HOBBIES weekly

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★ *Free Design*

'MILL GARDEN'

THERMOMETER

Hobbies

FOR CRAFTSMEN OF ALL AGES

6D

A HUNDRED and fifty years ago it was quite an exceptional event for the average person to receive a letter. One of the main reasons for this was the cost.

Letters in those days were paid for by the distance they had to go. The cheapest was 4d. for a distance of up to fifteen miles, while if it went between three and four hundred miles it would cost 1s. 1d.

POSTAL DIFFICULTIES

By L. P. V. Veale

That does not seem so very much today, but one must remember the difference in the value of money. At that time a man would have to keep himself and his family on a wage of about 12s. 0d. a week so that he would have to pay over a twelfth of his weekly wage in order to have a letter.

Remember also that in those days a letter was seldom prepaid, the postman brought the letter and did not hand it over until he had received the charge. This led to many abuses, and one of these was that people agreed among themselves upon a code. If a letter was addressed in a certain way it meant that the sender was quite alright and that there was no need to worry. The recipient would just ask to see the letter, note how it was addressed and then hand it back to the postman saying that he could not afford it.

Letters were paid for not only by the distance but also by the number of sheets, and the envelope counted as a sheet. Consequently people did without an envelope by folding and tucking one end into the other and putting a seal to prevent it being opened in the post.

Another abuse was that practised by Members of Parliament. They had the privilege of sending letters through the post without paying for them; they just signed their names or 'franked' the letter. Cases are on record that they franked other people's letters as well as their own. One man even paid his servants by franking a number of covers and the servant then sold them for as much as he could.

It is said that it was the fear that the members of Parliament would lose their right to frank that caused the delay in passing the Act for Penny Postage.

One of the results of the high charges and the fact that a letter was only one sheet was that people wrote as small as they could so as to get as much as possible on one sheet.

The writer has a letter, size of page 9 in. by 7 in. and the writing is so small that the person who wrote the letter was able to get 720 words on each side of the page; yet it is so well written that although the letter was sent from Marseilles to Ireland on 5th March 1829 it is easy to read even today.

Another dodge which was tried was that of writing at right angles to the first lines. Try this manner of writing yourself; write carefully and you will be surprised how easy it is to read.

Another difficulty in the matter of sending and receiving letters is shown in the illustration. You can see that the envelope has three stamps from Tonga, one of the islands of this group being Niuafoou. Because of the breakers, ships have to anchor some distance offshore and the letters are taken out by canoe. But it isn't very easy for the canoe to get very close to the ship, so the letters are placed in a tin in case of disaster. This has given rise to the term 'Tin Can Mail'. Letters from the ship were also placed in a tin and thrown to the canoe.

Not unnaturally this attracted quite a little attention as a curious method of delivery. The postmaster at Niuafoou saw the chance of cashing in on this system and as you see there are envelopes plastered with rubber stamps 'Tin Can Mail' 'Despatched by Canoe Mail' and so on — these of course for the benefit of the philatelist.

This has now stopped but although one must consider such exhibits as suspect they nevertheless remind one of some of the difficulties that were experienced in the olden days when they wanted to send letters.

* * *

WORLD'S FAIR

This imposing stamp and special cover was issued on April 22nd, the day the fair opened. It shows the main hall of the fair, with the Unisphere to the left. The embossed cover is a stylized representation of the Unisphere.

MILL GARDEN THERMOMETER

THIS very attractive model has been designed especially as a one evening project suitable both for the beginner in fretwork or for the more experienced worker. When made up it is a very attractive little gift and would be ideal for sales of work and bazaars.

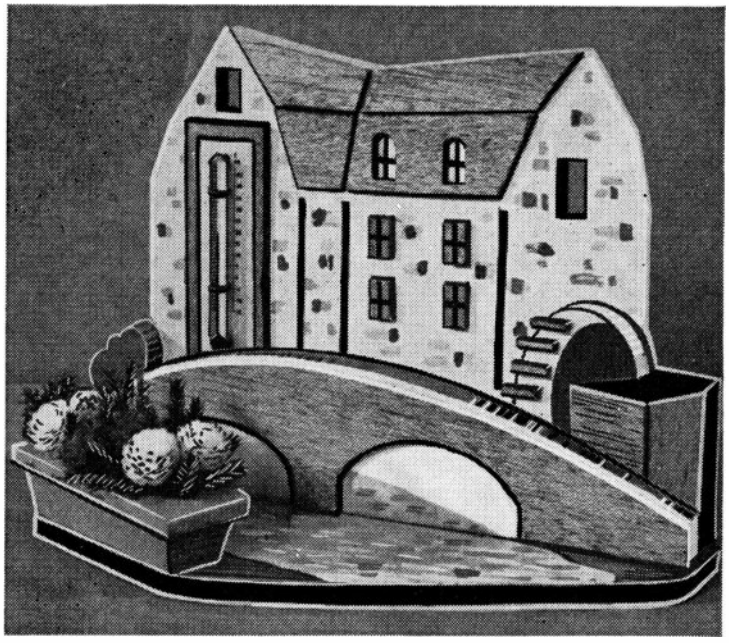
The subject is based on a watermill which incorporates a thermometer for practical use. In the foreground there is a miniature flower garden which gives a very colourful effect.

The make up is quite simple even for the beginner and with the use of contrasting woods no other finish need be applied. However, colour suggestions for the mill and bridge have been indicated on the design sheet for those who are competent with a paint brush, and colours of course will add to the attractiveness.

The novelty stands on a base 5½ in. by 2½ in. and is 3¼ in. high, which is handy for a narrow shelf or for standing on the sideboard or dressing table. Alternatively, wall brackets can be added at the back if it is required for hanging.

Hobbies kit includes all the contrasting woods required, thermometer unit and flower box.

All parts are shown full size on the design sheet. These should be traced and transferred to the appropriate thicknesses of wood by means of carbon paper. As the $\frac{1}{16}$ in. wood is inclined to be rather brittle, care will have to be taken in its cutting. It is suggested that strips of transparent adhesive tape are stuck over the cutting lines and when these are cut with the fretsaw it will prevent the edges of the wood from flaking. The tape is of course peeled off after cutting. Make all the interior cuts first before cutting round the main shapes of each piece.



Clean up all parts thoroughly with glasspaper before assembly, which will be by glue throughout. All the various stages in assembly are presented in diagram form on the design sheet. Make a start by glueing all the pieces indicated on to the back (piece 1). These will be the roof pieces of $\frac{1}{16}$ in. wood (4, 5, 6 and 7) leaving small gaps in between as shown by the dotted lines. Similarly, add the thermometer frame (9) and the four windows (8).

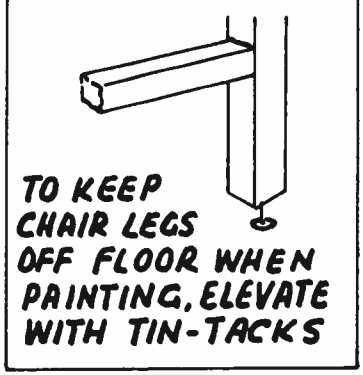
Now add the shrub (3) and the wheel (2) cut from $\frac{3}{16}$ in. wood. These will act as 'spacers', setting the bridge forward to give a 3D effect. To the wheel are added small paddle pieces (12) and cover pieces (10 and 11).

The $\frac{3}{16}$ in. piece of wood forming the bridge (13) is next glued to pieces 2 and 3 and to this bridge outline is glued piece 14 with its cut-out archways.

This mill and bridge assembly can now be glued to the base (piece 15). Piece 16, which suggests a flowing stream going through the arches, can be cut from thin blue card or painted in that colour and glued to piece 15. The small floral box and the thermometer are then glued in their respective positions.

If you are painting the model, poster colours will be quite effective. The photograph shows how brickwork on the mill can be indicated by dabs of grey paint on the white background. River banks will be green and the blue stream can be flecked with white and grey.

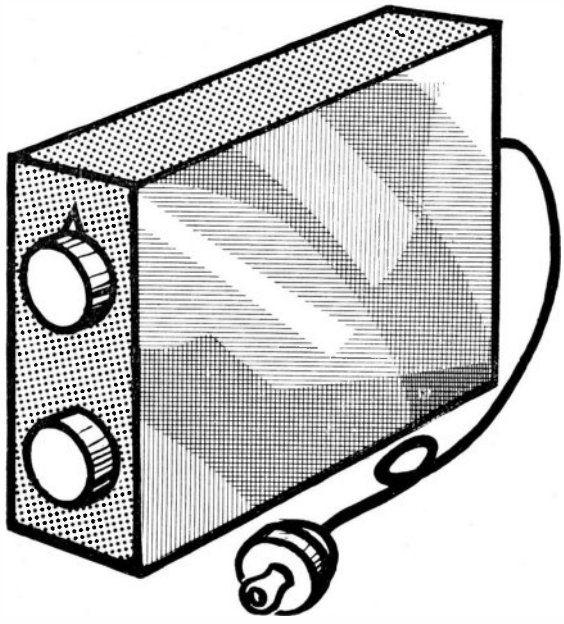
Quik-Tip



Personal listening:

A POCKET TRANSISTOR 2

By 'Radio Mech'



THIS receiver is self contained, for personal listening, and has an internal ferrite rod aerial. It is not built to the smallest possible dimensions, because this tends to make construction more difficult. The actual size is a little over 5 in. by 3 in. by 1 in., with the control knobs on the end, and this can easily be slipped into a pocket.

The circuit is shown in Fig. 1, and the first transistor A is a regenerative detector. This type of detector is sensitive to weak signals. Regeneration is controlled by the 50k potentiometer, which also has an on/off switch.

The second transistor B is an audio amplifier, and the output works a single personal phone, or an ordinary set of headphones. The personal phone can be carried in the receiver. A 6V, 7½V or 9V battery is used.

