

# HOBBIES WEEKLY

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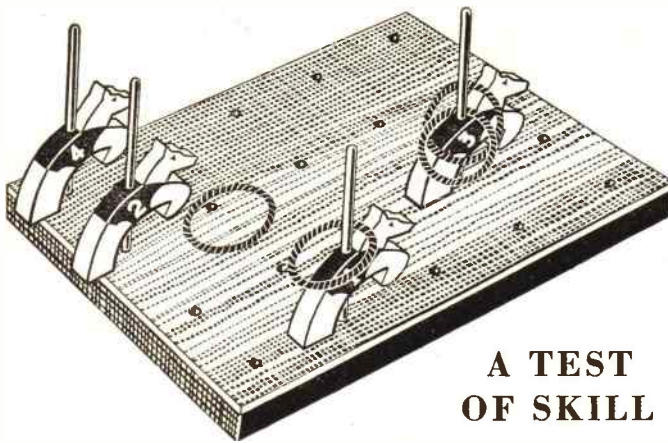


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★ *FREE Design inside for this exciting*



## A TEST OF SKILL

# TOY RACE GAME

**T**HIS entertaining game can easily be made by the fretworker. It is a game of skill which will amuse both grown ups and children alike. Two, three or four players can take part. There are four rings or quoits and the idea is for each player to take turns in throwing the four quoits and trying to ring his own marker. Each successful throw means an advance up the board.

All mounts start level in the back holes of the board, and the first five successful rings wins the game — four to reach the end of the board and one to get out.

If, however, a player is aiming for, say, No. 1 and he rings another mount, this counts as a score to the player whose mount is ringed. For instance, if you were aiming for mount one and inadvertently landed on three, then No. 3 mount would be moved up one place.

The game consists of the pegging board, four markers for which alternative designs are given, and four quoits.

The backing board (piece 1) on which the markers are moved, is the exact size of *Hobbies* panel J4 ( $\frac{1}{4}$ in.) shown actual size on the design sheet. Holes in this

should be cut out with the fretsaw, or drilled to take the  $\frac{1}{16}$ in. round rod which forms part of the assembly of the markers. Keep the holes the same distance apart as indicated on the design sheet and in straight lines. There will thus be four lines of five holes each.

Four pieces of  $\frac{1}{16}$ in. by  $\frac{1}{16}$ in. mitred stripwood (pieces 6 and 7) form the base which is pinned and glued underneath the board to raise it from the ground. Butt joints can, of course, be used for convenience.

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*For Modellers, Fretworkers  
and Home Craftsmen*

**4½<sup>D</sup>**

PAGE 113

World Radio History

# Cycle Camping is Fun

Says A. Sharp

CYCLE camping is good fun, but you need to be particular about choosing your equipment — your luggage should be as light as possible, consistent with your requirements.

Do not omit a waterproof cape. Our climate is notorious for quick changes in the weather. Even if it does not turn out showery, the cape thrown over the machine at night will protect it from dew.

Carrying the kit is always a problem for the beginner. But do not be tempted to pile a loaded rucksack or pack on your back. This is not only uncomfortable for the cyclist, but can be positively dangerous, apt to cause the rider to 'wobble' just as a vehicle is passing.

## On the Machine

If at all possible, pack all your kit on the bicycle. Make a list of what you need and check it over to see that you have all necessities but no luxuries to add weight. For a week-end a large touring bag will hold all that a 'solo' camper requires; but for a longer tour pannier-bags are suggested; panniers must be evenly arranged over the rear wheel or they may upset the balance of the machine when 'cornering'. They are better if fitted to a carrier with side pieces.

Pack the panniers evenly. If saddle-bag and panniers are used, the tent should be stowed in the saddle-bag, if you can manage to squeeze it in, as it will then be easily accessible. Some campers make do with second-hand army packs, but these do not fit so well over the rear wheel as proper panniers. An alternative is to put the tent into a waterproof container and strap it on to the back carrier.

Poles, if they do not fit into the container, should be strapped along the top tube. Always pack tent, pegs, and ground-sheet last, so that they are easily accessible on arrival at camp site, whatever methods you adopt of carrying same.

## Pack securely

After having packed your heavier kit on to the rear carrier, any excess kit can be loaded into a haversack and accommodated on a front carrier, but do not put too much weight over the front wheel, as it will affect the steering. Make sure that everything is packed securely and fixed on the machine, so that it does not shift at all.

