are not made in triode form, for example. However, a S.G. or pentode valve can always be used as a triode, if desired, by wiring the screen grid and anode together, and using this as a triode anode.

In Fig. 3, a mains triode is shown at 4. This is exactly the same as a battery triode, except that a cathode replaces the filament. This cathode is heated by the heater (which can be regarded as the equivalent of a filament). The heater may be operated directly from alternating current. This is very convenient in mains sets, and cannot be done with a filament, which must be run from direct current. Such valves are termed 'indirectly heated' and take some 30 seconds or so to reach operating temperature. They are made in tetrode, pentode and other forms, exactly as with the battery valves.

### Multiple valves

Various more complicated valves exist, but mostly consist of two or more simple electrode assemblies in a common bulb. This saves space and cost.

A double-diode, or full-wave rectifier, simply has two complete diode assemblies (anode, with heater and cathode). It is often used to obtain H.T. in mains sets.

The double-triode has two complete triodes in one bulb, and is used in battery circuits where two output valves are necessary. A double-tetrode or double-pentode similarly acts in exactly the same way as two separate tetrodes or pentodes.

The double-diode-triode has two diodes, and a triode, and can thus carry out several functions. Double-diode-pentodes are also made.

The triode-pentode has complete triode and pentode assemblies in one bulb. The triode-hexode resembles it, triode and hexode sections being coupled internally. Such valves are used as frequency changers.

The more complicated valves will not be wanted in small home-constructed receivers. But they will be encountered in larger sets, and are really only developments of the simpler type of valve already described.

### Bases

Fig. 4 shows valve bases most often encountered with home-built receivers. Four-pin 2 V. triodes have connections as follows:—

- |                         |          |
|-------------------------|----------|
| 1 and 2, filament.      | 3, grid. |
| 4, anode. (See Fig. 2). |          |

Five-pin 2 V. pentodes and tetrodes employ the same pin connections, with pin 5 for screen grid. Four-pin screen-grid and H.F. pentodes employ a top cap for anode, with pin 4 for screen grid.

Octal valves have 8 equally-spaced pins, a key on a central projection preventing the valve fitting its holder wrongly. Most octal mains valves, such as the 6V6, 12A6, 25A6, etc., employ pin connections as follows:—

- |                    |                |
|--------------------|----------------|
| 1 and 6, not used. | 3, anode       |
| 2 and 7, heater.   | 4, screen grid |
| 5, grid.           | 8, cathode.    |

This is viewing the valves from below, and counting clockwise from the key way.

Miniature battery valves use the B7G base. Counting pins clockwise from the space, connections for the 1T4, 1F3, DF91, and W17 are:—

- |              |                  |
|--------------|------------------|
| 1, fil. neg. | 7, fil. positive |
| 2, anode.    | 3, screen grid.  |
| 6, grid.     |                  |

Connections for the 1S4, DL91 and CV783 are the same, except that pin 3 is control grid, and pin 4 screen grid.

The 7-pin base is given because it is employed with cheap ex-service valves such as the 8D2 and 9D2, which are otherwise equivalents of the more costly 6J7 and 6K7. Pin connections for these are:—

- |                  |                     |
|------------------|---------------------|
| 1 and 7, heater. | 2, cathode.         |
| 3, screen grid.  | 4, not used.        |
| 5, anode.        | 6, suppressor grid. |
| Top cap, grid.   |                     |

### Equivalents and alternatives

Very many valves are given different numbers by their makers, when they are actually interchangeable. In other cases, valves with exactly similar characteristics are fitted with different types of base. Because of this, it is impossible to list all the valves which may be encountered though equivalents have been given from time to time in past issues.

Pin connections for any particular valve can be found in a valve reference book. This allows valves already to hand to be used, when suitable.

## An 'Insect' Thermometer

**O**N an autumn evening, when the crickets are out enjoying life too, it is interesting to be able to tell the temperature of the air by the number of chirps the cricket makes per minute.

It seems that the rate of chirps is affected by the temperature, and the exact relation of the temperature to the number of chirps has been estimated. With a little care in counting, one soon becomes expert enough to tell the temperature within one or two degrees Fahrenheit.

One meets with many discouragements at first as he tries to count every chirp: the cricket stops before the minute is up; other insects' notes drown out the cricket's; the noise of passing vehicles, etc., are very apt to interrupt at the critical moment of counting. But a little

patience will easily overcome such difficulties.

