

# HOBBIES *weekly*

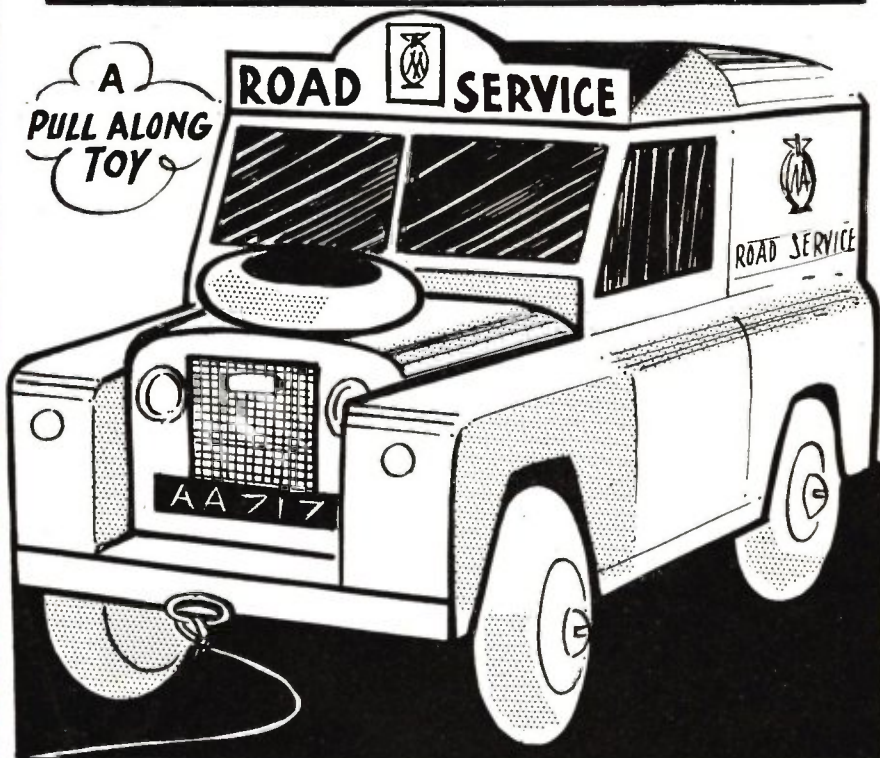
21st JULY 1965

VOL. 140

NUMBER 3632

## ***ROAD SERVICE TRUCK***

A  
PULL ALONG  
TOY



**FULL-SIZE PLANS INSIDE**

**FOR CRAFTSMEN OF ALL AGES**

**6<sup>p</sup>**



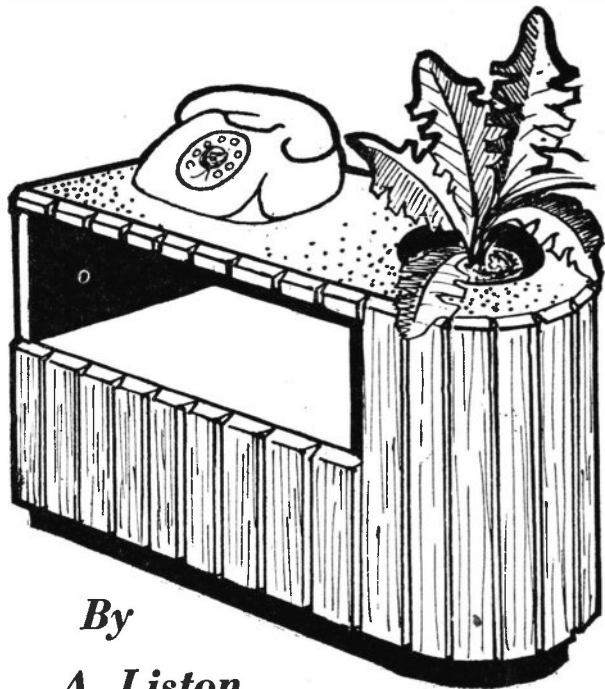
# A MODERN MULTI-PURPOSE FITTING

THE attractive multi-purpose fitting shown here is very suitable for the smaller room. Although it is only 2 ft. high and 3 ft. long, it can serve as room divider, cocktail cabinet, telephone table, book shelf or record holder.

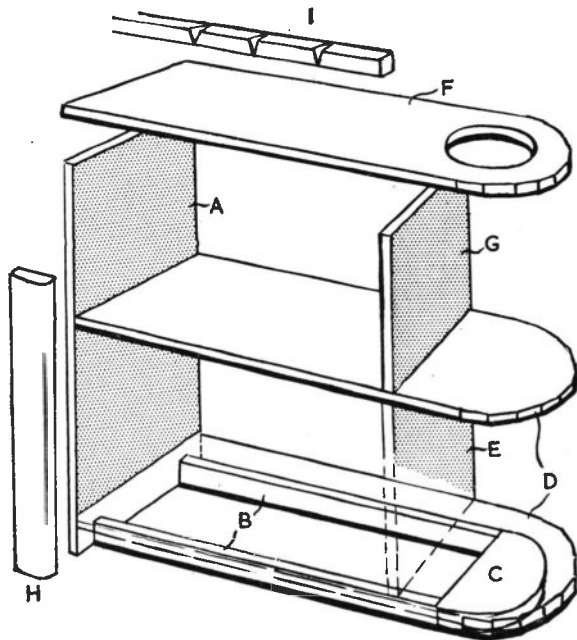
The method of construction shown is simple and straightforward, with no complicated joints. The end section A is a 12 in. wide and 24 in. high piece of  $\frac{1}{2}$  in. thick blockboard. The plinth, which is screwed to the end section, is made from two 29 in. long pieces of 2 in. by 1 in. wood B. These are fitted 1 in. in from the edges of the upright end section, and the rounded end-piece of the plinth C can be either a 10 in. diameter semi-circle of 2 in. thick wood, or a strip of hardboard bent round and screwed to the straight members of the plinth, which are rebated to take it.

The two lower shelves D are 35  $\frac{1}{2}$  in. long and 12 in. wide, and are made of  $\frac{1}{2}$  in. thick blockboard. Their curved ends are not, in fact, round, but cut in a series of flat faces so that the facing of vertical strips will fit them exactly. As the nominally 2 in. wide strips used are actually about 1  $\frac{1}{2}$  in. wide, this width must be checked before cutting the ends of the shelves.

A 12 in. wide and 10 in. high piece of blockboard E supports the middle shelf. It is screwed in place 20 in. from the end of the unit. The top shelf F is also of  $\frac{1}{2}$  in. thick blockboard, and is 12 in. wide and 36 in. long. An 8 in. diameter hole is



By  
*A. Liston*



cut in it, its centre being 10 in. from the curved end. The faces on the rounded end are cut in the same way as those on the shelves below. The shelf is supported on a piece of blockboard G 12 in. wide and the same height as the part of the upright end section which projects above the middle shelf. The top shelf is screwed in place, and the vertical striping added.

The rounded end is tackled first, this being covered with 22 in. lengths of 2 in. by  $\frac{1}{2}$  in. wood which are rounded off on two edges H. The upper ends of the strips are cut at an angle, to give an attractive finish. The sides of the unit are covered in the same way, but one shelf section is left open on each side; this can be done in a variety of ways. The lower half on one side can be covered, and the upper half on the other side similarly treated. Alternatively, the lower halves on each side can be covered to produce an open magazine or book shelf.

To hide the edges of the blockboard shelving where it is not covered by the strips, a length of  $\frac{1}{2}$  in. square stripwood, notched with a file at intervals to correspond with the joints between the strips I, is pinned and glued in place. An example of this can be seen in the illustration of the finished unit.

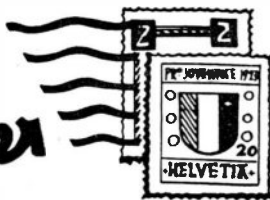
The back of each cupboard unit is lined on the inside with a piece of hardboard, and the fitting is then painted. The plinth is painted black, the top white, and the interior grey, using polyurethane finish, and the rest of the wood is varnished or coated with clear polyurethane finish.

A pot plant, raised on blocks of wood inside if necessary, or a large ashtray, is fitted into the hole in the top shelf, and the unit is ready for use.





# Stamp Collector's Corner



## GREAT BRITAIN PROGRAMME

Eight special issues of stamps, in addition to that commemorating the life of Sir Winston Churchill, will be made by Great Britain this year. The programme is:

May: the centenary of the International Telecommunications Union.