Receiver case

This can be of any material except metal. Plastic boxes with hinged and snap-on lids can be obtained from various well known stores. Transparent lunch boxes of this kind can be given a good finish by painting them inside. Enamel or oil paint of any colour can be used. Small trinket boxes with hinged lids are usually tinted. If the box is 5 in. long inside, this allows a 5 in. ferrite rod to be fitted. For a smaller box, a shorter rod is necessary.

A case can also be made from perspex, Paxolin sheet, or thin wood. The actual dimensions do not matter, if all the parts can be fitted. In fact, if miniature transistor type components are used throughout, the receiver can easily be made in a box which is smaller than the size mentioned.

Ferrite rod

This is 5 in. long and ⅜ in. in diameter, and is wound with 26 s.w.g. double-cotton-covered wire, turns being side by side. The winding is shown in Fig. 2.

Winding begins at point 1, about 1 in. from one end of the rod. Fifty-five turns are wound on, and a small loop is twisted, point 2. Ten more turns are then wound, and another small loop is made, for point 3. Winding then continues for eleven further turns, and the coil ends at point 4.

Ends 1 and 4 are left a few inches long, to reach to the fixed plates tag F of the 150pF tuning condenser, and trimmer tag T. Insulation is scraped from loops 2 and 3. The 0·05μF capacitor is soldered to loop 2. A lead to reach moving plates tag M is soldered to loop 3.

Sealing wax or adhesive will hold ends 1 and 4, or they can be tied with thread, or secured with adhesive tape.

If a different rod is used, or wire of different s.w.g., the number of turns may need changing. The receiver should tune from about 300 to 500 metres (medium waveband.)

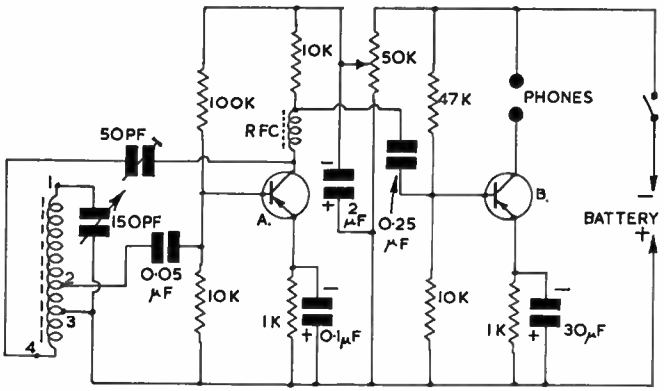


Fig. 1—Pocket receiver circuit

Transistors

Transistor A should be for radio frequency circuits. An OC44 or NKT152 may be used here. With cheap surplus transistors, or a transistor in poor condition, or not intended for RF circuits, it may be impossible to obtain regeneration.

Transistor B is an audio amplifier, and thus less important. An OC71, NKT252, or similar good quality audio transistor will be satisfactory.

The NKT and many other transistors are shaped as in Fig. 2, and have three wires. One wire is Emitter, the central wire is Base, and the remaining wire is Collector. These leads are marked E, B, and C in Fig. 2. Emitter and base wires are close together, and there is extra spacing between base and collector wires.

OC44 and similar transistors are round in shape, and there is no extra spacing between base and collector

wires. Instead, a red spot on the transistor indicates the collector lead.

Paxolin panel

The receiver is wired up on a $\frac{1}{16}$ in. thick Paxolin panel which is cut to fit inside the case. The resistors, capacitors, and other small parts are held by passing their wire ends through small holes.

All connections are shown in Fig. 2. Some 26 s.w.g. or other thin wire is handy for connecting purposes, and lengths of 1 mm. sleeving should be cut out and placed on leads which cross each other, to prevent short circuits.

If preferred, wires between components can be on the reverse side of the panel. Care should be taken not to make any wiring mistakes, if this is done. The long ends of resistors and capacitors have to be cut off.

Resistors can be inserted either way round, as can the small capacitors. But the 2μF and 30μF capacitors have positive and negative ends, which must be as in Fig. 2. Resistors are usually colour coded, and the colours are in bands, read from one end. The colour coding is given in the component list.

The trimmer is held by drilling holes for its tags and central screw. The 150pF tuning capacitor, and 50k volume control, are left until last. Elastic, passed through two holes and knotted, holds the battery. Proper positive and negative snap connectors are best for the battery terminals, so that there is no danger of reversing these. If a battery is connected in the wrong polarity, this will probably damage the transistors.

A small iron is most convenient for soldering, and joints should be made quickly. The transistor leads should all be at least $\frac{3}{4}$ in. long, and should be soldered rapidly. If the iron has reached its full temperature, and leads are clean, a good joint should be made in about two seconds. Radio type cored solder should be used. Lengthy heating can damage the transistors, or other parts. Transistor wires are sometimes gripped with flat-nosed pliers, between the soldered joint and body, during soldering. This helps to prevent heat travelling up the wire. If joints are soldered quickly this precaution is not needed.

Phones

If a small personal phone is used, this should be of the usual medium impedance magnetic type. *Crystal phones* cannot be used with this circuit.

Ordinary headphones, of the kind employed with crystal sets and small valve sets are also satisfactory. These usually have a resistance of about 500 to 4,000 ohms. Headphones of this type can give very good results.

The phone leads can be soldered directly to small wire loops fitted in holes in the Paxolin. Or two small screws or terminals can be used. A notch is cut in the case so that the phone leads can come out, with the lid closed.

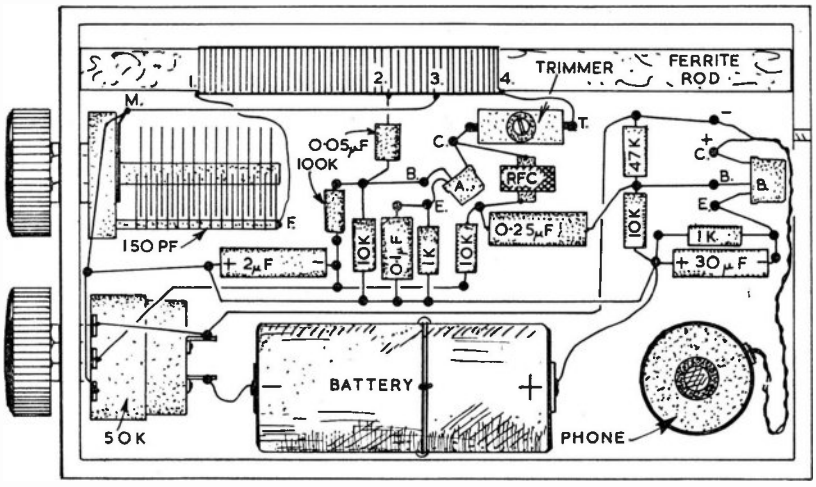


Fig. 2—Wiring plan of pocket receiver

External Aerial

Normally, good reception of reasonably strong stations can be expected with the internal ferrite rod aerial. If the set is to be used occasionally with an external aerial., this can be connected to F on the 150pF Capacitor. A short vertical wire, or telescopic rod aerial, will increase the number of stations heard. If a very long aerial is used, an insulated wire from it should be looped round the insulation on lead 1, as a direct connection will make tuning too flat.

Direction

Rod aerials of the type used in the receiver always pick up signals most strongly when broadside to the station tuned in. This is not of much importance when signals are fairly strong.

With weak signals, however, the set should be turned for best volume. This is very easily done, if needed.

Regeneration

The trimmer has to be adjusted so that best results are obtained, and it can then be left. To do this, a station should, be tuned in with the tuning capacitor about $\frac{1}{3}$ to $\frac{2}{3}$ closed, and the 50k regeneration and volume control is set at about half its full position. The trimmer is then slowly screwed down, from the open position, until oscillation is heard. Oscillation should cease when the regeneration control knob is turned back slightly.

A check can then be made that regeneration can be had through the whole tuning range. If the trimmer is screwed down very far, oscillation may begin abruptly, and best volume will not be obtained. But if the trimmer is much unscrewed, no regeneration will arise, and volume will be very poor (unless an external aerial is added).

The 50k potentiometer is used to build up the volume of weak signals. Adjustment is not very critical with strong signals, and the potentiometer then acts much as an ordinary volume control. But with weak signals, careful adjustment is needed. The knob should only be turned far enough clockwise to bring the receiver nearly to the point where oscillation begins.

With the 150pF tuning capacitor, and aerial wound as directed, nearly all the medium waveband can be covered, with smooth regeneration.

COMPONENTS LIST

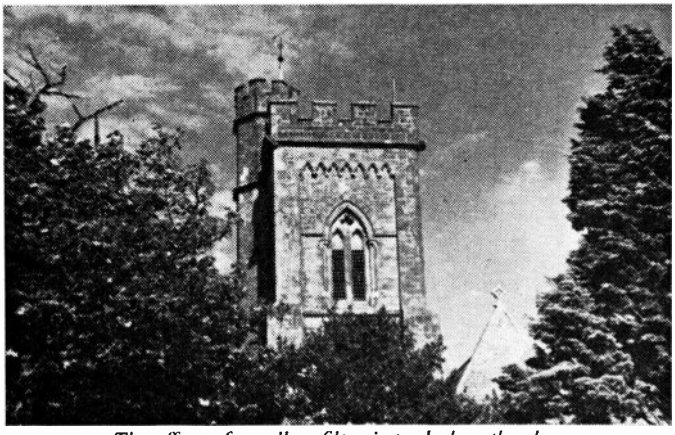
Low voltage miniature capacitors: 0·05μF, 0·1μF, 0·25μF, 2μF and 30μF.
150pF air spaced miniature short wave tuning capacitor.
50pF pre-set trimmer.
50k (50,000 ohms) miniature potentiometer with switch.
Two 1 in. knobs.
$\frac{1}{4}$-watt resistors:
two of 1k (brown-black-red, silver).
three of 10k (brown-black-orange, silver).
47k (yellow-purple-orange, silver).
100k (brown-black-yellow, silver).
Miniature transistor receiver type radio frequency choke.
5 × $\frac{5}{8}$ in. ferrite rod. 26 S.W.G. DCC wire.
1yd. 1mm. sleeving.
Battery connectors, Paxolin, etc.
Transistors, see text.
(A postal supplier of above components is Home Radio, Mitcham, Ltd., 187 London Road, Mitcham, Surrey.)