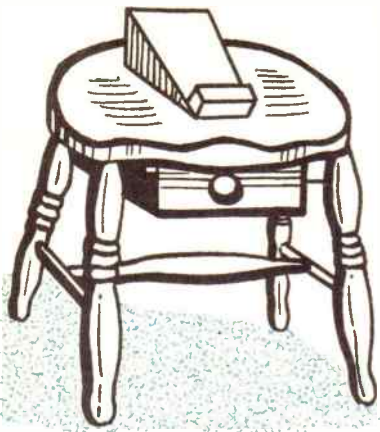
When one has the average number of chirps per minute, take one fourth of that number, and add forty to that; the result will be the temperature within a degree or two of the actual temperature as read from a thermometer hung out of doors.

Another experiment is to capture a cricket and take him into the house and see how much faster he chirps when he is warm.

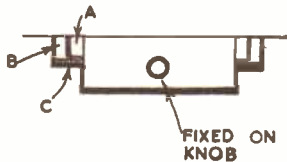
To count the chirps per minute, taking one fourth of that number and adding forty to it may seem a little complicated — but it is really very simple, and is like the game 'Think of a number, and double it', put to an interesting purpose. (R.L.C.)

## Two Household Projects

# A BOOT CLEANING STOOL . . .



**I**N many households there is usually an old discarded chair, probably minus its back, kept from the final breaking-up for no obvious reasons, yet apparently possessing nothing to recommend its continued existence. Instead of leaving it to take up space in the box room or gather dust and cobwebs in the corner of the garden shed, why not turn this old faithful into something quite useful such as a boot-cleaning stool?



If the back still remains, either in part or in whole, take it off and clean up the stool seat and legs.

Cut two blocks four inches long to form the base of a sloping foot platform (see illustration). The height of these blocks will depend upon the angle of the slope (approximately an incline of 20° will be suitable) and the top edges must be chamfered accordingly. The platform surmounting the base is comprised of a piece of ½ in. board (4 ins. by approximately 8 ins.). This is nailed or screwed to the two top faces of the block base and then covered with a piece of spare lino.

At the lower end of the lino-covered platform screw on the heel-block measuring 4 ins. by 2 ins. A suitable thickness is lin.

To the underside of the stool top a drawer must now be fixed for taking the shoe brushes and cleaning materials.

Fig. 1 shows the fixing detail. The size of the drawer is not critical, but it must of course be deep enough to take the shoe brushes.

The drawer can be made from ½ in. wood. Along the outside of the upper edge of each side fix a length of ½ in. square stripwood (A) and, to form an angled bed for these two runners, lengths of stripwood (B and C) are fixed at right-angles to each other on the underside of the stool seat just far enough apart to enable the draw to slide smoothly on the runners (A).

Screw or glue a stop-block of stripwood to the stool seat behind the back of the closed drawer.

A search in the junk box will probably provide the required knob or drawer handle.

Finally, give the finished job two coats of paint and you will have an article which every male member at least of the family will be pleased to use. (P.P.)

# . . . AND A DOGGIE DOOR STOP

**F**OR various reasons, many people find that it is sometimes convenient to have a particular door (or doors) in the house kept ajar. When this is required some suitable object is usually inserted at the bottom of the door to keep it open. This 'make-do' method is quite satisfactory but why not make a decorative door stop like the one illustrated? This does the job just as well and will often be found amusing when viewed by visitors and children.

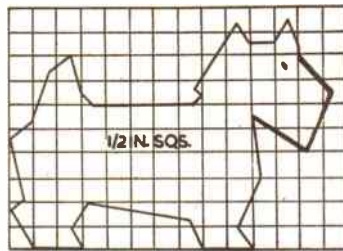


Fig. 1

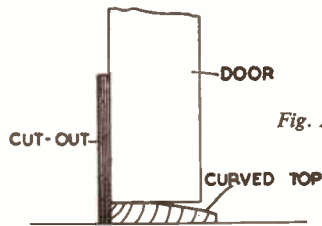
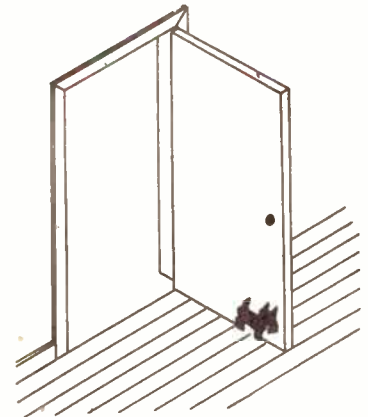