If carrying food this must be stowed separately, wrapped in grease-proof paper, and then in a container; also be sure not to put the spirit or oil for your

little stove alongside eatables; it should be carried separated from other kit.

It is advisable to have an 'S' hook clipped to the top tube of machine, two guy lines, which you attach one on each side of cycle on arriving at camping pitch, and peg down, so that the machine stands upright for packing or unpacking. You'll find this of great help.

## About Equipment

The tent should be of lightweight material, of a handy type, soon erected. A bivouac pattern is best. Jointed poles are advised, and light wood pegs — iron skewers are apt to pull out of the ground if the wind gets rough. Kit should weigh between 24lbs. and 26lbs.; if two pals are joining forces the kit may be around 34lbs. evenly divided.

You will need a suitable sleeping-bag and blanket, waterproof ground-sheet, and cape. Toilet requisites, pyjamas, cooking utensils — unless you intend to eat out of camp; even then you'll need

stove and kettle, etc., for breakfast. If you are camping far from nearest village, wayside café, or farmstead, you will have to take sufficient foodstuffs and things required to cook with; but keep to simple necessities, and have all your items small and light. Mug, plate, etc., should be of unbreakable material.

Items such as soap, matches, spare socks, first-aid compact, etc., will go into the container on front carrier. Map, camera, cigarettes, spare handkerchiefs, can be carried in your pockets.

It all sounds difficult, and you may wonder how you are going to stow all the stuff away without it being too bulky. A little practice will help you to straighten it all out, and you will find the different things fitting into place.

## The Rules of Camping

You will, of course, conform to the rules, written and unwritten, of camping. The cycle-camper, touring from site to site, does not need to obtain a licence; but he must comply with any regulations pertaining to the different sites that he may wish to pitch his tent on. Never camp on private lands without permission.

● Continued from page 113

## Toy Race Game

The design for the markers can be taken from the three indicated — a greyhound, horse or racing car. The assembly is shown in the detail on the design sheet. For each mount cut two pieces 2, one piece 3 and one piece 4, and a length of  $\frac{1}{4}$  in. dowel (piece 5) which is glued in position as shown.

The quoits are made from medium gauge wire covered with plastic thonging. The three stages of construction are shown in Fig. 1.

The baseboard can be stained and varnished, or finished in enamel paint.

The markers should be painted in contrasting bright colours, the numbers being shown in white on a black background.

### Buy a Kit

All the wood required for making this toy and material for the quoits are included in Kit No. 3160, obtainable from branches, etc, price 11/8 or post free from Hobbies Ltd, Dereham, Norfolk.

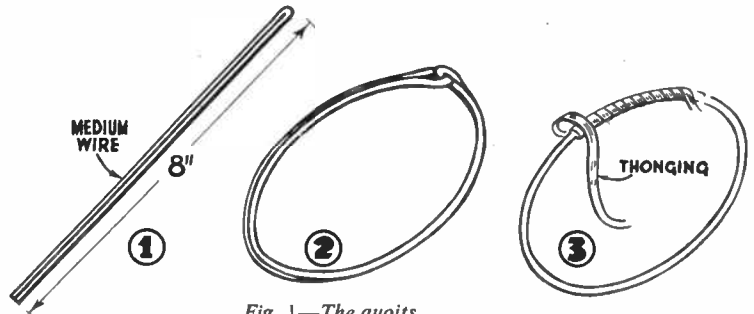


Fig. 1—The quoits

# MAKE THIS REMOVABLE BENCH TOP

— Says S. H. L.

A BENCH top is particularly useful for those who do not possess a workshop, since work may be done on an ordinary kitchen table without fear of marking or damage. The one described is simple to make, does not occupy much space when not in use and may be quickly fitted to the table. The only materials required are a piece

of batten so that they fit alongside the table top. Use countersunk screws. The piece of 9in. shelving should be at least 8ins. longer than the hardboard to allow for overhang at each end. This overhang permits the provision of a bench stop at one end, and at the other a small vice may be fitted. The shelving should be attached to the hardboard by screwing through the batten.

A hole may be cut out to fit a tapered bench stop or you may prefer to screw on a thin fillet of hardboard, or hardwood, for the same purpose. Fig. 1 shows the relative position of the materials with the shelving extending to form an overhang. Note that while the hardboard is screwed to the batten, it is preferable to screw the batten and hardboard to the shelving from the underneath.