Improving sky effects:

Use Filters on Your Camera

DO all your view photographs suffer from permanently blank skies? This is a problem that troubles many would-be serious camera users, for nothing adds more to a pictorial photograph than a nicely graduated sky complete with natural-looking cloud formations. The answer is quite simple, and you can have a great deal of fun experimenting with the production of different types of skies in the same photograph.

By A. E. Bensusan



The effect of a yellow filter is to darken the sky.

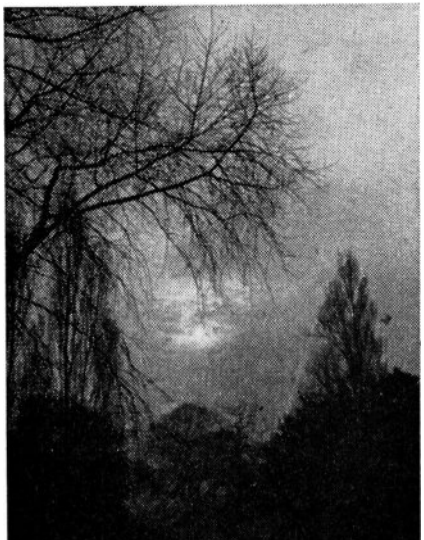
The secret lies in the use of filters. These are circles of coloured material which are placed as close as possible in front of the camera lens when the photograph is taken. There are three types of filter in common amateur use; these are gelatine on its own, gelatine sandwiched between two pieces of optically flat glass, and solid coloured glass which is dyed during manufacture.

The gelatine filters are the cheapest to buy, and they come in 2 in. squares which are cut in a circle to suit the camera. They are available in a wide range of different colours, but they need very careful handling since they mark so easily. It is essential to hold them only by the edges and to discard them should they become finger-marked.

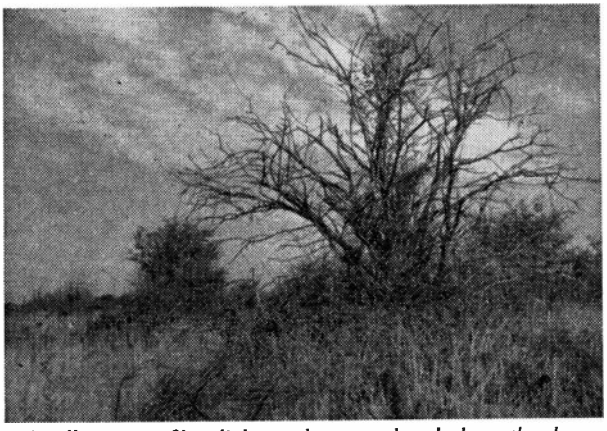
A little more expensive are the gelatine and glass sandwich type filters. These do not suffer from the same delicacy, but they are subject to damage by dampness and must, at all times, be kept in a dry place. Because of this susceptibility, gelatine and glass filters are not really suitable for use at the seaside.

Glass filters are not only the dearest but, as might be expected, also the most satisfactory. Even then, they range from only five shillings each in glass according to size, so their cost is no real drawback. The range available is rather more limited than is the case with gelatine filters, but sufficient varieties for average purposes are always available. When you buy a filter, always take your camera along to the shop, since you will also need a holder of the correct size to fit your lens.

The effect of a filter is to lighten subjects of its own colour, and those near to it in the spectrum, and to darken the complementary colours. Provided that it does this in moderation, it is known as a 'correction' filter. If the filter is of such a colour or density that grossly

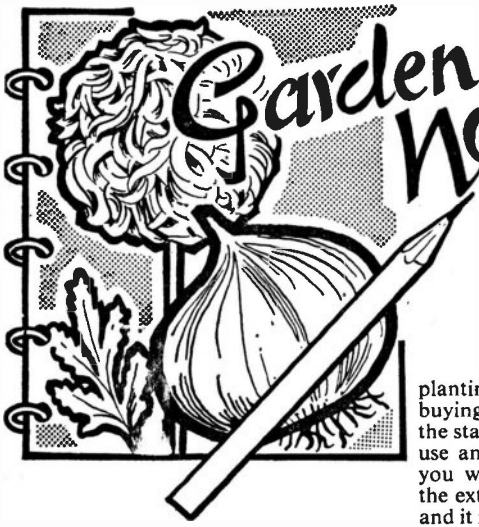


A red or orange filter gives the impression of evening in daylight.



A yellow-green filter lightens the grass, but darkens the sky.

● **Continued on page 135**



PLANTING OUT FLOWERS

ALTHOUGH some plants can be moved to their flowering positions in the latter half of May, it is not safe to plant tender annuals until the first week of June. Bedding begonias, both tuberous and fibrous, are particularly susceptible to cold and chilling winds and nothing is gained by planting too early.

A good hand trowel is essential for planting out and if you contemplate buying a new one it is worth considering the stainless steel type. These are a joy to use and if you have a lot of use for it you will find that time saved is worth the extra cost. The soil falls away freely and it is so easy to wipe clean.

Plants in pots and boxes should be watered thoroughly the night before and then again just before planting. Take the plants from the boxes with a good ball of soil adhering to the roots and plant quickly, leaving a shallow depression round the stem for watering. If the weather is sunny and warm the plants are almost certain to wilt, but if they are watered every evening it is seldom that they take more than a day or two to recover.

Plants which are purchased loose from such as market stalls are most likely to suffer from the effects of the sun. They should be planted as soon as possible and it may be necessary to provide shade for a day or two. Leafy twigs stuck in the ground in front of the plants will break the full strength of the sun and provide enough shade to help the plants through.

Many people will advocate waiting for rain before planting out, but in actual practice this is not always effective. Hot sunshine may follow the rain and you have gained nothing since the freshly planted flowers are not yet established. If, however, planting is carried out without waiting for that welcome shower your plants will become established and will surge ahead when it does eventually come.

If there is any need to provide fertilizers to the soil this should of course be forked in before planting, but the individual plants should not be fed until at least three weeks have elapsed. After this they may have a little about once a fortnight. Too heavy feeding will almost certainly produce foliage rather than flowers.

It is advisable to stake dahlias at the time of planting since later staking may well damage the tubers. Push the stake in firmly and tie the plant loosely to prevent wind damage. (M.h.)

● Continued from page 134

CAMERA FILTERS

exaggerates the actual tones you see before the camera, it is known as a 'contrast' filter.

The filter offering the least possible correction is a pale yellow one. This absorbs all the ultra-violet light, which is not visible to the human eye although it has an effect on the photographic emulsion. Because ultra-violet light is extremely prevalent at the coast and at high altitudes, the pale yellow filter is particularly suitable for general use in mountainous districts and at the seaside. A slightly deeper yellow filter is a firm favourite with pictorial photographers, as it darkens down blue skies sufficiently for white cloud formations to be clearly seen and rendered. Otherwise, it has very little effect on the picture as you see it by eye and it is, therefore, the type of correction filter every enthusiast should have available.

Another firm favourite with photographers specializing in views is the yellow-green filter. This is considered by many to give the most natural correction possible and it does no harm to use it always in a view. With this filter, the clouds will be brought up almost as well as with a yellow filter, but green foliage will also be lightened a little in tone, so giving the photograph a sunny appearance even in comparatively dull weather.

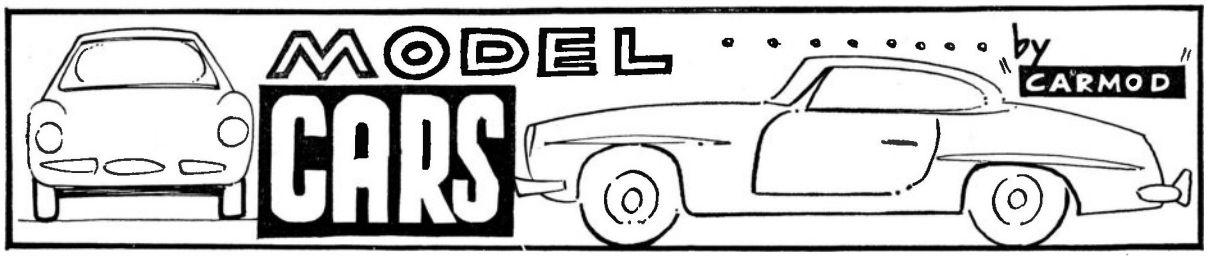
A deep green filter is really a contrast filter since it will render all colours except green very much darker, while green itself will be so light as to be almost white. Other contrast filters are red and orange, the former darkening down blue, green and some of the yellows while rendering red and the warmer yellows a little lighter. The effect of an orange filter is somewhat similar, but not quite so marked. In particular, red and orange filters are ideal for taking pictures in the daytime which give the effect of having been taken during the late evening.

If you use a filter over your camera lens, then its density will absorb some of the light which would otherwise pass straight through the lens and on to the film. So an allowance must be made for this drop in illumination, and this is done by applying a 'filter factor'.

When you buy the filter, you will see marked on the packet a symbol such as '× 2' or '× 3', or some similar value. This means that the exposure must be increased by the marked amount. For example if the filter is '× 2' then you will need to double the exposure, while an '× 3 filter will require treble the exposure, and so on. You can make this correction either by opening up the lens aperture by the required amount or by increasing the time for which the shutter is open.

Although this sounds rather complicated at first glance, it is in fact quite simple to carry out, and a little practice should soon make perfect here. If you are using a '× 2' filter, and the exposure without a filter would be 100th at *f*/8, then the exposure with the filter must be altered to either 100th at *f*/5·6 or 50th at *f*/8.