Fig. 2

The shaped dog is cut from a piece of three-ply (or hardboard) and the detail of this is shown in Fig. 1. Obtain first a piece of white paper 7 ins. by 5 ins. and divide it up into ½ in. squares in both directions. After this, plot on the required shape of the dog and this is made



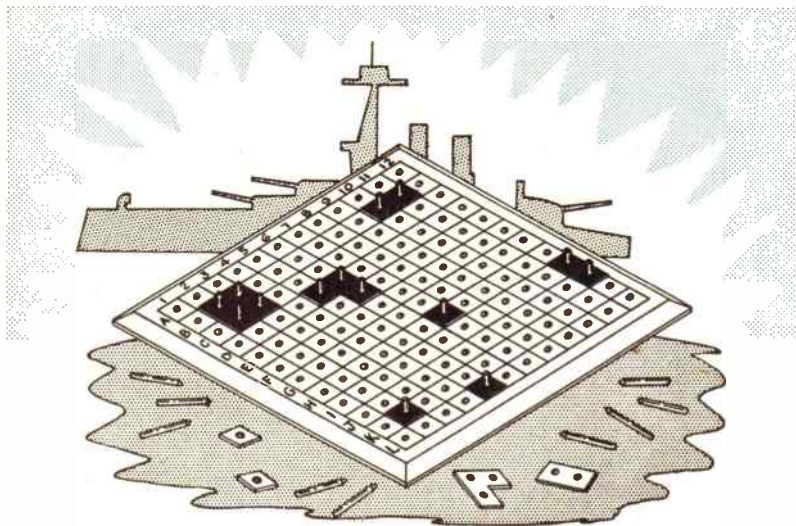
quite simple by the fact that all the lines are straight. When this is done, paste the paper pattern to the plywood and cut out the shape with a fretsaw. Smooth off the edges with a rub of fine glasspaper.

The next job is to make the wedge. Hold the door in the open position and measure the space between the underside of the door and the floor: this usually measures about ½ in. Fig. 2 shows the wedge in use and the thickness at the thicker end should be equal to the space under the door. Note that the top surface of the wedge is curved slightly. When made, secure the cut-out to the wedge with a little glue and a few panel pins.

To complete, paint the cut-out black with a touch of white for the eye and paint the wedge the same colour as the door. When in use, the part of the wedge which is seen from the front will appear to be part of the door. (F.K.)

A game for two

# SINK THE ENEMY FLEET



**T**HIS fireside game for two players will give endless fun and excitement. Making the simply-designed boards (one for each player) and equipment described here also provides an excellent project for the younger members of the family.

Each baseboard is made from any good quality hard timber  $\frac{1}{2}$  in. thick. Plywood is ideal but if you have any offcuts of  $\frac{1}{2}$  in. perspex this will also yield a professional looking job.

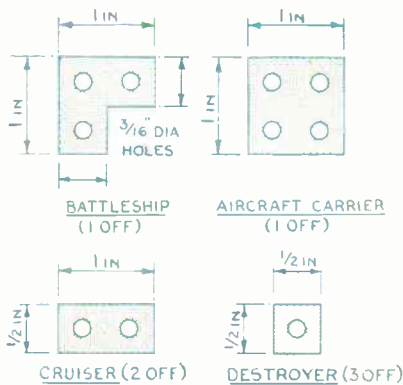
Cut a piece of the timber 7ins. square and trim true and smooth. Leaving a 'margin' of  $\frac{1}{4}$  in. all round mark, in pencil, a 6in. square on one face of the wood. Then hatch this square into smaller  $\frac{1}{2}$  in. squares as shown in the illustration. This is done by dividing each side of the square into twelve  $\frac{1}{2}$  in. spaces and then joining up the opposite points. Using a steel rule and a steel scriber or other sharp-pointed tool score the pencil lines deeply and evenly. Fill these lines with black wax level with the surface or alternatively mark the lines with black indian ink applied with a drawing pen.

## Lettering the board

In the centre of each square drill a  $\frac{3}{16}$  in. diameter hole right through the board and trim clean. The exact centres are at the intersection of diagonals which are drawn faintly in pencil. Bevel the edges of the board neatly at 45 degrees and glasspaper smooth. Then, with mapping pen and indian ink, carefully mark the numerals and letters as

indicated in the drawing. Apply a coat of clear varnish to the whole board. Back the board with a piece of stiff card or  $\frac{1}{8}$  in. ply and make sure no glue escapes into the holes.