Fig. 2 shows the position of the clamp

for holding the top to the table. A clamp will be required at each end. Normally, this arrangement should prove quite satisfactory, providing a protective strip is placed underneath the table to prevent the clamp from making an impression. It is a simple matter, however, to provide a bed for the clamp by cutting out a slot in the hardboard and this should be done before fixing to the batten. Similarly, if the clamp will not engage with the table top, due to the width of the batten, a slot may be cut which allows the clamp to be let into the bench top.

If a wood bench stop is fitted in the form of a peg, it should be about 1½ins. wide by 1¼ins. thick and mortised through the front portion as shown. The part projecting should not be more than a ¼in. or it may interfere when planing thin wood.

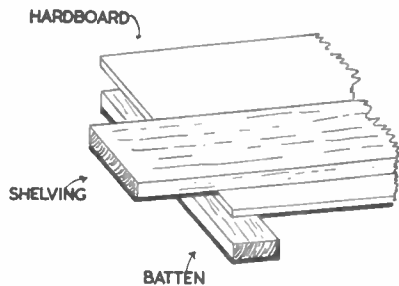


Fig. 1

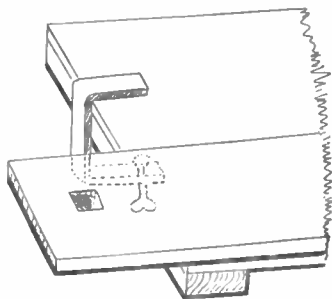
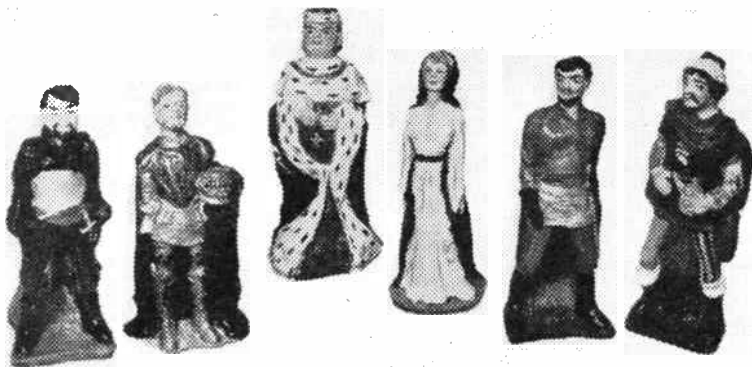


Fig. 2

of hardboard, a piece of shelving, two batten and two clamps. The length of the wood and hardboard depends on the size of the table.

The piece of hardboard should be long enough to extend the full length of the table plus three extra inches to allow for attaching to a 1½in. by 1in. batten at each end. The width of the board is immaterial, so long as it is ample to protect the table top from damage. Fix the hardboard to the

## 'Quentin Durward' Moulds



Sculptorcraft have introduced a new series of moulds for casting figures of well-known characters appearing in the film 'The Adventures of Quentin Durward'. These include Quentin Durward, King Louis XI, Hayraddin, Count William de la Marck, Countess Isabelle of Marcroy, and Count Philip de Creville. These are individual moulds — not a boxed set.

Concluded from last week

# Additions to Movie Projector

WHEN the movie projector has been built in the manner explained in the previous article, it may be improved by fitting spools for the film, and also a winding arrangement, if desired. This enables long films to be projected. It is also possible to obtain a much brighter picture by using mains instead of a battery, and this improvement is also dealt with here. If the film transport mechanism has been carefully made, without excessive play or looseness, and these additions are provided, then the completed projector will form a very good model.

Spools can be obtained ready made, or can be made from thin wood. The diameter will depend on the maximum length of film to be used. The width, between inside surfaces of the discs, should be  $7/10$  in. for 16mm. film, and no rough edges should be left, as these may impede unwinding. A lighter type

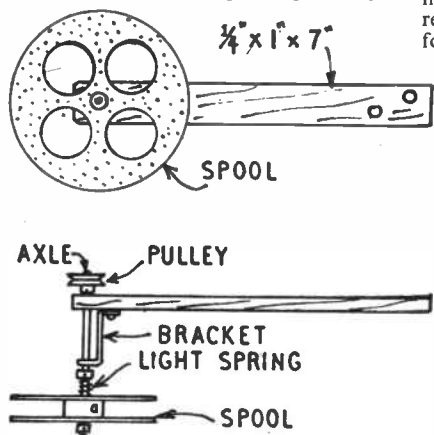


Fig. 7—Details of spool supports

of spool can be made by using  $1/8$  in. thick paxolin sheet for the discs, and the inner piece may be of wood,  $3/4$  in. in diameter and  $7/10$  in. thick, the whole being held together with small sprigs or screws, and a central hole drilled for the axle. Apertures are normally provided in the sides of the spool, similar to those seen in Fig. 7, so that it can at once be seen how much film is left.