Be a little adventurous with your filters. They can often transform a conventional snapshot into a genuinely attractive picture. There is nothing difficult about their use and, in the small plastic cases which can be obtained for a few pennies, they take up little room in the pocket or outfit case.



MODEL car choppers, active in either the die-cast miniature or plastic kit fields, find that one of the most difficult problems is to discover a convincing method of representing chrome or stainless steel parts or car trim.

CHROME PARTS AND BODY SHELLS

Many kits and some die-cast vehicles have sprayed silver parts but with certain exceptions, such as the Corgi Bentley Continental, the result is quite inadequate both in appearance and durability; one notorious model will lose its shine within minutes of falling into the hands of a playing child, leaving the car with odd-looking red coloured bumper bars.

Many choppers are finding that the use of silver paper for representing the shiny parts can enhance an otherwise drab-looking model where silver paint with its flaky texture is unsuitable. It calls for some practice before the method of application can be considered perfect but results are well worth the trial and error.

I find the best way of applying it is to treat the parts to be plated with an extremely thin coating of 'Durafix' and allow this to almost harden. A piece of silver paper, slightly larger than the surface to be plated, is placed in position and smoothed with a rounded object like the end of a screwdriver or even a finger nail. The edges can them be trimmed with a razor blade.

The wheels of die-cast miniatures are generally poor in detail, and there is much scope here for the chopper to enhance his modifications. Silver paper can be used to effect for this purpose but a pattern is needed and one often has to go to foreign-made models for such 'tools'.

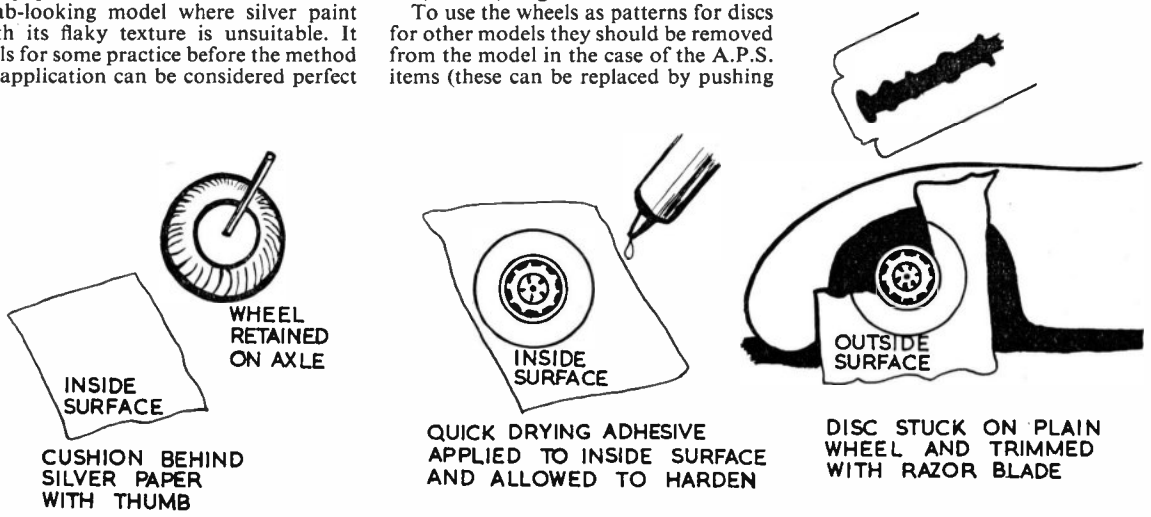
The wheels on A.P.S. Politoys (Italy) are quite well detailed where a wheel with lightening holes is needed, and the Tekno (Denmark) Cooper Norton 500 has ribbed wheels which are appropriate for all Cooper cars in 1/43rd scale, and are also acceptable as the 'wavey-webb' Lotus wheels. These foreign made models may be obtained when required from Charlier-Niset, 7, Rue du Chemin de Fer, Wavre, Belgium.

To use the wheels as patterns for discs for other models they should be removed from the model in the case of the A.P.S. items (these can be replaced by pushing them straight back onto the axles. Retaining the tyre on the wheel the latter is pushed on to a piece of silver paper using the thumb as a cushion beneath the paper.

When the required number of wheel discs have been so formed, Durafix is lightly applied to the reverse side of the disc and allowed to harden. When set, the discs can be carefully put into place on the crude wheels, again using Durafix as an adhesive. When set, the waste silver paper is trimmed off with a razor blade and tyres replaced.

There are many occasions when hard-tops are needed for sports car conversions and this often causes considerable problems to even the most experienced choppers. Gummed paper strip is a good material for making 'lids' as well as other parts where a shell of a multiple-curved shape is needed.

First of all the part is built up on the model with Plasticine, and the strips cut in widths of about $\frac{1}{16}$ in. are stuck down on to this former. Several layers (usually three in the case of 1/43rd scale miniatures) are applied, each layer crossing the other at right angles. The model is then set aside to dry, after which it can

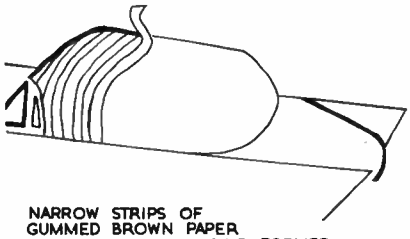


SILVER PAPER WHEEL DISCS

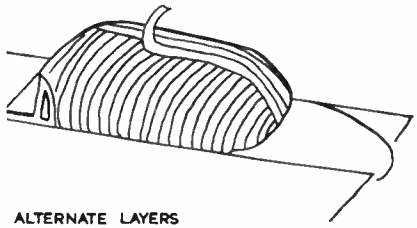
be hardened by application of suitably thinned clear cellulose dope.

Any irregularities on the surface can be smoothed with fine glasspaper, windows and other apertures cut, and the part removed from its Plasticine former. After trimming, painting, and glazing, the part is ready to be fitted in position.

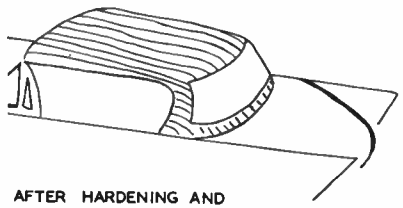
Next time: the 1962 E Type Jaguar Coupe Le Mans of Briggs Cunningham using a Spot-On basic.



NARROW STRIPS OF GUMMED BROWN PAPER STUCK OVER PLASTICINE FORMER



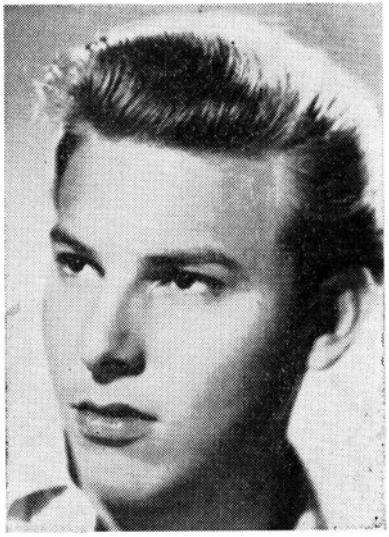
ALTERNATE LAYERS AT RIGHT ANGLES



AFTER HARDENING AND SMOOTHING, WINDOWS ETC. ARE CUT IN SHELL.

HARD TOP SHELLS.

HANK WILLIAMS



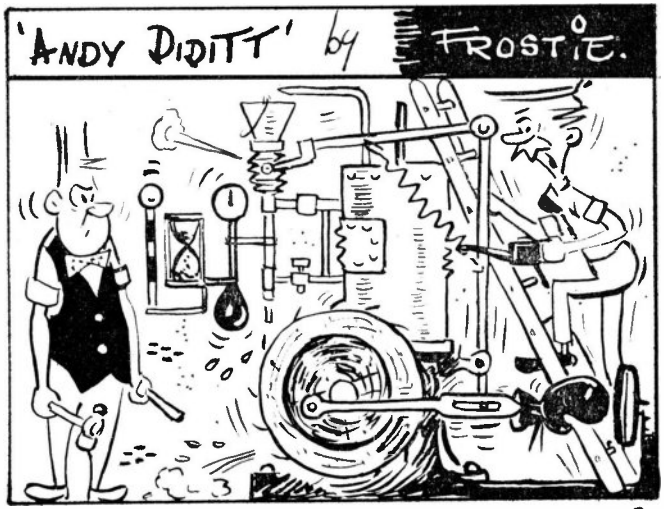
WHEN Hank Williams, Sen. had his biggest ever hit in the forties with the immortal *Lovesick Blues*, they didn't have Hit Parades. Now they do. And now Hank's son has gone on record for the first time with *Long gone lonesome blues* (MGM 1213), which was rapturously received in American 'country' circles, and which in fact went straight into the best-selling lists over there.

Hank, Jun., a tall, muscular, fair-haired youth with a pensive air about him, sounds to many like a duplication of his father. Which can only be good when you consider that the untimely death of Hank, Sen. left a gaping hole on the country music scene.

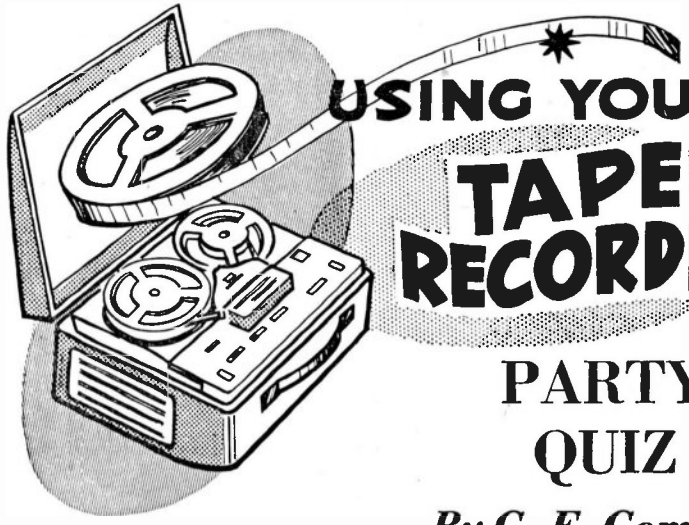
Hank, Jun. (now 14) was four years old when his father was killed. He says he can't recall too much about him — the songs his father taught him, the sing-a-long songs the family used to have together.