The playing pegs, about two hundred of which are required, are each  $\frac{3}{4}$  in. long



and are cut from  $\frac{3}{8}$  in. diameter birch dowelling. One end of each peg is pointed, the other can be rounded off.

The 'fleets' are cut from millimetre ply with a modelling knife and are painted grey. Their shapes are given in the illustration and they are drilled so that the holes align with those drilled in the board.

To play the game, you and your

opponent peg your fleet to the boards in any position you wish, without letting each other see your individual 'deployments'. Pegs which have been painted yellow are used for this.

You then 'open fire' by pinpointing a square on your opponents board, for example F6. He must then tell you if this is a 'Hit' or a 'miss'. You have made a hit of course if the square you have pinpointed is covered by one of his

By G. Allen

ships or part of a ship. He must also tell you what kind of a ship, if any, you have hit so that this will act as a guide for your future salvos. If you have made a hit, you have an extra shot.

Immediately a hit is made he must remove the appropriate yellow peg from the centre of the square concerned on his board. In this case you also place a peg painted red in the corresponding hole in your own board to guide you in your shooting.

If you miss...

On the other hand if you miss with your shot your opponent does nothing but tells you and you then place a peg painted black in the square you have pinpointed so that you will not repeat the shot in the future. If you miss then the 'firing' reverts to your opponent.

The winner is the player who succeeds first in removing all his opponents 'ships' from the board.

Points to note. There is no reason why a square covered by one of your own ships should not be pinpointed by your self just in case one of the enemy's ships is in a similar position. In this case your yellow peg is removed and replaced by either a red one or a black one according to whether a hit or miss is recorded.

Painting of the pegs is done with quick-drying cellulose or plastic enamel of the Starlon variety. Twenty eight will be yellow, twenty eight red and the rest black.

Completely new Edition

WHERE'S THAT CAR FROM?

Price 1/- (Postage 4d.)