June: the 700th anniversary of the sitting of the first Parliament.

July: the centenary of the Salvation Army.

August: the centenary of Joseph Lister's discovery of antiseptic surgery.

September: the 25th anniversary of the Battle of Britain.

September or October: The Commonwealth Arts Festival.

October: the 20th anniversary of the United Nations.

There will also be an issue of stamps featuring the Post Office communications tower.

Mr Benn also announced that he had decided to issue, in January 1966, Robert Burns stamps.

## GREECE

A set of stamps commemorating the 350th anniversary of the death of the painter D. Theotocopoulos (El Greco), was issued by Greece in March. Details are:

**Lepta 50** — Details from the painting, 'Espolio' (Christ stripped of His garments). Old Art Gallery, Munich.

**Drachma 1** — Details from the painting, 'Concert of the Angels'. National Gallery, Athens.

**Drachma 1,50** — El Greco's signature.

**Drachmae 2,50** — Greco's portrait. Metropolitan Museum, New York.

**Drachmae 4,50** — 'Storm-lashed Toledo'. Metropolitan Museum, New York.

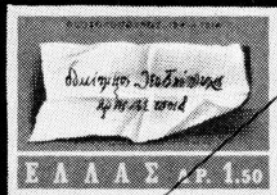


## SPECIAL STAMPS FOR ABU DHABI

Three special stamps were issued in the Trucial Coast Sheikdom of Abu Dhabi on March 30th when the sheikdom's postal services was two years old.



The stamps depict falconry, a popular sport in the sheikdom. Each stamp shows one of the very fine birds used in the sport perched on a gloved hand against a blue background. Denominations are 20 and 40 naye paise and 2 rupees.



350th anniversary of death of painter D. Theotocopoulos (El Greco)

## CANADA

### INTERNATIONAL CO-OPERATION YEAR

In the past few years, Canada has issued several postage stamps honouring United Nations activities and once again joins other member nations, this time in producing a special stamp to mark International Co-operation Year. The stamp



shows two hands clasped, a symbol of international co-operation, surrounded by the United Nations Wreath. Canada's maple leaf is shown in a quadrangle symbolizing Canada as a link between other countries in the furtherance of international co-operation.

# MAKE A JACOB'S LADDER

**F**LEXAGONS are interesting hinged structures which can be made into little puzzles or even toys. The easiest to make is perhaps the one termed a tetraflexagon which is a three faced structure made from a strip of thin cardboard. This is an easy puzzle to make but later we will show other intriguing features of the flexagon.

Take a strip of thin cardboard 5 in. long and 2 in. wide marking off into squares as shown at the top of Fig. 1. Score on the lines with a blunt tool for easy folding. Mark the numbers shown on the face of the card, marking the other set as shown in the shaded diagram on the back.

Fold both ends inwards to make the structure as shown on the right of the diagram. Reverse the card when all the ones will be showing, fold half to the left

vertically to reveal a pair of twos, open to the centre to reveal the threes, fold half to the left to show a pair of twos but when opening to the centre again we find a set of four ones! This is due to the arrangement of the numbers and the hinging and a similar structure can be used to make a fascinating little toy sometimes known as Jacob's Ladder or The Tumbling Blocks, but before describing this in detail let us introduce you to another puzzle of the same type.

This second puzzle is a little more advanced and technically termed a tetra-tetraflexagon. Obtain a piece of card as before but 4 in. long and 3 in. wide, scoring into squares as shown in Fig. 2. The upper diagram represents the face of the card and the shaded diagram the back. You should also note that there are some broken lines in the centre.

Number the squares as shown on both sides, score on the lines then cut the rectangle on the broken lines, noting that it is hinged on the left side of the face.

Fold the two face centre squares backwards towards the left. Fold backwards the face column on the extreme right to give you a structure as shown in the bottom diagram of Fig. 2. Again fold back the column on the right and the odd square projecting 3, is now folded

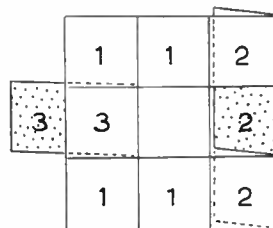
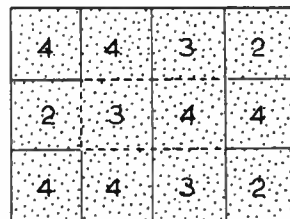
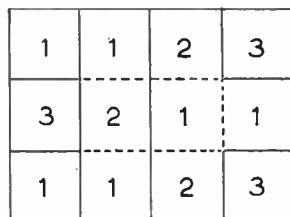
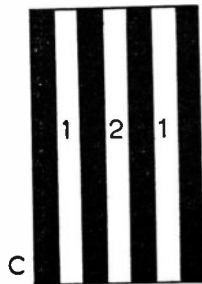
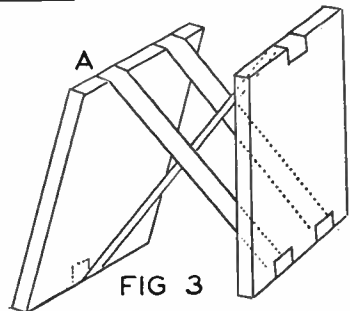
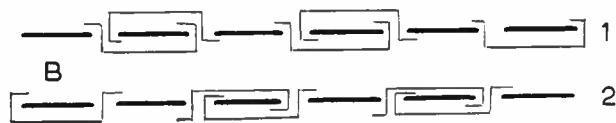
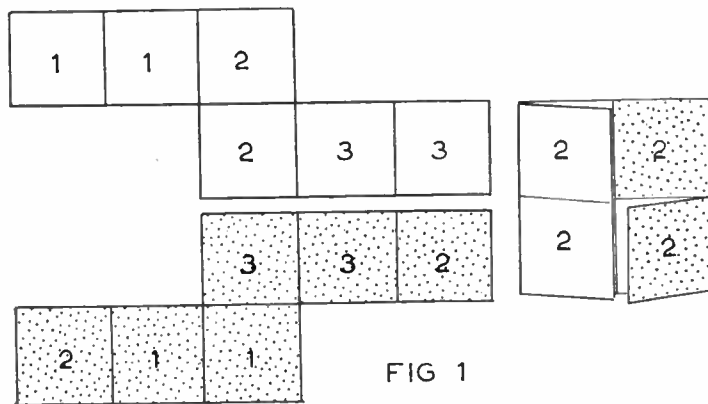


FIG 2

forwards and to the right. This will give you six 1 squares showing on the front. We will leave you to puzzle out subsequent flexing but it should be a simple matter to find faces 1, 2 and 3. The 4 face seems to vanish! Fold down the centre vertically towards the left each time and try to find the 4 face.

In Fig. 3 we show the details of how to hinge a children's toy known as Jacob's Ladder and you may make this from odd pieces of plywood. Note that the introduction of one or two solid blocks will produce a different sound as the blocks tumble. The blocks fall continuously



from the top when held in the hand and on coming into contact with each other make a rhythmic clapping sound. When the blocks are opened like a book two tapes appear on one block with one tape on the other, but on folding again they appear reversed although still glued to the blocks.

Take six pieces of  $\frac{3}{8}$  in. plywood measuring  $3\frac{1}{2}$  in. by  $2\frac{1}{2}$  in. Smooth all the edges with rasp and glasspaper leaving them nicely rounded at the sides. For best effect I would suggest that the blocks are painted in some gay colours and perhaps you will have some surplus which will serve the purpose.

Ordinary cotton tape as used for sewing purposes, about  $\frac{1}{2}$  in. wide, along with some strong glue is required for the hinging. Note that Sellotape must not be used since the tapes are partially free and

only glued to the edges of the blocks. Cut off a supply of strips of tape long enough to fit lengthways of the blocks plus sufficient for the thickness and overlap at each end. When gluing these tapes it should be observed that the hinging system involves two separate series as shown in 1 and 2 of Fig. 3. The first series marked 1 on the diagram is a double one, the identical method of hinging being followed while using two tapes attached near the outside edges of the block. The other series marked 2 involves a single tape attached centrally. The position of the two series of tapes is clearly shown in Fig. 3C.

The detailed method of hinging together is shown for both series at the top of the diagram, the thicker lines representing the blocks and the thinner ones the tapes joining the blocks together.

Start fixing the tapes of series 1 by taking a length of tape, smear glue on the block and place the tape in position. Place the second block in position, pull the tape taut underneath — but not too tight to prevent free hinging — gluing to the lower end of the second block. The first single tape of series 2 may now be fitted noting that this is centrally positioned.