## Spool Supports

The simplest possible method is to use one spool only, to hold the film, and to let this pass down through the projector on to the floor, after which it can be re-wound, for subsequent showing. This is only suitable for short films.

Such a spool (or the front one, when two are used) is easily fixed to a long axle supported as in Fig. 7. The pulley

and spring will not be required. The wooden strip is screwed to the side of the projector, and the axle is of such a length that the film descends level with the gate and transport mechanism.

The making of a 16mm. Movie Projector was described in our last issue. Other improvements are suggested here by

*F. G. Rayer*

A simple method of working with long films is to fit a similar free spool towards the back of the projector, and allow the film to pass under the base-board, up through a slot, and on to this second spool. Winding can be by hand, slack being taken up from time to time.

Finally, there is the method where the film is wound up automatically, and the rear spool is arranged as shown in Fig. 7, for this. The spool is loose upon the

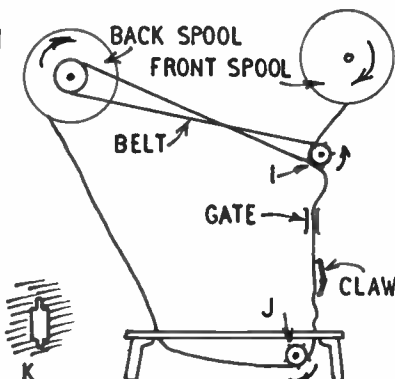


Fig. 8—Winding mechanism

axle, but turns because of the friction of the spring, the axle being driven by a belt taken to the pulley. The film is thus taken up continually, a light tension being imposed on it by the spool trying to follow the axle, which rotates a little faster than necessary.

## Film Sprockets

For the complete automatic winding mechanism, two sprockets are added, to feed the film through the projector. The whole system will become clear from Fig. 8. The front spool rotates freely on an axle, as described. Sprocket (I) turns in the direction of the arrow, feeding the film down towards the gate. A small loop of slack film must always remain between this sprocket and the gate, so that the claw mechanism can work. Similarly, a little slack remains below

the claw, and the sprocket (J) draws the film out, where it is taken up by the back spool, which is rotating by means of the friction drive in Fig. 7.

In order that the whole may operate properly, the gear ratio between claw crank and (I) must equal the number of teeth on (I), e.g., for a 5-tooth film sprocket, the crank must turn five times for each single revolution of the sprocket. As a definite ratio is required, a belt is not suitable. However, this drive can readily be arranged by parts from constructional toy sets.

A 1:1 ratio is arranged between (I) and (J), two small chain sprockets, with a chain drive, being the simplest manner of doing this. These, again, can easily be purchased from stockists of constructional toy parts. The ratio between (I) and the back spool is not important, so a belt can be used here.

The two slots in the base, through which the film must pass, should be cut as shown at (K) and smoothed free from all rough edges. The section of the film upon which pictures appear will then be kept clear of the wood, and possible scratching will be avoided.

The sprockets can be made from wooden dowel  $1/8$  in. in diameter and 1 in.

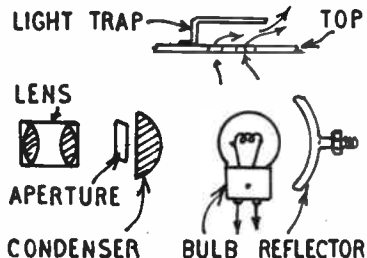


Fig. 9—Condenser illumination

long, into which sprigs are driven, heads then being cut off. Correct spacing will be achieved if a short length of film is tied round the dowel, and the sprigs driven through the perforations. When finished, they must project only slightly.

## Condenser Illumination

For a brilliant picture of a size approaching that of a good ready-made projector, a powerful lighting system is required. The correct arrangement for this is shown in Fig. 9.