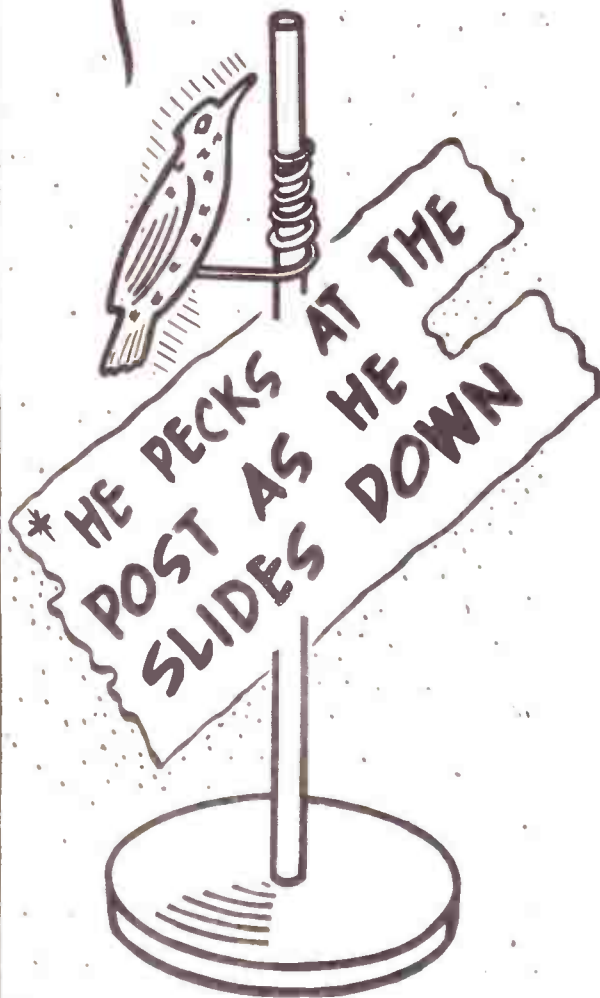
Of all Booksellers

or

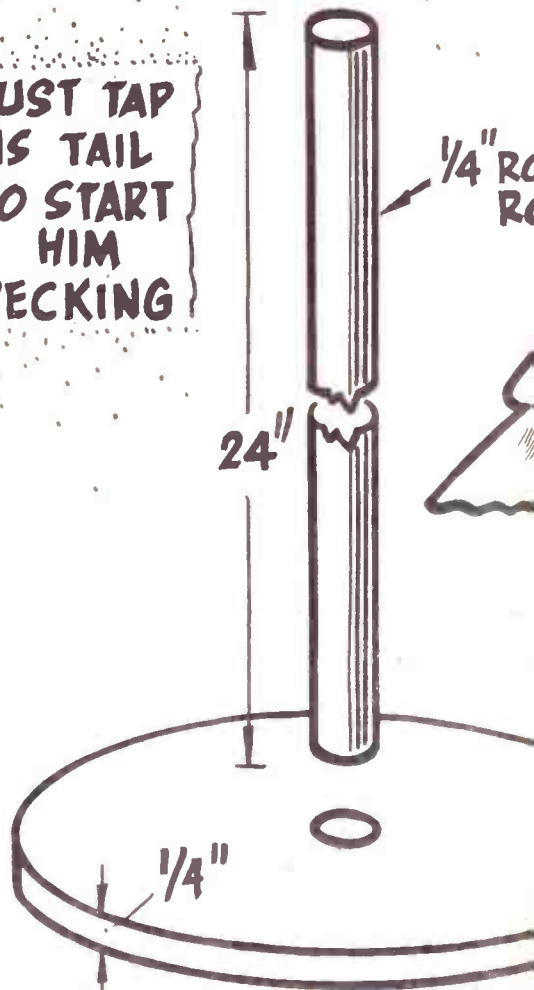
RALEIGH PRESS, Exmouth, Devon

# WOODY the V

\* AN AMUSING NOVELTY

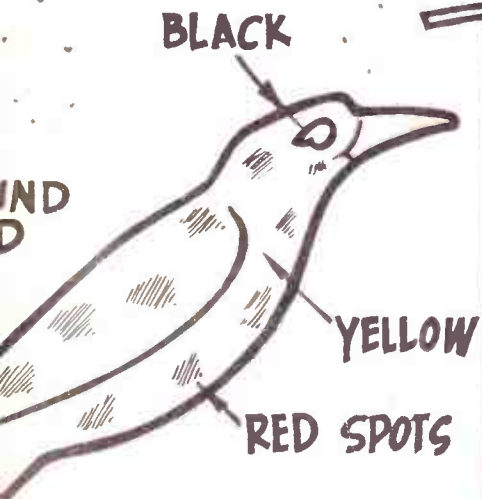


JUST TAP HIS TAIL TO START HIM PECKING



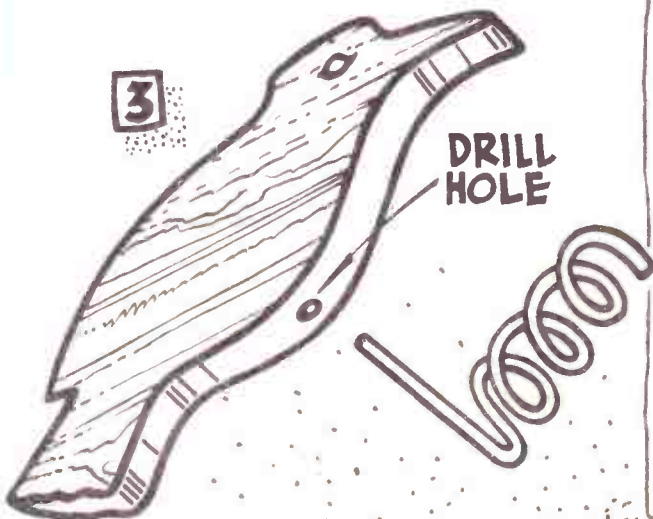
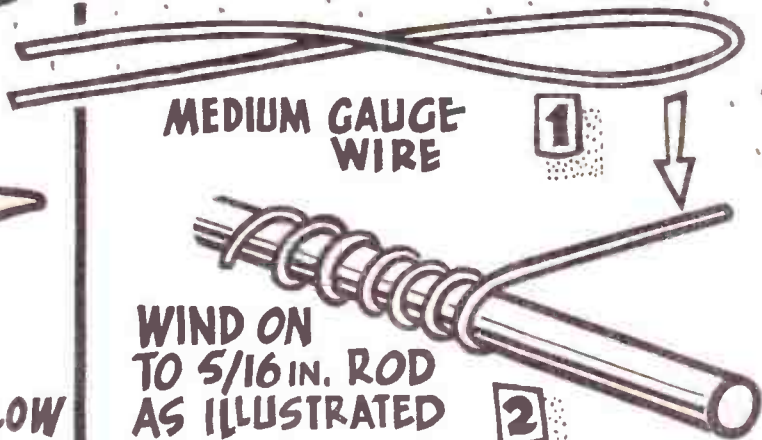