Careful examination of the two diagrams should clarify the method but Fig. 3A, shows the position after the first two blocks have been hinged. The next pair series 1 of tapes starts at the top of the right hand block while the next single tape starts at the bottom of the same block.

This fascinating little toy will give endless amusement and is ideal for a small child. The puzzles mentioned earlier are also simple yet intriguing. (S.H.L)

*Two young experimenters build their own*

## CHEMISTRY LABORATORY

Two readers of *Hobbies Weekly* with an eye on their future have recently completed their own chemistry laboratory in order to carry out scientific activities after school hours. They are working on a syllabus to 'O' and 'A' level and will attempt research into different ways of preparing substances and their derivatives.

These two ambitious boys are Philip Gun of 14 Choumert Grove and Colin Catt of 26 Nutbrook Street, Peckham.

With the help of friends and parents they purchased tables, cupboards, chemicals and an array of impressive equipment. They converted the fireplace into a 'fume cabinet' by blocking up the front with hardboard and installing an electric fan to force fumes up the chimney.

The main lab. is fitted with fire alarms, and buckets of sand and water are kept at hand. Another room has been converted into a prep. room for storage and preparation purposes.

These two friends have also acquired quite a respectable library of books on all chemistry and science. Naturally, with such enthusiasm they find their hobby most interesting and instructive and one which will benefit their future careers.

Philip wants to enter research chemistry and Colin plans to take a course in dental surgery. They hope to study the same subjects at 'A' level, including Zoology and Chemistry. At present they are working on experiments such as the dissection of a rat captured in their back garden.

Records of experiments are kept in their own filing cabinet, which is just another part of the well planned laboratory. Cylinder gas is hidden under benches and plans for a 10-gallon water tank are being worked out. The laboratory carries a good stock of chemicals, and all are labelled and recorded. Bottles of antidotes for acids are kept in a prominent place and a first-aid chart and cabinet are also ready at hand in case of accidents!

Their enthusiasm is to be highly commended and it would



*Corner of the well-equipped lab.*

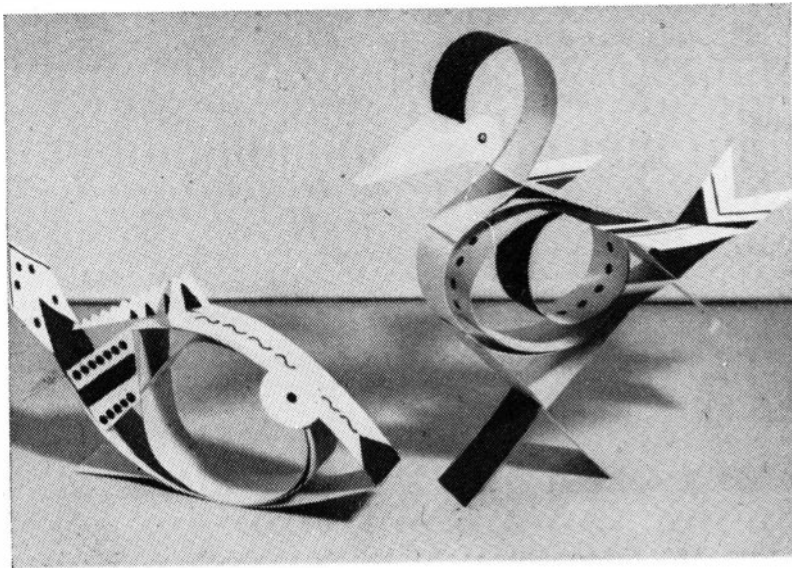
also seem that they have an eye to business as they have chosen as their official name Osmarea Laboratories, after a plant growing in the front garden. Philip and Colin say that they get more ready help from firms when they use their official title. (E.)

# MOBILES

## FROM

## CARD

## STRIPS



OUR illustration shows examples of colourful mobiles made from long strips of thin, pliable card-board. The latter is used to make the frame, or skeleton, of the shape and I find that manilla folders are adequate for this purpose. You may also buy large sheets of thin, white card from leading stationers. Remember that the card must be strong yet flexible. If it is too thick it will not make the necessary curves.

The card is cut into strips 1 in. wide, although this width can be modified at your discretion. Larger specimens may look better if prepared with  $1\frac{1}{2}$  in. or  $1\frac{1}{4}$  in. strips. Do not cut all the card into strips for some will be required for adding fillings and details. You will find that the thinner card is flexible and there is no difficulty in shaping to a nice curve.

Most of the joints are nothing more than half-joints made by cutting alternating slots in the strips and fitting together,

This method is shown in Fig. 1. Other parts are glued together and can be held firm with paper fasteners while the glue sets.

When the framework has been constructed we can proceed with the decoration. The more vivid your imagination and colouring the gayer your mobile. Poster paints are adequate for this part of the work and do not be frightened of using bright orange, vermilion, greens and other brilliant colours along with some original designs. Spots, stripes, ellipses, diamonds and stars or what you will may be used to achieve attractive specimens. Our illustration must be in black and white of course but no doubt you can imagine the effect if colour had been employed. Fig. 2 shows the skeletons of the bird and fish before decoration and the following describes the method.

### Bird

The body 1, is made from a 1 in. strip

14 in. long. Cut alternate slots  $1\frac{1}{2}$  in. from each end, bend into a curve and lock together. You will find that the card will curve much more readily if you take hold of one end of a strip between finger and thumb and pull it over the edge of the table while the other hand applies a little pressure. Repeat this two or three times when the card will curve, making it easier to bend into a rounded shape without buckling.

The head 2, is made from a 1 in. strip 9 in. long, slotted  $1\frac{1}{2}$  in. from each end while the legs 3, are made from two 4 in. strips slotted in the centre. Note that it may be advisable to glue two strips together for the legs if you wish the specimen to stand. The beak is cut from a separate piece of card, details being shown in Fig. 1.

Having prepared these few parts we glue the surplus ends of the head to the body. Before doing this make sure the head is in the correct position, then hold with paper fasteners until the glue sets. The legs are similarly glued to the body and finally the beak to the head. There are several positions for the beak and this is fitted in accordance with the general posture of the bird.

Additional pieces of card can be cut out for extending and tapering the tail, which may be decorated as desired. Wings may be made in many ways, e.g., we may pleat a strip of paper, colour, fasten one end to make a fan shape and stick to the body. Flat, pear-shaped wings may be cut out and stuck flat to the sides of the body if desired and you will note from the illustration that we can add triangular wings. You will also see that we can add as many decorative strips inside the body as we wish, each bearing

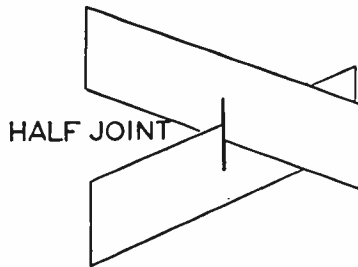
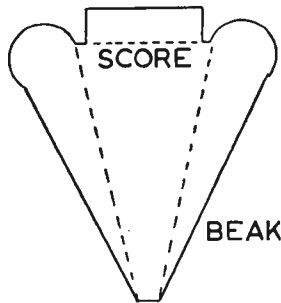


FIG 1



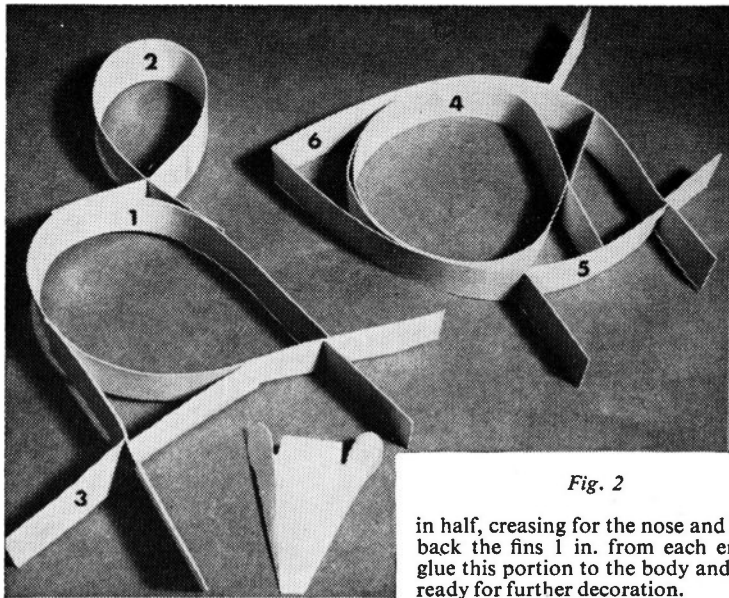


Fig. 2

in half, creasing for the nose and folding back the fins 1 in. from each end. We glue this portion to the body and we are ready for further decoration.