Immediately behind the film aperture a condenser is fixed, with its flat side towards the film. It can be secured to the front of the lamphouse, inside, by four small clips screwed in place. A condenser with a focal length of about 1 1/2 ins. will be suitable.

● Continued on page 117

## Intriguing novelty

# A Case of Dancing Men

THE ancient Greeks knew that if amber was rubbed with a piece of silk it would produce a certain kind of electricity. Very little practical use was made of this knowledge for many hundreds of years but, doubtless, much amusement was obtained with this amazing property.

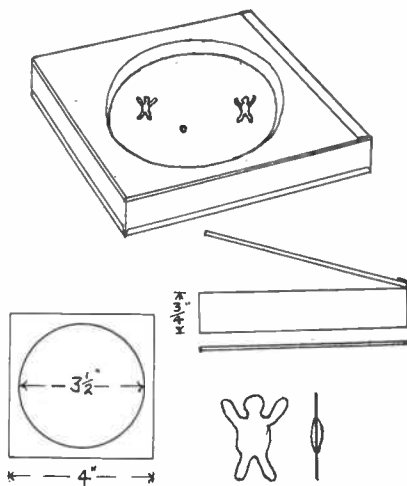
Electricity can be produced by rubbing other substances together, such as a stick of sealing wax and a piece of fur or flannel, or when a sheet of celluloid is rubbed with the finger tips. The articles thus rubbed have the power of attracting light objects, such as tiny pieces of paper or fragments of dry pith.

The little case of 'Dancing Men' has been designed to demonstrate these properties, and while quite a lot can be learned from the various experiments you may carry out with it a great deal of amusement is created by the antics of the figures.

### Small arena

The case is really a kind of small arena in which the various figures can perform, the top and bottom being covered with a piece of transparent material, so that all movement can be carefully watched and studied.

For the foundation a piece of wood 4ins. square and  $\frac{1}{4}$ in. thick is needed, but while this thickness should not be altered, you may make the other measurements larger or smaller if you wish. In the centre cut out a circle about



$3\frac{1}{2}$ ins. across and this is best done with a fretsaw, so that the wood is not torn out and ensuring a perfectly smooth finish.

To make sure that the circle is quite smooth, give it a thorough polish with fine glasspaper, and then a coat or two of varnish or french polish.

To cover the arena two pieces of celluloid, 4ins. square are needed, the bottom one being a fixture, while the top is hinged, so that the objects in the arena may be changed. *Passé partout* binding is probably the best way to fix the celluloid in position; use four strips

to secure the bottom and a single band for the hinge as shown.

The figures should all be of very light construction and you can try different kinds of paper from thin tissue to a somewhat stiffer kind. Cut them out in the shape of little men about  $\frac{1}{4}$ in. high as shown; some may be plain, while others can be given a little 'body' to make them

By A. F. Taylor

more attractive. A tiny blob of pith gummed to the paper on one or both sides will make an excellent body, and you can try thickening the hands and feet also, but keep them quite small.

### Watch their antics

Make a few little balls or cubes from a piece of dry pith and carry out a few experiments with them. Elder pith is probably the best to use but other kinds can be tried. Put one or two figures or pith balls or both into the arena and close the top. Now rub this briskly with the finger tips, a piece of silk or other material and carefully watch the antics of the performers. Then turn the case over and rub the other side.

Certain kinds of plastics and also glass will attract objects in a similar manner when rubbed with a piece of silk or other material, especially if they are warmed first.

● Continued from page 116

## Additions to Projector

Even with mains supplies, a 200/250 V lamp is seldom used, because the heat produced is great, and the source of light diffused. A car type bulb (6 V or 12 V, 36 watts) is best, operated from a transformer. The bulb-holder should be fixed to a stout wire, so that it can be bent from side to side, raised or lowered, and moved in line with the condenser, to obtain even illumination. It can then be left in this position.

The reflector shown in Fig. 9 may be omitted, but its presence further increases the brilliance of the picture. This type of reflector usually has a mounting screw, and is of plated brass. It may be purchased from a supplier of projector equipment. The distance between it and the bulb should be varied, to find the best position.

When a powerful bulb is used, and the projector run for a long time, ventilation becomes necessary, to allow hot air to

pass away. A row of  $\frac{1}{4}$ in. diameter holes in the back of the lamphouse, at the bottom, and a similar row or two at the top, will suffice for this. Light cast from the back holes will normally be unimportant, but a light trap can be fitted over those in the top of the lamphouse, as illustrated in Fig. 9.