He doesn't even look like his father, and while his mike-technique and easy manner on stage spell professionalism and stagecraft extraordinary, he does not pretend to possess the over-powering drive and frantic emotion which hall-marked his father's live performance.

Yet in his singing there is that same grey-voiced sadness which still conjures misty-eyed memories of the thin, lanky balladeer with the burning eyes who gave the world more hit songs than any other country music star.



"NOW WE'VE INVENTED IT, WHAT CAN WE USE IT FOR ?"



USING YOUR TAPE RECORDER PARTY QUIZ

By G. E. Gompers

A TAPE quiz has two advantages over a personally conducted quiz at a party. Firstly it can be more fascinating; and secondly, after the tape is started the host or hostess can leave the guests to attend to the question of eats and refreshment.

The fascination of any party tape is much emphasized when recording takes on an ingenious personal tone. If the general foibles of each guest is well known, then the machine can attract immediate attention.

'Order, order! I must have order. Margaret, hand out the quiz papers. John, your trousers are too far up, you're showing your legs.'

Margaret is the hostess, and has rehearsed for her part well. John always shows his legs this way.

As soon as these introductory remarks have got the guests in the right mood, and Margaret has had time to supply papers and books to rest them on, the quiz can get under way.

One would think that the most obvious type of quiz for tape is a musical one. Unless you have a specifically musical type of guest, musical quizzes are out, whether tape or otherwise. A celebrity quiz is much better. By taping well known people on the wireless it is useful to build up a small collection of, say, ten well-known voices for the guests to identify.

However, there is one fairly well known L.P. disc that has been a real treasure house of famous voices. It is a record of sound covering the years 1934–49, issued by Oriole Records Ltd, (MG 20021.) Since most of the voices are still very much around, it will still be some time before this excellent recording is obsolete for the purpose of supplying posers for a celebrity tape quiz.

A musical question, placed half-way or so, containing a complete piece by a known singer, could also be included.

If the tape recordist has a battery operated machine, another type of quiz which is sure to go down well is to identify familiar sounds around London, or the locality in question.

I must confess that I once presented a tape quiz purely for the selfish reason that I wanted to know if certain sound effects I had recorded by experimental methods were recognizable to others. The results were doubly successful. I was reassured about the effectiveness of my effects, and as my guests enjoyed themselves, so much the better.

OCEAN POST PEN-PALS

LOOKING for a pen-pal? Why not try an unusual method of finding one—by means of a bottle. That's right, a bottle. Or to be more precise, a message in a bottle. Next time you go to the coast for a holiday, pop a message into a bottle, throw it into the sea and let the vagaries of wind and tide help you to find a pen-pal.

'Messages in bottles' probably conjures up a vision of a poor demented, ship-wrecked sailor on a small, one-palm-tree desert island in the middle of a shark-infested ocean. Certainly that's an impression cartoonists are fond of using.

Although we tend to think of them as something of a joke, messages in bottles do have serious uses. The Admiralty has used them to chart ocean currents. The bottles were thrown overboard and the replies from the finders helped to trace the drift of the current. The charts made as a result of this research are called 'Bottle charts'.

There is also a museum for 'messages in bottles'. It is the 'Ocean Post Museum' of the German Hydrographic Institute in Hamburg, and they have many records of the path taken through the seas by bottles containing messages.

Recently, off the Australian coast, a fisherman whose boat was sinking put a message together with his money (ten Australian pounds) into a bottle before fastening himself in the cabin so that 'the sharks don't get me'. The bottle with its grim message was found on the beach.

When you try to throw your bottle into the sea from the shore you will find that it is not just as simple as that. Even when the tide is on its way out, you will almost certainly find that the waves will bring your bottle back to your feet within minutes. The answer is to inflate a plastic bag or a balloon, fasten it to the neck of the bottle and wait for an off-shore wind. Even with a moderate breeze the bottle will be out of sight in a very short time.

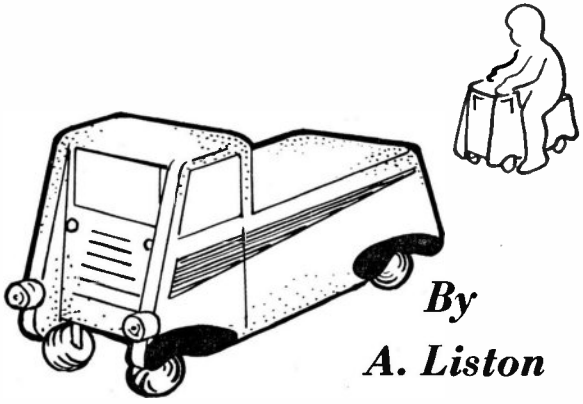
Of course, if you are going abroad and making the sea-crossing by boat you don't need to use a plastic bag or balloon to help the bottle on its way. Likewise, you can do without the bag if you throw your bottle from a 'trip-round-the-harbour-and-back-in-time-for-tea' boat.

One piece of advice, by the way — use a plastic bottle (some fruit squashes are now being packed in plastic bottles). For a glass bottle washed up on to a rocky shore will probably get broken. This will not only create a danger for bathers, it also means that your message will not be found. As plastic bottles are usually only semi-transparent, write your message on brightly coloured paper. This way a person strolling along the beach will be attracted to your bottle.

And whilst you are on the beach launching your bottle, don't forget to look for any bottles which have been washed up, for the message may give you the name and address of a ready-made pen-pal from over the sea. (P.A.R.)

Novel toy for a toddler

PUSH-ALONG TRUCK

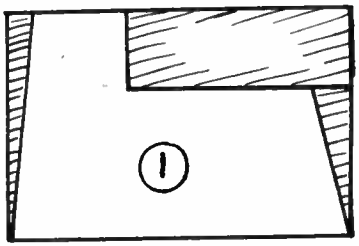


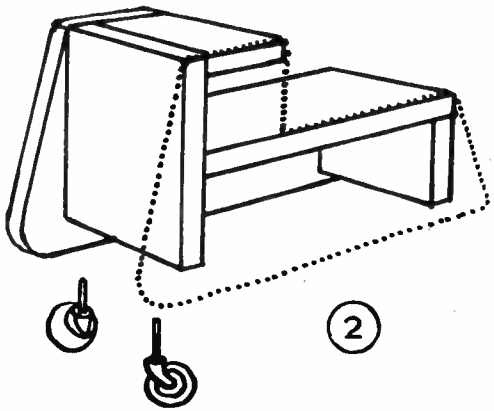
By A. Liston

THE simple and sturdy push-along truck shown here is an ideal first wheeled toy for a toddler. Instead of running on wheels, it is mounted on four swivelling ball castors, and so can easily be manoeuvred in any direction by a young child sitting on it.

The toy is constructed of 1 in. thick wood throughout, the sections being screwed together; the dimensions can, of course, be altered to suit toddlers of different ages.

Each of the two sides is cut from a 12 in. by 18 in. piece of wood, and is shaped as shown in Fig. 1. The front slopes back by 1 in. at the top, and a 12 in. by 4 in. cut-out section forms the platform behind the cab. The rear edge is also angled, the top corner being cut away by 1½ in.





The four pieces which form the body are shown in Fig. 2. All of these are 7 in. wide. The platform is 14 in. long, the front vertical member is 11 in. high, the rear vertical section 6 in. high, and the cab roof is 3 in. from front to rear. These sections are screwed in place between the sides. It should be noted that these vertical pieces are designed for wheels or castors of about 2 in. in diameter; if a different size of castor is to be fitted, allowance must be made for this in the height of the vertical sections, so that the sides are about 1 in. off the ground after the wheels are fitted.

Four holes are drilled in the bases of the vertical cross sections of the truck to take the shanks of the castors. The diameter and depth of each hole depend, of course, on the type of castor used.

All corners are rounded off with a shaper tool, and shallow wheel-arches are filed in the side sections at each castor. This gives a less slab-sided appearance and also allows clearance space for the swivelling of the castor, if necessary, enabling them to be fitted as widely spaced apart as possible. Two rubber door-stops are screwed to the front to act as buffers; these may be fitted at the rear also, if desired.

The finish should be in a non-toxic gloss paint. A light body colour, white windows, black mudwings and cab details, with a brightly-coloured flash along each side, makes an effective finish.

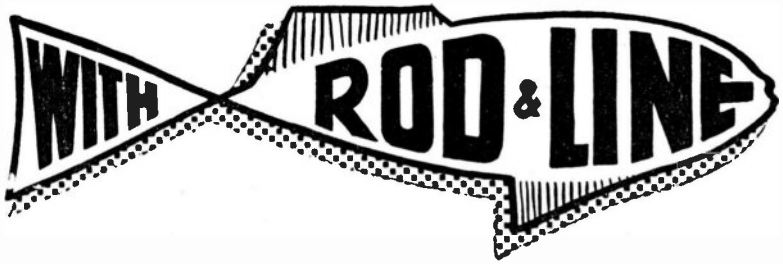
They know what they want

IN the last six months hundreds of young modellers all over the country have written indignant letters to Humbrol Products of Hull, makers of the universally popular Britfix 66 balsa cement.

Last year the company commissioned experts to redesign the packaging of several products in its modelling adhesives range, including Britfix 66 and 77 (polystyrene cement) both of which were given longer, more slender nozzles for greater accuracy of spot gluing. A new screw pin closure was added to the 1 oz. and 2 oz. tubes to eliminate blockage of the nozzle by oxidized adhesive.