As with the bird we can add further strips inside the basic skeleton. This enables us to stick pieces on the sides after cutting to a suitable shape. An example of this method is shown in the illustration near the tail. The latter can be fashioned just as you wish, cut from another piece of card and stuck on the basic tail. A fin may be added by means of half joint and the basic fin then trimmed away with scissors to fit. The mouth may also be painted in while a disc of card may be used for the eye. The latter may have a paper fastener inserted — the brass type with a rounded head — or you may stick on a glass bead.

The best effects are obtained by mak-

a different design. The beak is glued on to the head by the tab but I also suggest a long pin be pushed through the centre of the eye and bent over at the other side to give a firm grip.

#### Fish

This has a central core 4, to reinforce the skeleton and is prepared from a 1 in. strip 12 in. long. Prepare half joints by making alternating slots 1 in. from each end. We now prepare the body 5, and tail from a 1 in. strip 14 in. long with slots 1 in. from the ends. The head 6, and fins require a strip 11 in. long. Fold this

ing really exotic looking specimens in the gayest colourings. Other strip animals can be made in the same manner by modifying the width of the strips. Dogs, tigers, bulls and the like are quite simple to construct once you have made the first basic specimens and if you wish to suspend them pierce a hole at a suitable point, adding a string with a knot at one end. (S.H.L.)

## SIXPENNY ILLUSIONS

**H**OW big is a sixpence? Your memory and reasoning powers can play curious tricks when you try to estimate sizes.

Consider the serial number on a pound note and guess how many sixpences would be needed to completely obliterate the figures. Or how many pennies would form a stack as high as a sixpence stood upon end?

Psychologists have demonstrated that we often take the value into account when estimating the sizes of objects. If one of two discs of identical size has a dollar sign printed upon it, the 'dollar disc' may look bigger. We underestimate the size of a paltry sixpence, which is actually  $\frac{1}{4}$  in. in diameter.

Only one and a half sixpences would be needed to cover the number on a pound note — and nearly a shilling's worth of pennies would have to be piled up to equal the width of a sixpence.

## Miscellaneous Advertisements

**STAMPS FREE** — Empire Packet with Approvals (4d. postage). — John Peck, 143 Markham Road, Winton, Bournemouth.

**UNDER 21?** Penfriends anywhere — details free — Teenage Club, Falcon House, Burnley.

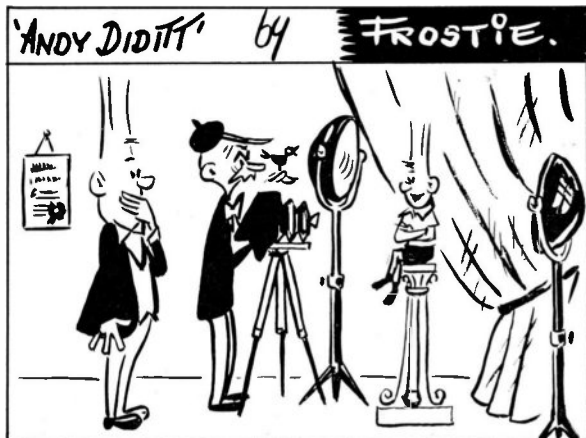
**PENFRIENDS** home and abroad, all ages. P.S.a.e. for details. European Friendship Society, Burnley, Lancs.

**FRENCH** penfriends, all ages under 21. Send s.a.e. for free details. Anglo-French C.C., Falcon House, Burnley.

**2000** Stamps FREE. Send for approvals and details. T. Brown, 23 Regent Avenue, Haydock, St. Helens, Lancashire.

**FOR** pen-pals read C-S NEWS, 9d. stamps & S.A.E., 2 Sutton Ave., Biggleswade, Beds.

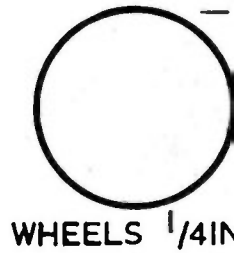
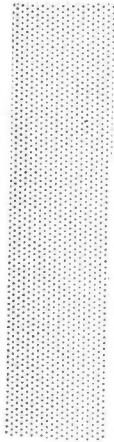
**COMPLETE** set of 12 wood CARVING CHISELS, all different shapes, ideal for Model Makers of all ages. Only 6/- P & P 1/6d. — Greenwood Discount Supplies, 108 Mayes Road, Wood Green, London N.22



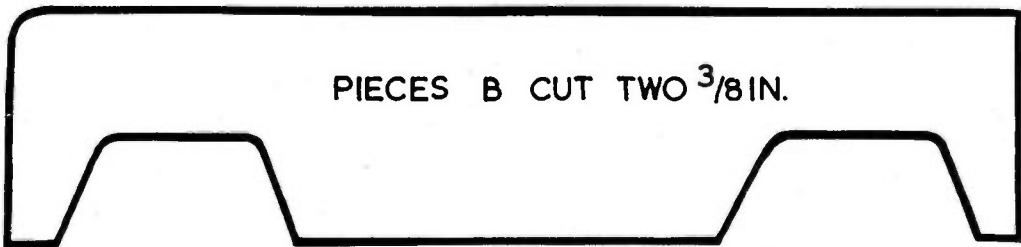
NEVER MIND THIS WATCH THE DICHY BIRD LARK - YOUR FOCUSING, EXPOSURE AND APERTURE ARE ALL WRONG!



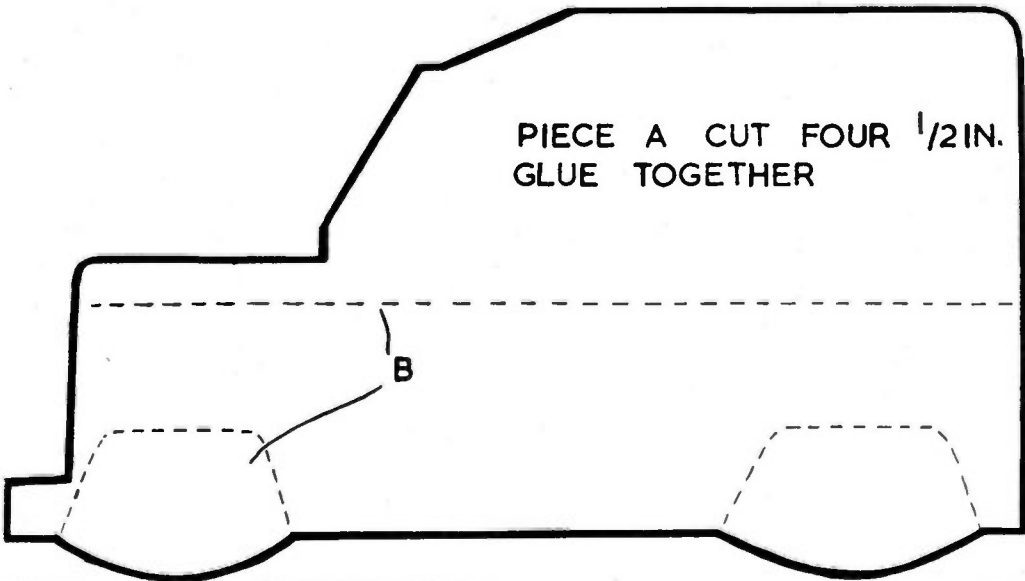
# TOY ROAD SERVICE TRUCK



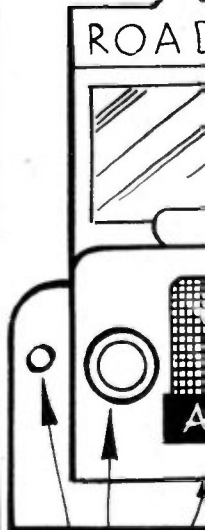
BLACK



PIECES B CUT TWO  $\frac{3}{8}$ IN.



PIECE A CUT FOUR  $\frac{1}{2}$ IN.  
GLUE TOGETHER



ROAD

BLACK

LIGHTS

BLACK



C. CUT ONE 1/8IN.

5 1/4IN.