# WOODPECKER



'NOODY' CUT FROM 1/2" WOOD — PAINT BRIGHT COLOURS AS SUGGESTED

4" DIA. SHAPE OF BASE IS NOT IMPORTANT



MADE IN MINUTES



# PHOTOGRAPHERS!

**DO YOUR OWN  
DEVELOPING**

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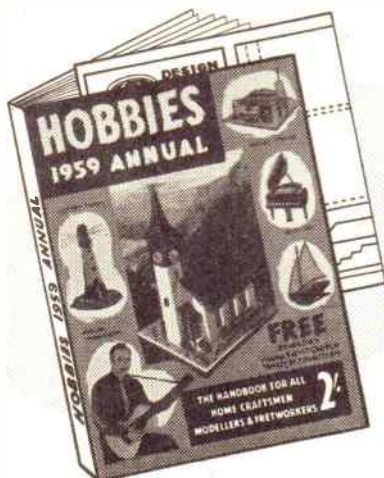
### COPPERCRAFT AND SILVER MADE AT HOME

By Carl and Nora Kramer. 30/- net.

This distinctive and unusual book, fully illustrated, demonstrates how simple and uncomplicated it is to make copper and silver objects at home, and without any expensive workshop or equipment. For the beginner amateur with limited leisure, and no particular artistic training, metalry as a creative hobby is an ideal pursuit — the authors describe many fascinating and handy things, such as trays, bracelets, spoons, and napkin rings, all illustrated with step-by-step photographs and diagrams, and all of which can be made by the beginner. The book is delightfully produced and will give hours of pleasure to the creative person with a taste for something new to do.

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**I** COLLECT old tea caddies because they are so useful for storing stamps, labels and oddments of all kinds.

The most valuable specimens are those which still retain the two original compartments (for green tea and black) and with the original cut-glass sugar-bowl accommodated in its own niche between the two. When the caddy spoons and sugar-tongs are likewise preserved, the caddy is, from the collector's point of view, of particular merit.

The name 'caddy' is derived from the word 'kati', the Chinese name for the small wooden boxes in which the leaf was sent over from the East in the days of its first introduction to this country. Some of these boxes, large enough to hold about 2 lbs. of tea, are still to be found, the surface being frequently covered in old Chinese paper, elaborately adorned with pictures and hieroglyphics.

Early Sheraton boxes, adorned with the familiar inlaid shell in a lighter tone

upon the lid, are often found in antique shops. But Chippendale caddies with a mitred lid, ornamented with a delicate beading surrounding a flat plaque on the summit, are rare.

In shape one finds that the finest specimens tend to the tapered design, the smaller base probably proving more convenient in the withdrawal of the contents. The little brass balls used as feet, the brass ring handles, and the mounts, often wrought in the form of a posy of flowers, are all points deserving careful study.

During the 18th century, most porcelain firms producing caddies, restricted themselves to the simple four-sided shape tapering at the top to a small opening from which the tea could be easily poured into the spoon, a rounded cover fitting loosely over it. Bow and Chelsea, Worcester and Lowestoft all produced beautiful china caddies with their china tea services.

## TEA CADDIES by R.L.C.

These are but roughly the more common types of caddy, but the collector will soon discover that the designer expressed his fancy in other forms. There are, for instance, beautiful caddies to be discovered in straw work, the art of which we derived from the French prisoners taken by us during the Napoleonic Wars. Others are found in the curious inlaid work, formed of tiny rolls of gilt and painted paper, that gives the effect of some elaborate form of filigree. These, like the lacquer caddies in black and gold, are scarce.

But start your collection with modern caddies. There are many on the market in all shapes and sizes. They serve many useful purposes and you may stumble on some rare items.

## Be a Sport Hobbyist

**I**F you are keen on sport you should become a 'Sport Hobbyist'.

During the summer the sport hobbyist spends much of his time following cricket, tennis, bowls, etc. He collects all programmes, cards and other items found on sale at sports meetings.

In winter he attends football matches etc., writes to fellow collectors at home and abroad exchanging duplicates, and writes up his collection, the last named being one of the most fascinating features of the hobby.

Sport collectors fall into different categories. The main body of collectors are those collecting sport cards. Since 1880 sport personalities have been honoured on thousands of cards issued with cigarettes and confectionery, and also on stamps, labels and all kinds of pictorial adhesives.