It will be realised that many modifications can be made to the illumination system.

A simple, yet powerful arrangement is to use a 60 or 100 watt 200/250 V household lamp of the pearl type, fitted about 2ins. from the condenser. It is possible to omit the latter item, though its presence greatly helps in securing a bright picture when a large screen is used. If a lamp of greater power than 60 watts is used, the film should not be left stationary in the projector, when the lamp is on. Instead, the film should be got into motion, then the lamp switched

on. This will avoid heating of the film in one spot.

### Screen

A few notes on this are worthwhile, as it can quite considerably influence results. Best of all are the screens specially made for projection, as they reflect a large amount of light. Worst of all is a white cloth sheet, or sheet of matt white paper, as these only reflect a little light. Glossy paper is quite good. Some wall surfaces, even if not pure white, are also quite good, and may reflect more light than paper.

The size of picture will depend largely on the strength of the lighting system. For a given degree of brilliance, a picture 1ft. wide will only require *one-quarter* the illumination power of a picture 2ft. wide. (This will be understood if it is remembered that the 2ft. wide picture will have *four* times the *area* of the 1ft. picture.) By varying the distance between projector and screen, and then bringing the picture into sharp focus, as explained, a good idea of the results to be obtained will soon be gained.

# BUILDING OR BUYING?

THE varied selection of commercially-made model railway goods offered at moderately reasonable prices by the trade may be sufficient for many enthusiasts, but sooner or later will surely come the urge to try one's hand at making something or other for the railway. It is only natural, after all.

By E. F. Carter

But this matter of what to buy and what to build is quite a complex problem, simple though it may seem at first glance. Time and money, skill and experience with tools all enter into the 'build or buy' equation.

Admittedly, the home-construction urge is one which should be fostered, for it lifts one out of the rut of just 'playing trains'—as the lay press calls it, and places the model railwayman in the category of a craftsman. For skill is surely born of experience, and though one's first humble efforts may leave much to be desired, it should be remembered that it is the discoveries of

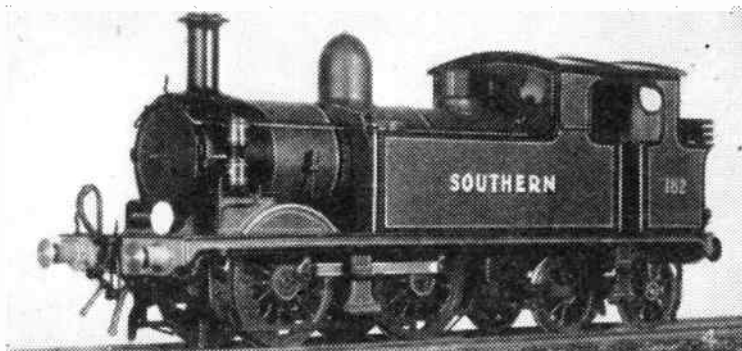


*Simplicity is the key to good track layout design.*

amateur builders which has been directly responsible for most of the great advances which have been made in the hot by during the past few years.

However, be that as it may, the final choice between building and buying is entirely one for the individual, who must bear well in mind that the more he builds for himself, the less time he will have for operation. Conversely, a person whose main interest lies in train operation may well be rather overwhelmed by the amount of time which can be spent on constructional work. It's all a matter of personal choice plus something of a knowledge of one's limitations.

Whilst not over-estimating the difficulties attendant upon home construction—particularly of locomotives and rolling-stock, it is true to say that, given moderate proficiency with simple tools and the ability to work accurately and carefully, there is no legitimate reason



*A useful small 0-4-4 tank engine in 'O' Gauge.*

why any average 'handyman' should not make a success of building even his own locomotives. Whilst as to simpler items, such as lineside accessories, bridges, and similar adjuncts to a layout, none of these represent any difficulties, providing only that due care is taken to get them correct to scale, and to make 'clean' jobs of them.

## Ready-made parts

But building—locomotive or accessory—takes time, and plenty of it; owing to the care and accuracy which are essential, and if time is at a premium, then the only obvious thing to do is to purchase what is required and get down to model railway operation without hindrance. Alternatively, of course, one may 'buy a bit and make a bit' and thus enjoy the hobby more fully.

Skill will come with experience, so the would-be builder of a locomotive will be well advised not to try his hand as a first effort, on a large main-line engine such as a 'Princess' or a 'Rebuilt Scot', but to choose a simple prototype such as a little 0-6-0 tank or a small 0-4-0 shunting engine for which as many fittings as possible should be purchased to make the job as simple as possible.