LACK ON YELLOW

ROAD SERVICE

SPARE WHEEL

YELLOW

BLACK

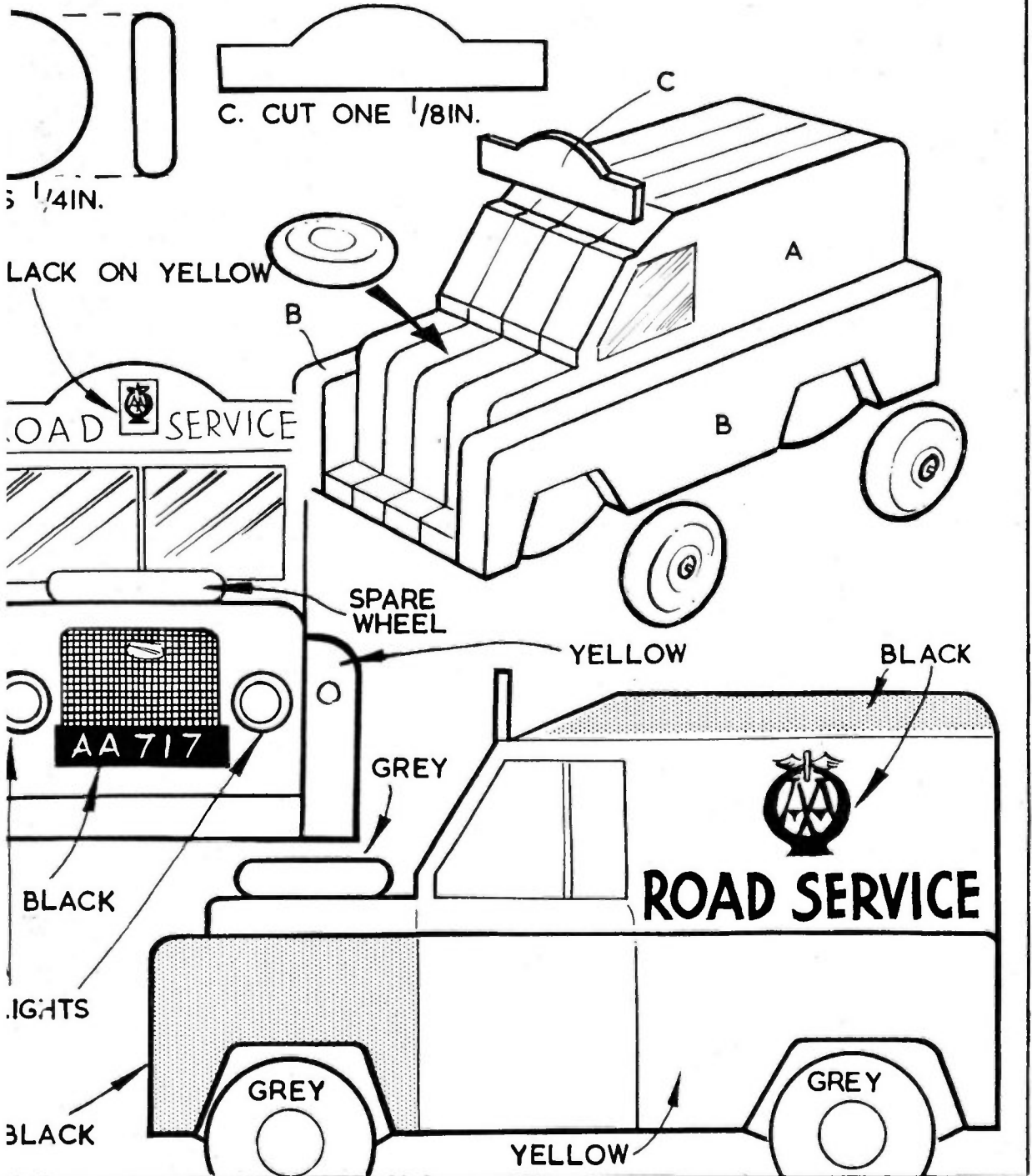
GREY

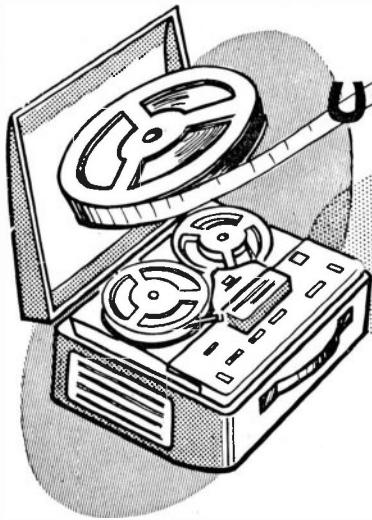
BLACK

LIGHTS

BLACK

YELLOW





# USING YOUR TAPE RECORDER

## AUDIO AND THE LAW

**M**OST people who use some form of audio or other — and I suppose that just means most people — are vaguely conscious of our copyright laws; but most of them know little of societies responsible for copyright protection, nor when they themselves violate copyright law.

There are two copyright protection societies — the Performing Rights Society and the Mechanical Copyright Protection Society. The former watches the interests of composers, arrangers, authors and publishers; the latter the interests of the record companies.

The Performing Rights Society, for whom I worked for four and a half years, is by far the better known. Those people who organize social functions are usually more cautious of this organization, and unless the event in question is a dance (practically all modern dance music is copyright and therefore the fees cannot be avoided except if the dance is in aid of a recognized charity) they might try and get by by playing a record of music by a non-copyright composer (copyright lapses fifty years after the composer's death), and then fall foul of the Mechanical Protection Society. I have, however overcome both these obstacles, by making live tape recordings of performances of non-copyright music.

The television or wireless set in the cafe or public bar is covered by licence, and the P.R.S. has many commissioned agents to keep a check.

It is illegal, technically, to make a recording of a record issued by a professional record company. Many a tapespondent, blissfully unaware of the copyright law, and who has never perhaps even heard of the MCPS, will send a copy of a disc that is beginning to catch

on in this country to a tapespondent in, say the US. He may even be aware of the MCPS; but has the idea that one copy cannot hurt the record company. But what if the American tapespondent likes

the tune, and sends off a few copies to his other tapespondents? And what if these other tapespondents have similar ideas? Indeed, one copy can sire thousands of others!

A tapespondent of mine said that if I was interested he would send me a copy of a strictly banned recording (in his country as well as mine). He had received it from someone in Singapore, who had it from someone in Australia, etc.

The use of tape recording in the law courts, for recording the proceedings, has aroused quite a good deal of controversy. Of course, to a rational mind there is only one side to the issue. If these tapes are safely guarded so that they cannot be got at and altered, then there is no case against the procedure; and the tapes are obviously so guarded. It may be rather hard on the shorthand writers, but then it was rather hard on the Dodo when he became extinct.

It is, however, absolutely right that a tape recording cannot be accepted as evidence, since a competent tapeologist can rearrange the words to completely alter their meaning.

So all those stories of the clever hero-detective who gets the villain to give himself away by hiding a tape recorder, are strictly phoney.

## THE HINDU BUTTERFLY TRICK

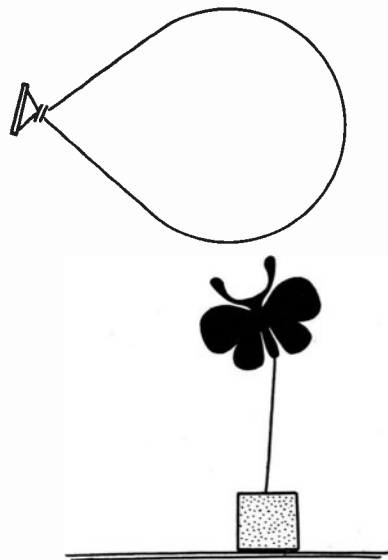
**Y**OU can imagine an atom as an incredibly minute 'solar system', consisting of a positively charged sun-like nucleus, around which negatively charged electron particles revolve in orbits, like planets.

Attractive forces between 'opposite' (negative and positive) charges keep the electrons in their orbits.

When you rub an inflated balloon against your pullover, electrons are separated from atoms in the wool. These electrons collect upon the balloon and give it a strong negative charge of static electricity.

The charge is static or still, because the balloon is made of an insulator, or non-conductor of electricity. You can make the electrons flow as current electricity by holding the balloon near a water tap, when the electrons crackle across in a 'discharge', and flow down the metal conductor to earth.