A collector of sport items might belong to any group of collectors. He might be an autograph collector specializing in autographs of sport heroes. He could be a curio collector whose chief interest is in items concerning sport figures. He may be one of the many amateur or professional sportsmen who collects souvenirs.

If you are a sport fan anxious to get started, why not concentrate on stamps issued by most countries commemorating the Olympic Games?

There is a wide choice of match labels depicting sports. Some hotel labels illustrate outdoor pastimes, and do not forget railway posters and travel brochures, which often show some form of outdoor recreation.

Whichever sport hobby you choose, you can be sure that there will be many hours of real hobby enjoyment for you.



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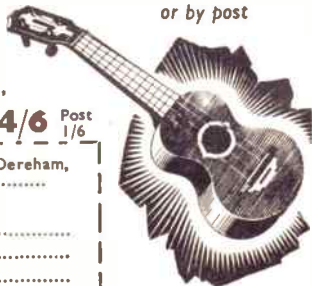
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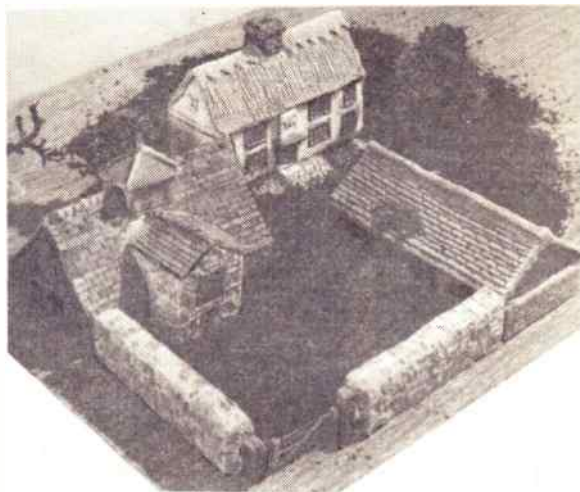
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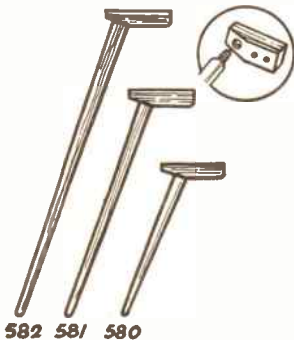


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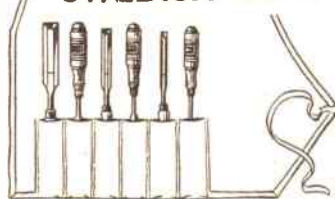