From the purchasing angle, it should be born in mind that certain types of locomotive bodies for electric mechanisms may be bought ready-made, whilst die-cast bodies are also obtainable which are most beautiful reproductions of some of the more popular types of engines to be seen on our railways today. So great possibilities are now opened up to the beginner at locomotive construction in which he is relieved of all the work of cutting, shaping and soldering sheet metal, whilst still being able to add extra details to such a body, knowing that its main proportions are basically correct.

The same applies to the building of lineside and scenic structures, kits for the construction of which are available for almost everything to be seen on any honest-to-goodness model railway layout. But here again, the reader will be well advised to make a humble start—with a fog-hut or similar simple structure, and gradually build up his skill at card cutting and folding before attempting a more complicated structure such as a station building or a goods shed.

The methods of construction now used for coaching stock, wagons and vans—particularly in 'OO' scale, are greatly improved to what they were only quite a few years ago. Kits of wooden parts ready-shaped, can be purchased which the builder has but to assemble to produce a perfect model ready to mount on its wheels. Kits of card parts are also available.

## Individual choice

But some modellers find greater power of expressing themselves when working in wood or cardboard than they do in metalwork, and in view of this variation of manual skill in the human element it is quite impossible to specifically mention any particular form or method of coach-building and state that it is the best method. Once again, it is a matter for individual decision, for a fair estimation of one's personal skill and enthusiasm.

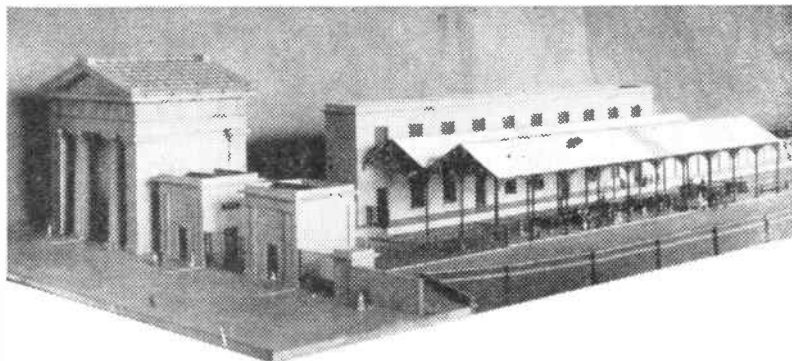
If construction in wood and card is contemplated, and ready-shaped kits of parts are not being bought, then many failures will be avoided by the selection of dry, well-seasoned wood and hot-pressed board which has been thoroughly dried before use. It is impossible to work with 'green', damp wood, to which nothing will stick for long. Moreover, the use of hardwoods with obtrusive grain should be avoided, and whitewood,

birch, pine, or satin walnut used instead. Even 'deal' (fir-wood) works quite kindly if it is old, dry, and well seasoned.

In this brief survey of ways and means, it is quite impossible to more than lightly touch upon the wealth of ready-made and partly-made model railway material which is available to the beginner today. Every train-set marketed, although by no means complete as a fully-fledged railway when purchased, can form the centre-piece around which the various accessory items offered by the firms marketing the set can be displayed. Truly, there is today no excuse for even a 'boxed train set' appearing bare and uninteresting. There is no need for a train to run round on a 'Sahara Desert' of bare boards with unsightly power wires trailing all over the place into the bargain.

### Quest for realism

This quest for realism is an interesting and not too expensive one. It is a study in itself in which observation and initiative have to surmount crudeness and incongruity. It is an unending task,



*A fine model of Old Euston Station by Messrs Bassett-Lowke Ltd., showing the detail which can be incorporated in a station model.*

but one which, as it is being completed, gives an immense amount of satisfaction, and when finished, makes just all the difference between a 'toy' railway and a 'model' one.

Readers who already possess a model railway will find that pictures, photographs and sketches will form the most ready means of determining where the new goods shed should be placed, or how far from the signal-box the starter signal should be. Pictures, sketches and notes will provide all the necessary details for the actual design and structural details of station buildings and the like from which models can be made by those who are individualists and who despise the commercial 'building set', moreover, such notes and pictures will gradually build up into a valuable collection over the years, of which the reader will be proud.