Make a tissue paper butterfly and glue it on to a cotton thread tied to a wooden block. Electrify your balloon and hold the butterfly just underneath the charged rubber or plastic, whilst letting the block stand on a table.



'Like' charges of electricity repel each other — so negative electrons on the balloon repel negative electrons in the paper, to give the butterfly a positive charge. Then the negative balloon attracts the positive near-side of the paper, and the butterfly hovers on top of the thread, like a Hindu boy in the legendary Indian Rope Trick! (A.E.W.)



# BULB BOWLS FROM PEAT

**S**OON it will be time to think about planting the bowls of bulbs which do so much to brighten the dull days of winter. This year, however, why not make your own bulb bowls?

Attractive and unusual containers for bulbs, more like indoor gardens than simple bulb bowls, are easy to make in a variety of shapes and sizes. The bowls described here are made of synthetic stone, which gives a natural, rockery-like look, with the blooms springing from it.

The materials used are sand, cement and peat. The peat can be fibrous, but not lumpy. Any lumps in it should be rubbed down with the fingers. Equal quantities, by volume, of these three materials are mixed thoroughly together with just enough water to make a stiff

concrete. Modelling a little of the mixture with the fingers on a board will show how it can be formed into a cone shape without collapsing. If this cannot be done, there is too much water in the mixture, and more of the dry ingredients

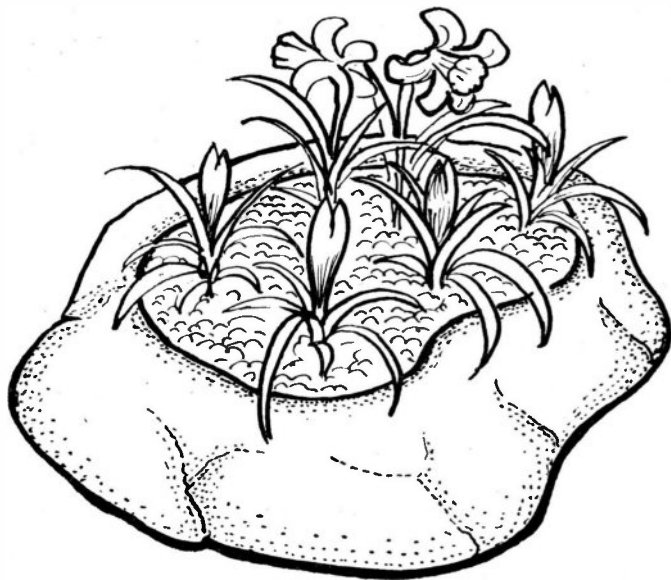
must be thoroughly mixed in.

To make small bowls up to about 9 in. in external diameter, place enough cement on a flat board to form a disc of the required diameter about 2 in. thick, A. An old knife blade can be used for the shaping. Place a cardboard collar, B, about 3 in. high and 5 in. in diameter on top of the base, and build up the walls of the bowl to the shape shown, C, tapering them as they rise, and pressing the mixture well into the base, so that it knits together. The walls should not be smoothed over, but left rough and uneven like natural stone.

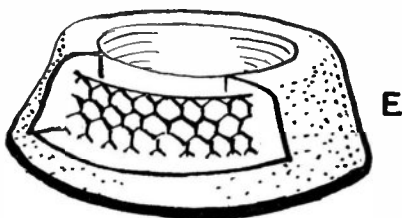
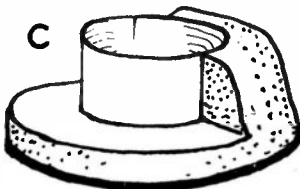
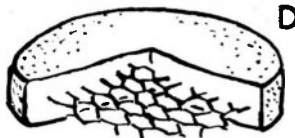
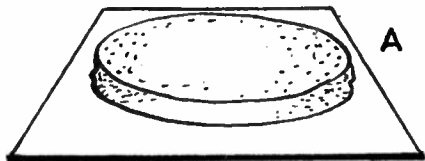
The finished bowl must be left undisturbed for several days before the paper collar is removed. The mix may take up to ten days to dry out completely to its final colour, a pale grey, flecked with fawn. The last step is to glue a piece of felt to the underside of the bowl to protect the surface on which it rests.

Bowls of virtually any shape can be made in this way. Larger bowls are better if they are reinforced, and smaller bowls can be made with thinner bases and wall if reinforcement is used. The base is reinforced by sandwiching a circle of chicken wire between two layers of concrete which are pressed well together, D. The sides are reinforced by sinking a ring of chicken wire into the base before it has hardened and building the sides round this, E.

While the natural colour of the concrete looks most attractive, the outside of the bowl can be finished with emulsion paint when it is perfectly dry.



By  
*A. Liston*



# CHEMISTRY

## AT HOME

**A** STRINGENT lotions are often in demand by the ladies. A good one may be made by dissolving in 25 ml. of isopropyl alcohol 0.2 gram of camphor, 0.1 ml. each of oil of lavender, oil of bergamot and 2-phenyl-ethanol. Mix in 5 ml. of distilled extract of witch hazel and then make up the volume to 100 ml. with soft water.

**Iron cement.** A useful cement for repairing holes in cast iron articles such as wash house boilers, or cracks in guttering, is based on iron filings with additives. Mix intimately 2 pounds of iron filings, 5 ounces of plaster of Paris, 2 ounces each of whiting and powdered gum arabic,  $\frac{1}{4}$  ounce of soot and 1 ounce of cement. Store it in damp free conditions such as in a screw capped jar. For use, mix some to a paste with water and press it well into the hole or crack, allowing an overlap on both sides of the cast iron surface. Where used for outside work, wait for the weather experts to forecast a fine spell, for the cement takes some hours to harden.

**Sweeping compound.** Places with dust and grime-labile cemented, tiled, or similar floors, can be cleaned efficiently between the ordinary washing by scattering a special compound and then sweeping. Grit, grime and dust adhere to the compound, and so clear the floor.

Mix together 2 pounds 3 ounces of sand and 2½ pounds of sawdust. Wet with a  $\frac{1}{2}$  pint of water, stir up well, and the mix in  $\frac{1}{4}$  pint of kerosene (lamp oil). Keep the compound in a large press lid tin to prevent drying out.

**Papier-mâché cleaner.** Lacquered trays, and similar articles of papier-mâché in need of cleaning, should not be sponged with soapy water. Use a paste of olive oil and plain flour, rubbing this on with a soft cloth and repeating the process until the rag comes away clean. Wipe off remaining paste and buff carefully with a soft cloth, preferably an old piece of silk.

**Pipe cleaning.** When a pipe tastes strong and unpleasant, it is time to give it an extra special clean with acetone. As acetone is inflammable, use it away from flames and wash the waste down the sink. Partly fill the bowl with acetone and cant the pipe so that the liquid runs into the stem. After a few minutes run off the acetone and clean with a pipe cleaner. Repeat this acetone steep if the poured off liquid is strongly coloured. Acetone is very volatile and evaporates quickly, but a little may lodge in the stem. Re-

## USEFUL RECIPES

By L. A. Fantozzi

move this by pumping air into the pipe with a bicycle pump until the smell of acetone has entirely gone.

**Light blue paint.** For a quickly made paint of this shade, mix intimately 18 ounces of zinc white powder (zinc oxide) and 1½ ounces of ultramarine powder. Add 2½ fluid ounces of raw linseed oil and rub up smooth. A little more oil may be added as a thinner.

**Graphite grease.** The excellent anti-friction properties of graphite lubricants are well known. Cyclists who need a supply for chains and bearing cups should first melt 93 grams of petroleum jelly. Remove it from the source of heat, stir in 7 grams of powdered graphite and continue stirring until the mass thickens. When cold the grease is ready for use.

**Iron adhesive.** The difficulty of sticking iron to stone or wood can be overcome by using the proper adhesives. Either of the following recipes will give good results, though the first is to be preferred.

Melt together 4 parts by weight of pitch, 1 part of beeswax and stir in 1 part of brick dust. Apply to the heated iron and clamp to the wood or stone until cold.

This second recipe is cheaper. Melt 4 parts of pitch and stir in 1 part of either sulphur, iron filings or brick dust and use in the same way as the first recipe.

**Upholstery reviver.** Leather upholstery will come up bright and new looking if rubbed with a special reviver. Put into a dry bottle 175 ml. of methylated spirit, 2 ml. of castor oil, 10.5 grams of sandarac and 42 grams of shellac. Close the bottle and shake occasionally until the solids have dissolved.