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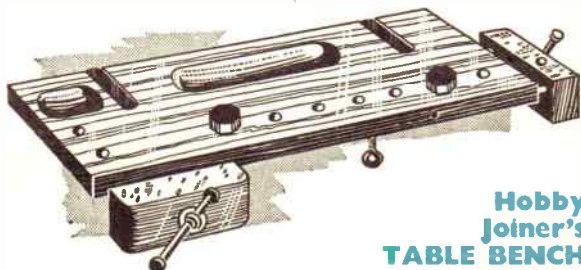
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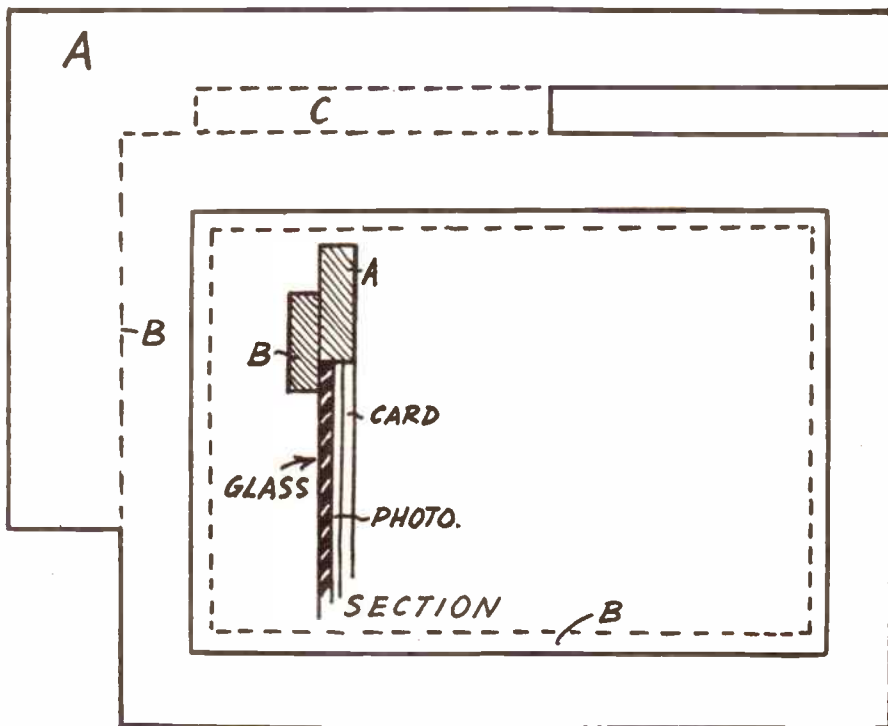
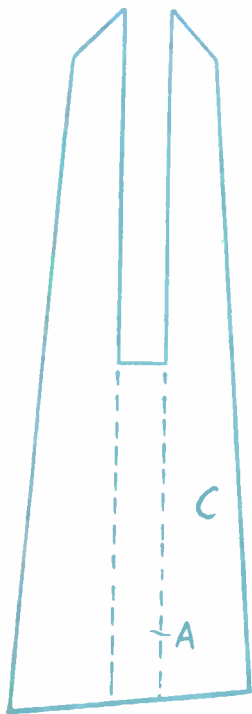
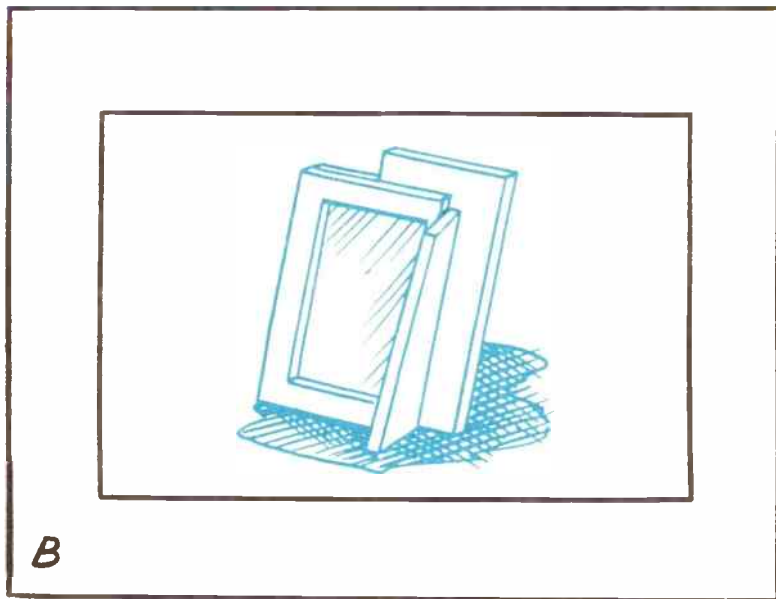
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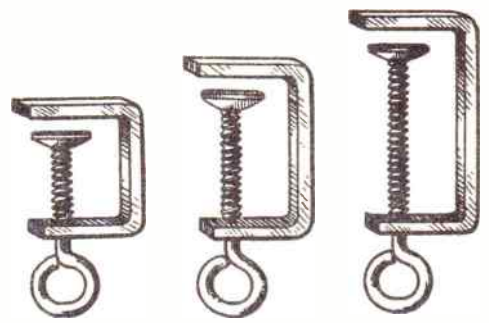
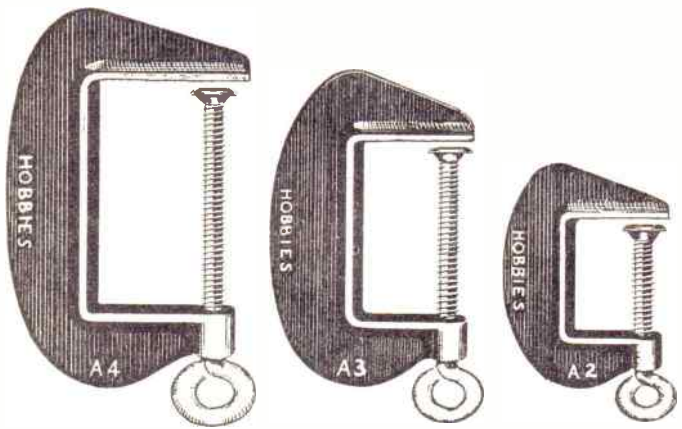
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