However, modellers have firm views of their own, as their letters show. The screw pin is, they all plead, making life tedious for them. Britfix 66 balsa cement dries so quickly that they scarcely have time to screw the pin back in the nozzle — an operation now requiring *two* hands.

Result of this deluge of letters: The old red plastic 'pop-on' cap has been brought back into production. Says Mr G. D. Barton, Humbrol's Governing Director and a former modelling enthusiast: 'After all, the customer is always right!'



FLY FISHING FOR TROUT

By 'Kingfisher'

THERE are two methods of fishing for trout with a fly. One is by using the dry fly, and the other is by using the wet fly.

Now the difference between the two is that the dry fly is fished on the surface — it floats. The wet fly is fished anywhere between just under the surface, and an inch or so from the bottom.

The dry fly angler works only when the fish are rising to the flies, which are on the surface, and this rise varies from, maybe, a few minutes to perhaps an hour. And there may be a morning rise and an evening rise, so that he gets two chances on some days.

Now the dry fly fisherman doesn't have to find his fish; he waits until he sees the rings on the surface caused by a fish rising to a fly which may have alighted on the water. My method is to cast just upstream of these rings, so that the fly has a chance to recover its balance, and float over the fish all in order.

'Read' the river

Wet fly fishing to my mind is the more difficult of the two methods, as the fisherman has no indication of where the fish are unless he can read his river, and for this reason it is folly to go to one river one week and another river the next. You should get to know one water first, and know it in all its moods and at all depths.

In dry fly fishing only one fly is on the cast but in wet fly fishing three or four can be used, although I always use one only, even for wet fly work.

I've seen more than one angler lose both his fish and his cast with the other flies when one of the free ones has become hooked in a snag whilst he's been playing his trout, and therefore, I keep to one only.

Trout take the greater majority of their food down below, and flies form a very small part of their diet. They feed on the various water grubs, many of which will eventually turn into flies. Also, they are not averse to taking small fry, even of their own kind. There are trout which have turned cannibal, and just won't look at a fly, and the only way to get them is to use spinning tackle.

When down below the fish have homes to which they return after a feeding foray, and one such place will be a submerged stone or rock behind which the fish can retire out of the force of the current. The water flowing downstream strikes this obstruction, and breaks round either side of it, and meets again at some distance below, and the fish get in the slack water immediately behind the obstruction. There they can watch for any morsel of food coming round the stone in the current, and will then move and take it up.

Fondness for nymphs

Trout like to feed on nymphs, which are the creatures or grubs which have turned or are turning into flies. They crawl up stems of various water weed and come out of the water, resting until they have cast the skin, or 'shuck' as it is termed. Their wings then come out and they stay until these have dried in the sun, enabling them to fly.

More nymphs are taken than actual flies any day of the season, and the fish take these at various depths, at times from just beneath the surface.

Not all nymphs crawl up weed stems. Many of them float freely up to the surface, and often the trout will come to the top. You won't see rings, but may well see their backs as they turn and dive down, taking the nymph as they go to the bottom. When doing this they are termed as bulging fish, and as such have very little interest in the natural fly settled on the surface of the water.

It is policy to cast your wet fly upstream when wading, but if I can't wade I always cast across and down, letting the current swing the cast and line round, and hoping a fish will take as the fly or nymph passes a fish at home. Trout will also lie behind tree roots or behind a piece of land jutting out into the water. In fact you have wide scope when using the wet fly, and you never know when you are going to pick up a fish.

A 'SAFE BET' ON PAPER

MAKE twin vertical tears in a strip of paper, to almost divide it longways into three roughly equal parts. The tears should extend to within ½ in. of the paper's opposite edge.

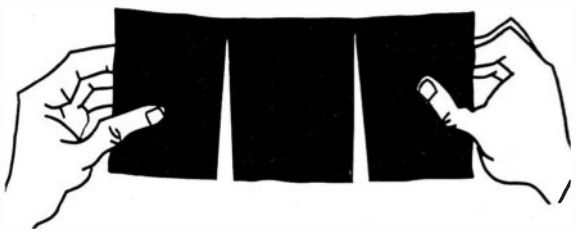
Support the strip between both hands, as illustrated, and try to divide the paper into three parts by pulling sharply outwards in both directions. The paper will never break in more than one place!

One side of your strip will invariably 'give' and break before the other tear will even begin to be extended.

Perhaps this is due to an accidental slant, however imperceptible, that you give to the paper when you grip it, or to a minute inequality of the tear lengths. Maybe both factors play their part.

Anyway this infuriating stunt is good fun at a party and a very 'safe bet' should you wish to wager upon your friends' attempts to obtain three pieces of paper with one pull.

(A.E.W.)



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by John N. C. Lewis. An ideal book for beginners as it gives instructions for building a series of subjects. These include a decorative ship model, a decorative half model, a small waterline model, a ship set in a sea, two representative ship models, three built-up models, including a working model of a schooner. Numerous drawings, photos and scale plans. **7s. 6d.**, post 9d.

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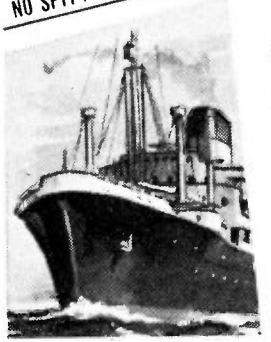

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Variations in the use of

CRAYONS

WAX crayons can be used in a variety of ways other than for simple drawings and the following will allow you to experiment. All you require are some inexpensive wax crayons and good quality drawing paper.

Etchings

If a sheet of drawing paper is first covered by rubbing over with a wax crayon and then a coat of Indian ink brushed on we can scratch away the latter to make novel coloured etchings.

S. H. Longbottom

You will realize that if this idea is to produce the best results it is advisable to use light coloured crayons, e.g. white, yellow, green and orange, and a substantial coating of crayon applied. Moreover, if you have some definite plan for the kind of picture you are to make you may use more than one colour.

In the illustration you will see a simple drawing of a fir tree and a cottage, so we may cover the left half with pale green crayon and the right half with white crayon. These colours are then revealed when the Indian ink has been scratched away. After applying the crayon a liberal coating of Indian ink is brushed on and allowed to dry naturally. The wax prevents the ink from sticking to the paper and can be freely removed with a dry pen nib, compass leg or scratched away with a knife where large areas are involved. Alternatively, you may prepare the paper as mentioned with crayon and ink then draw a scene with a white pencil, scratching off accordingly with a tool as described.

Coating models

Small figurines and clay models may be given a coating of coloured wax for both preservation and decorative purposes. Proceed as follows.

Obtain a fairly deep container for melting the crayons. We would suggest that you place an empty tin container in a saucepan of hot water since this is not quite so dangerous as melting the wax over an open gas ring. Allow the wax to melt, then force a long piece of thin stick into the body of the model to facilitate handling. The model should now be submerged into the molten wax very quickly, withdrawn and laid aside to set. The improvised handle may be either removed or the surplus cut away. You may also use this method for models made from Plasticine.

Painting on wood

Any design or picture can be painted on wood with melted wax. It must be remembered that the wax must be kept in the liquid state throughout the painting although it dries fairly quickly on the wood. You will find it convenient to place the crayons in small tins, a separate one for each colour, and again employing hot water for melting. A multiple bun-tin with about six compartments will be useful, since it can be laid across the top of the pan, or vessel, holding the hot water and the wax will remain workable.

A separate brush is required for each colour and each must be allowed to set before applying the next. Brushes can be cleaned by dipping in boiling water to melt the wax.

Your design may be traced on to the wood before starting the work and the different colours to be used should be decided in advance. Finish one colour before starting on the next and allow each one to dry before continuing with the next application. Small boxes look quite nice if decorated in this fashion.

Marbling paper

Plain paper may be 'marbled' with wax crayons quite easily and then used for backing books and the like. In this instance we may use any colour, small pieces of crayons and fragments.

Shave the crayons into very thin, small slices and mix together thoroughly in any convenient container. Now obtain

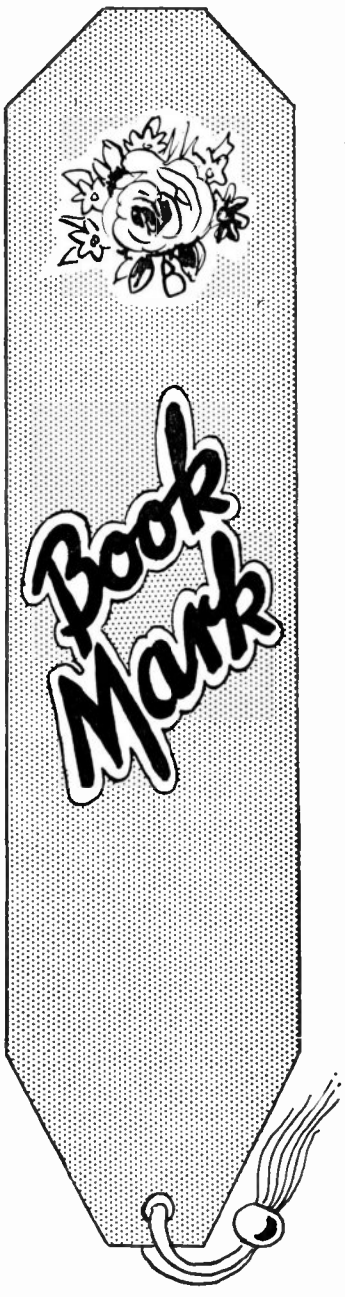
a flat pan, filling with boiling water. Sprinkle the wax shavings into the water, when they should start to melt immediately.

Take a piece of good quality white paper in the right hand, submerge just below the level of the water, push through to the left where it is drawn out by the left hand. Note that the spots of melted wax will be more or less floating on the surface of the water, consequently the paper must pass just below the surface if it is to take the colours. Remember not to dip your fingers into the boiling water or you will be scalded but if you have any suitable tongs there is no danger of this.