This will give a product which while reviving unworn leather may not adequately conceal scuffs and worn places where the colour has lightened. To rectify this more severe wear and tear, the reviver should be tinted by dissolving in it small amounts of dyes. For black, use Naphthalene Black; for brown, Bismarck Brown; for green, Brilliant

Green; for blue, spirit soluble Aniline Blue.

**Stone cement.** To mend broken stone, mix well 20 parts by weight of sand, 2 parts of lead monoxide (litharge) and 1 part of calcium oxide (quicklime). This should be stored in a well closed jar so as to prevent access of moist air. Immediately before use, mix some to a thin paste with boiled linseed oil. Smear this evenly on both surfaces, press together and leave undisturbed for at least a week. The longer it is left, the harder the join.

**Feather bleaching.** There are several ways of bleaching feathers. Perhaps the easiest and certainly the least likely to injure the feathers is to expose them in the moist state to sulphur dioxide. Sulphur dioxide is produced as a pungent smelling gas when sulphur is burnt.

First degrease the feathers by immersing them in benzene or a dry cleaning fluid, stirring them occasionally. Lift out and let them dry off. Next wet them in hot water and hang them in an upturned box. Light some flowers of sulphur in a tin lid, put it on a bed of sand or earth and cover it with the box. Leave for several hours. Then remove the feathers and let them air off until all smell of the gas has disappeared.

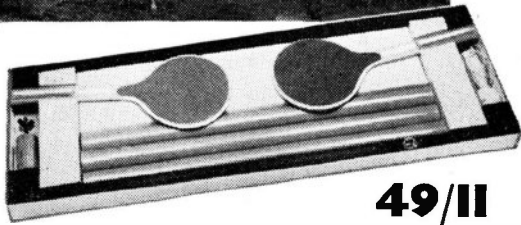
**Black finish on brass.** Attach the brass article to copper wire. Degrease the brass by swabbing with benzene and let it dry off. The blackening solution is made by dissolving  $\frac{1}{2}$  ounce of basic copper carbonate in 4½ fluid ounces of strong ammonia and finally stirring in 10 fluid ounces of water. Suspend the brass in the solution by means of the wire. When the article is completely black remove it rinse and allow to dry.

**Eau de Cologne.** A number of formulas exist for this popular perfume. A simple one requires 1 ml. of oil of bergamot, 0.5 ml. each of oil of neroli and oil of lemon, 0.2 ml. of oil of rosemary, 0.1 ml. of oil of origanum, 1 ml. of diethyl phthalate and 97 ml. of isopropyl alcohol. Put the isopropyl alcohol into a dry bottle, add the diethyl phthalate and mix by shaking. Then add the oils. Shake well until a clear solution results. Eau de Cologne improves by keeping, and if it can be left unused for at least three months a very pure fragrance results.

## SPECIAL FURNITURE CEMENT

For the better type of wooden furniture there is a particular adhesive. Mix well together 60 grams of barium sulphate, 13 grams of quicklime, 15 grams of mica and 12 grams of casein. All should be in powder form. If it is to be stored, keep the powder in a screw capped bottle fitted with an extra rubber disc within the cap. For use, mix some to a paste with water. It requires about 24 hours to set hard.





**49/11**  
(post 3/6)

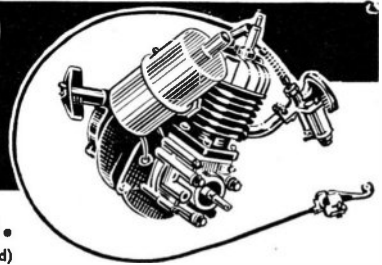
## PING BALL

*It's exciting — it's fun — it keeps you fit.*

Good for fun — excellent for exercise. Use it on the beach, in the garden, or in the house for all-the-year-round pleasure. Easily carried — assembled in seconds.

HOBBIES (Dept. H.53), DEREHAM, NORFOLK

**J·A·P**  
**34 CC**  
**ENGINE**



Only **£6. 10s.**

EACH (Carriage paid)

New J.A.P. two-stroke petrol engine, 34 c.c. Model J.S. 34 Complete with mounting studs, recoil starter, carburettor and silencer. Size 10 in. long, 12 in. wide, 11 in. high, weight 12 lb. Suitable for lawn mowers, go-karts and saws, etc.

**L. W. VASS LTD, (Dept. HW9), Amphill, Bedford**  
Amphill 3255

## HEAR ALL CONTINENTS

With **H.A.C. Short-Wave Receivers**

Suppliers for over 25 years of radio S-W Receivers of quality.

One-Valve Kit, Price **34/6** Two-Valve Kit, Price **52/6**

Improved designs with Denco coils. All kits complete with all components, accessories and full instructions including prepared and drilled chassis. Before ordering, call and inspect a demonstration receiver, or send stamped addressed envelope for descriptive catalogue.

'H.A.C.' Short-Wave Products (Dept. 22), 44 Old Bond Street, London, W. 1.

## KITS for OLD TIME SHIPS

Hobbies range of Ship Models includes Elizabeth Joans, Cutty Sark, Victory, Mayflower, etc. Complete kits of wood, sail material, guns, pulleys, cord, etc., with full-size patterns of parts and planed wood ready to cut out, shape and construct. A fascinating pastime.

Ask for free illustrated list at Hobbies Branches or from Hobbies Limited Dept. 99, Dereham, Norfolk

## A NEW AND FASCINATING HOBBY FOR ALL AGES



**No. 7836/12. PENCIL CRAFT No. 2.** As shown above with twelve colour-vue pencils and six pictures to colour, three different designs: Marines, Animals and Favourite Scenes. Price **14/11** each (post 2/9).

*The latest idea in colouring by numbers. Anyone — even a child — can make wonderful finished pictures. They make no mess, are easy to do and give hours of enjoyment.*

FROM  
ALL  
BRANCHES  
OR SENT  
TO YOU  
BY POST  
(SEE COUPON)



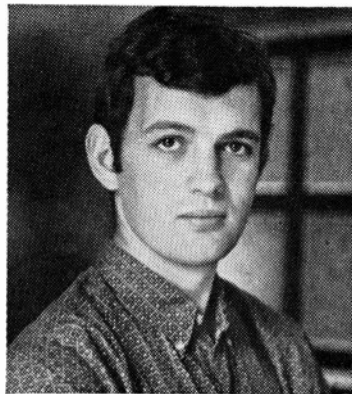
**No. 7835/8. PENCIL CRAFT No. 1.** As illustrated, with eight colour-vue pencils and six pictures to colour, three designs to choose from: Sports, Historic and Landscapes. Price **9/11** each (post 1/4).

**HOBBIES LTD, (Dept. H. 54), DEREHAM, NORFOLK**

Please send me Pencil Craft No. .... for which I enclose .....  
to cover cost and postage.

Name .....

Address .....



## CLIFF BENNETT AND THE REBEL ROUSERS

**T**IMES have changed for Cliff Bennett and The Rebel Rousers who were playing Rhythm 'n' Blues long before it became currently fashionable.

'Why don't you play something from the Top Twenty?' was a frequent request from uncomprehending audiences who didn't dig the earthy sounds they were hearing. But Cliff and the Group couldn't oblige.

'It would have been possible, I suppose' says Cliff, 'but it seemed unnecessary when the interval groups did it — and sounded like the Shadows, too. We just didn't use material from the Hit Parade. But even if we weren't getting through we didn't mind, because we knocked ourselves out and enjoyed it. We felt our turn would come.'

And it has, to such an extent that Cliff and The Rebel Rousers are held in high regard not only by their growing number of fans, but also by British and American entertainers who have seen them in action. They even have to contend with other groups copying their arrangements.

### 'Flattered'

'It's a dead liberty, of course' says Cliff, 'but at the same time we are flattered that they do this. When we play at certain halls we know other groups are listening and taking note, because we hear afterwards that they have started to play our arrangements.'

The scene for Cliff and the group changed, if not overnight, in a surprisingly short time. Back from one of their visits to Hamburg's famous Star Club, they discovered that the sound of the Mersey groups was suddenly 'in' 'The effect on audiences was fantastic' Cliff says. 'Instead of indifference we had recognition and interest. They were

digging us at last.'

Born in Slough on June 4th, 1940, Cliff's interest in music developed through hearing Lonnie Donegan records. He bought a guitar from a friend for £3. 10s., and with school pals formed a skiffle group, but after hearing Eddie Cochran records decided to play rock 'n' roll. At first their idol was Jerry Lee Lewis, but an R & B influence crept in after hearing coloured performers like John Lee Hooker, Bo Diddley and Ray Charles.