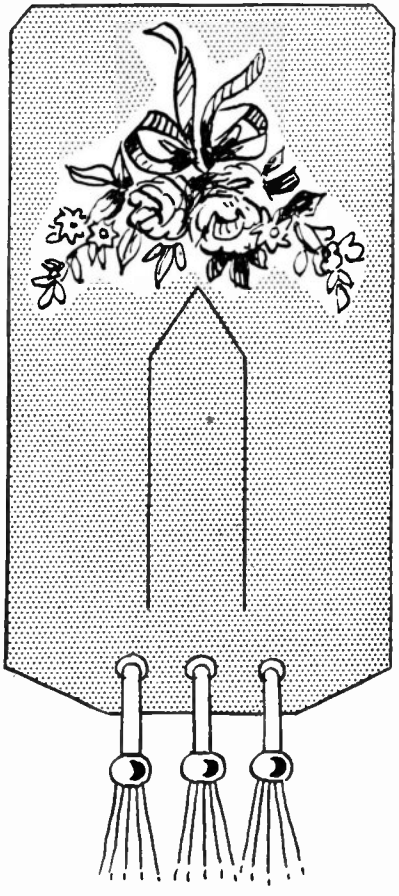
The paper should emerge with smeared and mingled colours all blending together. Some blends look far better than others and this can be controlled by the mixture you decide to melt. Nice combinations are red and yellow, blue and yellow, yellow, orange and red or blue, yellow and green, but there are many others you can try.

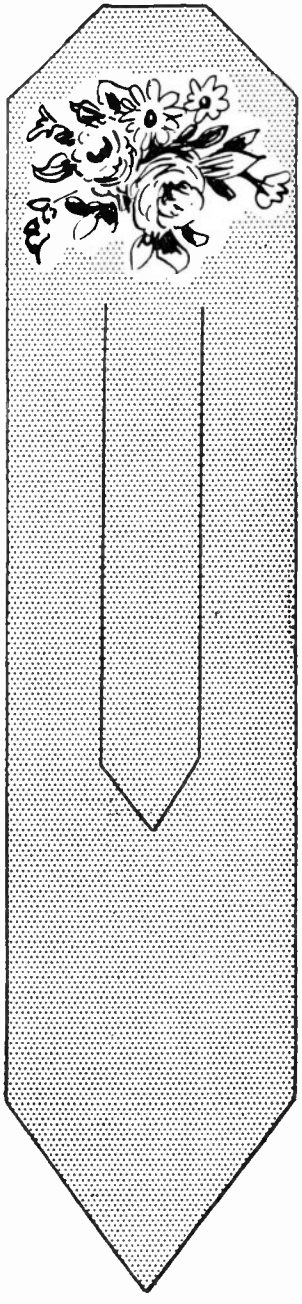
Allow the paper to dry naturally after this treatment by laying face upwards on a sheet of blotting paper. It will then be ready for backing books.

PARCHMENT BOOKMARKS



GOOD quality 'parchment' paper can be obtained from Hobbies Ltd, Dereham, Norfolk, price 1s. 9d. per sheet 25 in. by 20 in., postage 9d. Cut it into strips, and decorate as shown. Locating slits may be cut with a razor blade or sharp knife. Punch holes to take coloured cord or wool doubled, and secured by a bead glued in place. The words 'BOOKMARK' may be painted with poster paint, oil paint or water colour. Further decoration may be added by using small transfers. Those illustrated are taken from the Decorette sheet No. 130A (35 pieces), price 2s. 3d., postage 3d., from Hobbies Ltd. (M.p.)





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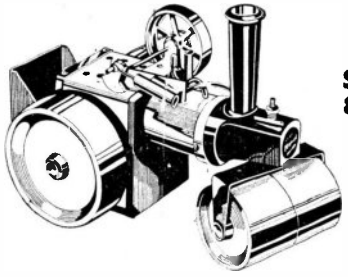
READER'S REPLY
HW JUNE 1964



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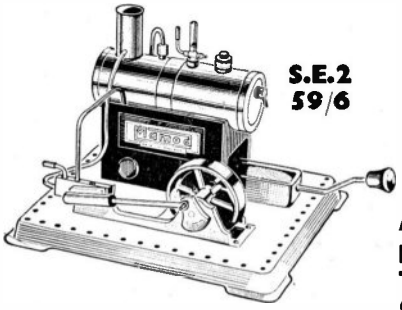

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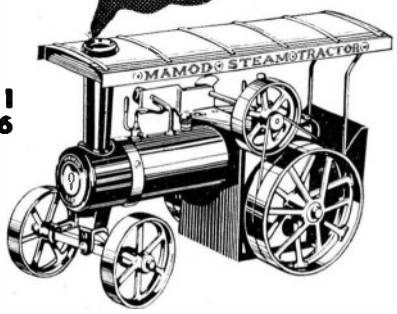
full steam ahead



T.E.1
89/6

Full steam ahead to hours of enjoyment with Mamod Steam Models. You'll be proud to own one of these solidly constructed, smartly finished working models which operate alone, or with miniature machine tools or with your own Meccano Models.

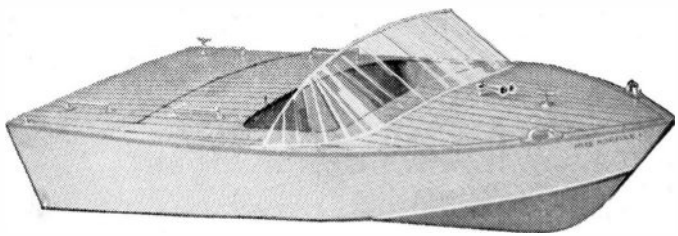
SEE THEM AT YOUR LOCAL TOY AND SPORTS SHOPS

Manufactured by

MALINS (ENGINEERS) LTD.
Thorns Works, Thorns Rd.,
Quarry Bank, Brierley Hill,
Staffordshire

Mamod

Motor Launch MISS NORFOLK I



Length 22″, beam 8½″.

Designed to take a Diesel motor up to 1·5 c.c., or an inboard Electric Motor. Details of suitable motors available upon request.

Just the job for Radio Control working.

READY-TO-ASSEMBLE

No cutting—all parts pre-cut and shaped ready for gluing together. Kit R.T.A.18 contains everything necessary to complete this fine launch, including assembly instructions.

PRICE **35/6**

Postage 2/-

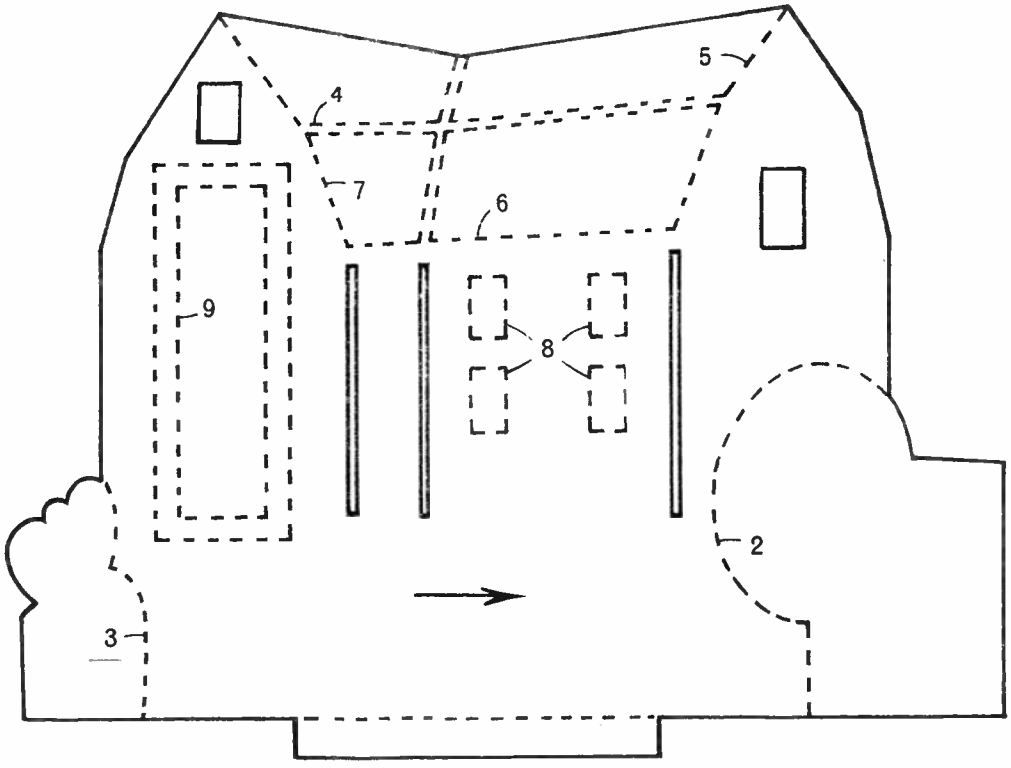
To HOBBIES LTD. Dept. 991, Dereham, Norfolk

Please send me Kit R.T.A.18, for which I enclose cheque/P.O. for 37/6. (including postage)

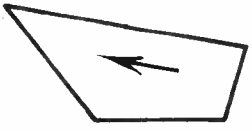
Name .....

Address .....

.....

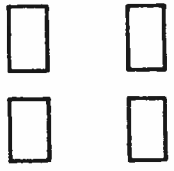


PIECE 1. CUT ONE 3/16 in.



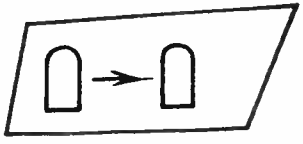
PIECE 4. CUT ONE 1/16 in.

PIECE 5. CUT ONE 1/16 in.



PIECES 8. CUT ONE OF EACH 1/16 in.

PIECE 7. CUT ONE 1/16 in.



PIECE 6. CUT ONE 1/16 in.

PIECES 12. CUT ONE OF EACH 1/16 in.

PIEC
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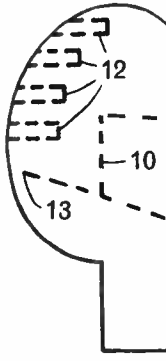
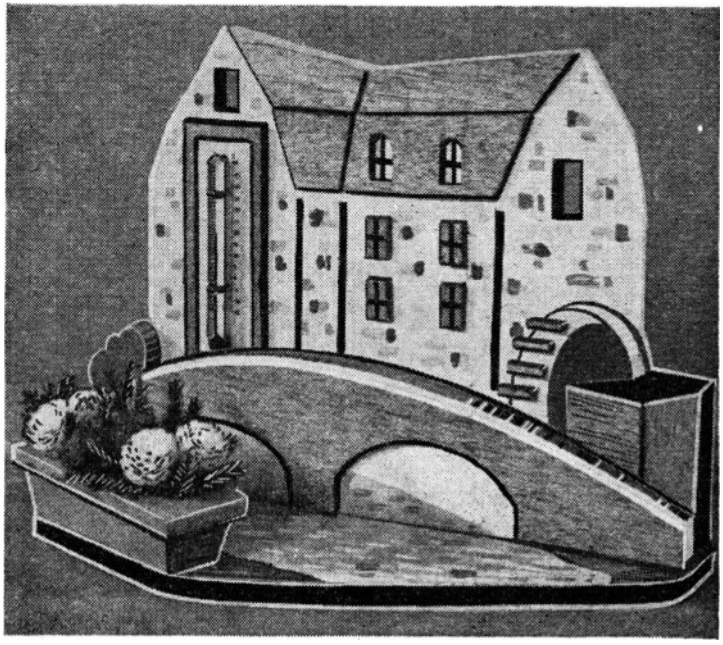


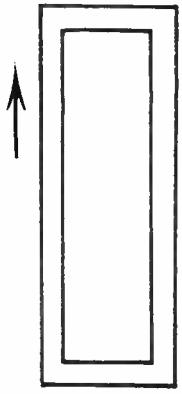
P
CUT

Hobbies DESIGN No. 3573

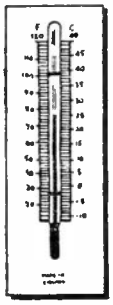
THE MILL GARDEN THERMOMETER

5¼ in. BY 2¼ in. BY 3¾ in. HIGH.

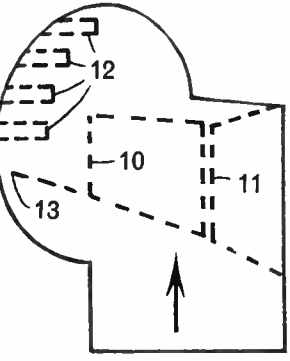




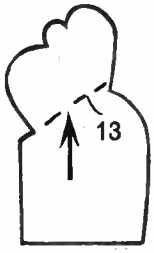
PIECE 9. CUT ONE 1/16 in.



HOBBIES THERMOMETER No. 5016.



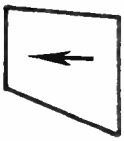
PIECE 2. CUT ONE 3/16 in.



PIECE 3. CUT ONE 3/16 in.

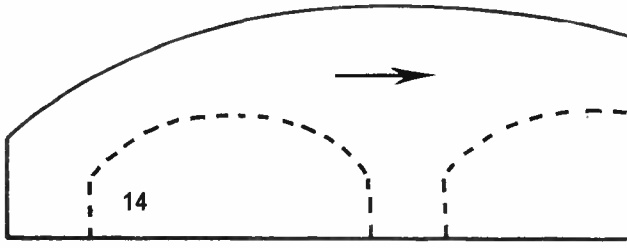
A KIT OF MATERIALS FOR MAKING THIS DESIGN IS SUPPLIED BY HOBBIES LIMITED, DEREHAM, NORFOLK. PRICE ON APPLICATION.

THE ARROWS INDICATE THE DIRECTION OF GRAIN OF WOOD.

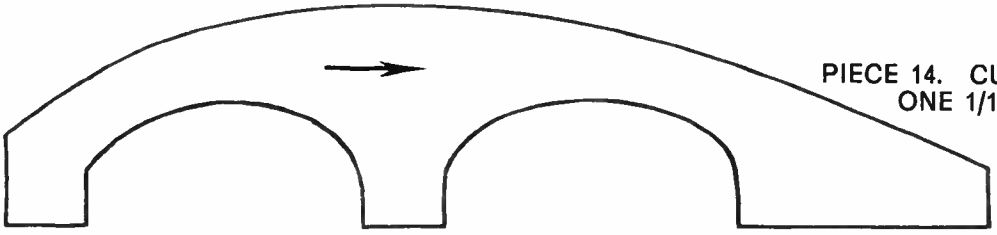


PIECE 10. CUT ONE 1/16 in.

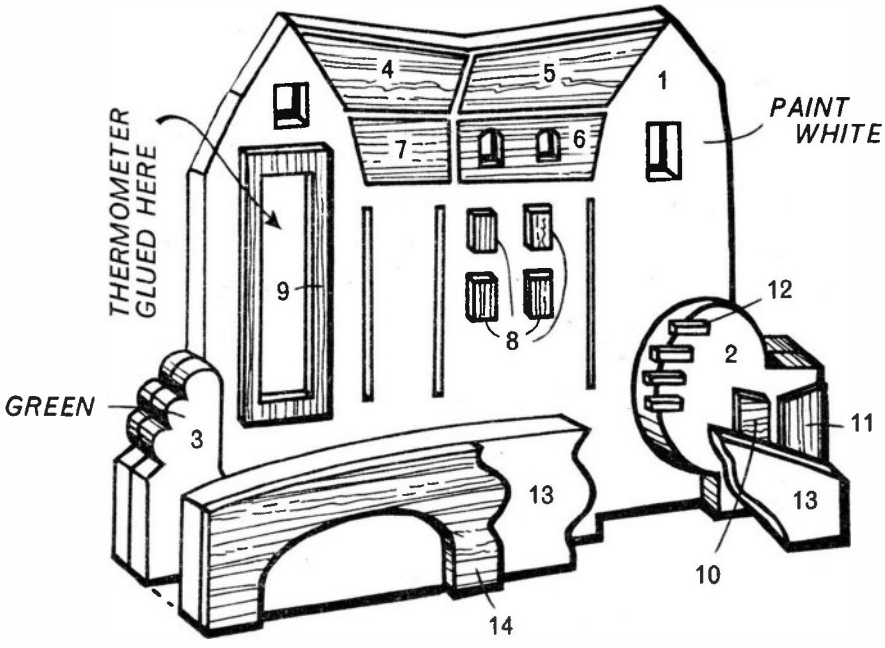
PIECE 11. CUT ONE 1/16 in.



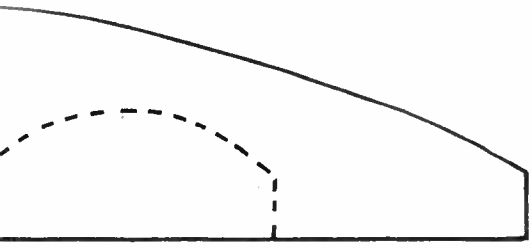
PIECE 13. CUT ONE 3/16 in.

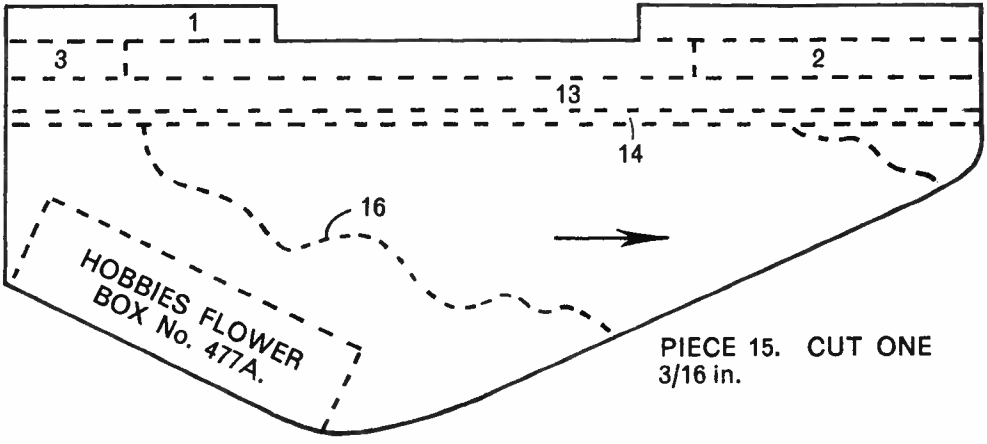


PIECE 14. CUT ONE 1/16 in.

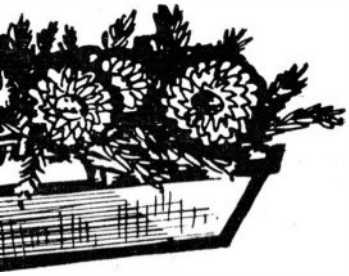


HOBBIES FLOWER BOX No. 477A

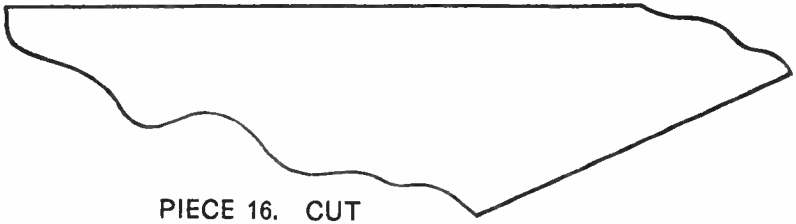




PIECE 15. CUT ONE 3/16 in.



BIES FLOWER
OX No. 477A



PIECE 16. CUT FROM THIN CARD.

PRINTED IN ENGLAND.