The group took their name from Duane Eddy's recording of 'Rebel Rouser' and turned professional in 1961. Not long afterwards they cut their first disc 'You got What I like', for independent producer Joe Moek. It was released on Parlophone and was followed by such records as 'Poor Joe', and 'Everybody loves a Lover'.

It was at Hamburg's Star Club that Cliff and The Rebel Rousers first found an audience which appreciated their music. They have been back by request on several occasions since and have won the compliments of American visitors like Bill Haley, Joey Dee, Bo Diddley and Jerry Lee Lewis.

'I did think about working full time in Germany, but the pace is so hectic that we would have become nervous and physical wrecks in a short time. The money is good, but sometimes you don't get to bed until six or eight o'clock in the morning, because the club just stays open all night. The German teenagers go home from work, sleep for a few hours, arrive at the Club around 10 p.m., when things are just warming up. They stay all night and go straight to work in the morning.

Off-duty, Cliff likes football, ten-pin bowling, swimming, tuning his hotted-up Mini Minor, and he has just taken up

golf. His ambition is to take the Group to play in America. He is 5 ft. 10 in. tall, weighs 11½ stone, has dark brown hair and eyes.

### In support

Other members of the group are Mick Burt (drums), Dave Wendells (lead guitar), Bobby Thomson (bass), Roy Young (electric piano and organ), Maurice Groves and Sid Phillips (tenors). They travel in a converted blue and white Daimler ambulance, once owned by the London County Council.

Cliff Bennett and The Rebel Rousers have a direct contract with E.M.I. and their sessions are handled by John Burgess, recording manager of Adam Faith and Freddie and The Dreamers. Their first release since joining the Brian Epstein empire was 'One Way Love'/'Slow Down' (R.5173).

## POTTERY AND MOSAICS

By Harold Powell

**T**HE contents of this book range from the advanced stages of coil and wheel pottery to the exciting possibilities of mosaic pottery and design.

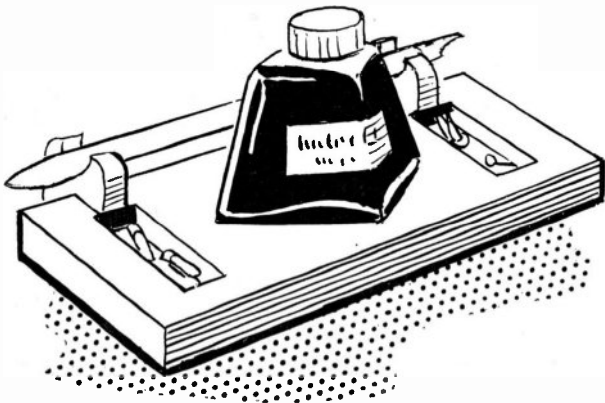
Mr Powell combines the qualities of a successful teacher and a skilled potter.

The introduction of Agate-ware into this book will please those who see and regret the passing of old crafts. The author gives a full explanation of 'Agate' making techniques, and supplies full detailed information about them.

Published by Blandford Press. 167, High Holborn, London, W.C.1. Price 12s. 6d.

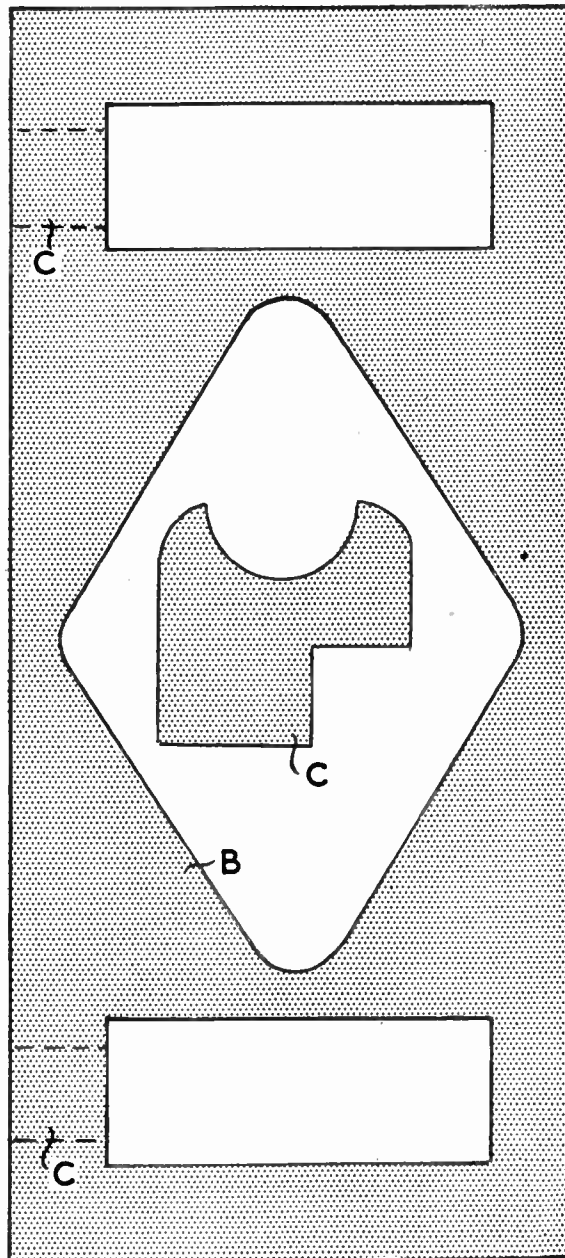
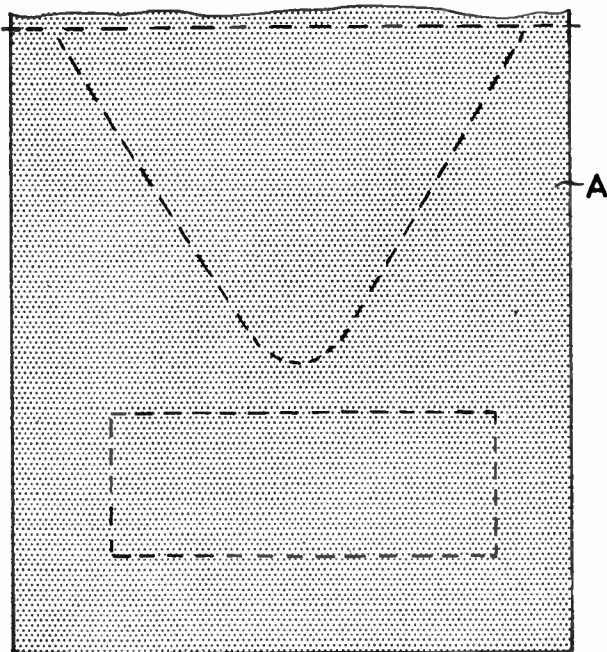


# A NEAT DESK TIDY



**T**HE two pieces A and B are cut from  $\frac{1}{4}$  in. wood, the centre cut-out being made to suit the particular bottle of ink used. Glue the two pieces together and pin from underneath. The two pen rests C are cut from  $\frac{1}{2}$  in. wood and are glued to B. Clean up and paint with high gloss enamel. (M.p.)

**CUT OUT FROM THESE FULL-SIZE PLANS**



# JUST LIKE THE REAL THING!

This exciting model of the 25 pounder incorporates the finest details of one of the most famous guns of the Second World War, still in use today. It is complete with ammunition-carrying limber and the four wheeled 'Quad' that tows it. 71 part kit — only 2/-. There are over 200 Airfix kits covering 13 different series. And at 2/- to 17/6d you can well afford to make all your models *just like the real thing!*



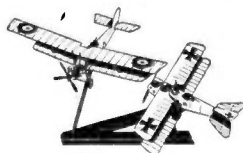
## AIRFIX CONSTANT SCALE

### CONSTRUCTION KITS

*Just like the real thing!*

From model and hobby shops, toy shops and F. W. Woolworth

### LATEST AIRFIX PRODUCTION



#### Dogfight Doubles

Two kits for the price of one, re-creating the famous dogfights of World War I.

Here you see the Rolland C11 and RE 8, one of a series of 3 sets — only 3/- a set.

ALSO NEW VAUXHALL VIVA Detailed model of the new 1 litre 80 m.p.h. saloon. 52 part kit — only 2/-

ALL THAT'S NEW IN MODELLING I  
Airfix Catalogue 9d. and Monthly Magazine 1/6d.