This may well be yet another side of the model railway hobby, for most

people are content to use other folks' photographs and take their word for granted, rather than go out and investigate for themselves. Strange though it may seem—especially to the beginner—when seeking knowledge upon one branch of the real railways for the hobby's sake, one will almost assuredly find out a wealth of other data and information for which one was not looking. This is just how one's store of general railway knowledge can be increased—simply by keeping one's eyes open when in the vicinity of the railway.

Just a point about such work. Never work only with the camera. Notebook and camera should go hand in hand on every railway data expedition made, and try and make every picture of the maximum interest and usefulness, so that it may be studied to good effect with a magnifying glass on winter evenings and provide visual information about those very details required to finish off accurately a job on the model railway.

Reverting, for the moment to matters of building and buying, there is one

whilst a toy may not be a representation of anything in particular. It is very essential to get this right at the very outset, as the words 'toy' and 'model' are too often used in a completely wrong sense.

'Scale' is none-the-less a very flexible word, but broadly speaking it is the term used to denote the proportion which exists between the prototype and the model. Thus a model one half the size of the original is said to be built to a scale of 6ins. to a foot—meaning that for every foot on the prototype, the model would measure 6ins.

### Flexibility

Similarly in the smaller scales, so many inches or millimetres are pre-determined to represent one foot, but now the 'flexibility' mentioned above enters the field. On 'OO' track the scale used for the gauge is 3.5mm. to the foot (track gauge 16.5mm.), but the scale used for the locomotives and rolling-stock is 4mm. to the foot, this latter deviation from track scale being made for special reasons of production.

### Keep to one scale

But the impact of the 4mm. scale used for locomotives and other vehicles running on an 'OO' gauge railway track when in fact they should be built to 3.5mm. scale, is quite considerable; for the departure from true track-gauge scale involves all the station platforms and buildings—indeed, everything else on the model being also built to 4mm. scale. If this were not done, rolling-stock would not pass under bridges and through stations, and everything would look ill-proportioned and 'wrong'.

So it will be appreciated that whilst the nominal track/rolling-stock scales are slightly different in normal 'OO' modelling, it is vitally essential to good modelling that the 4mm. scale used on everything 'excepting the track gauge should be rigidly adhered to. No departures from it should be made, nor should they ever be found necessary.

### Do not 'mix the breed'

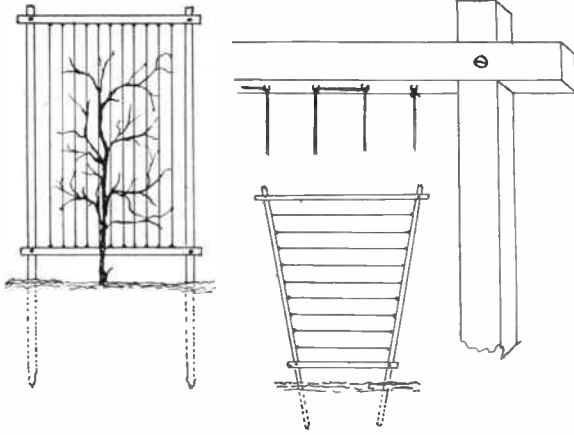
In the light of the foregoing remarks, it will be more than ever appreciated that 'mixing the breed'—particularly with regard to 'boxed train sets' and their separately-purchasable accessories is a policy to be strongly denounced; both upon the grounds of inaccuracy and lack of eventual realism.

Moreover, other difficulties are introduced when ill-assorted commercial goods are attempted to be run on the same railway. Couplings are by no means standardised, nor are wheels, methods of picking up the electricity from the track, and, indeed, the very construction of the track itself, of which the sections are in each brand connected together by different means. *Verb Sap.*

### Reproduction in miniature

It may be well to define the word 'model', remembering the while that though a model may be more or less a toy, a 'toy' need not necessarily be a model. A model conveys the idea of a reproduction of something in miniature,

# SUPPORT CLIMBING PLANTS



Says A. F. Taylor

if given a coat of creosote or green paint.

The wire strainers can be horizontal, vertical or from corner to corner, and at an appropriate distance apart to suit the growth and habit of the plant. Staples are a cheap yet very effective way of holding the wires in position. Any type of small gauge wire may be used.

Securing the plants to the frame will be determined by their habit, some may require quite a lot of tying, while others will cling of their own accord and, perhaps, only need starting on their upward journey. Do this as the plant grows and do not wait until it reaches the top before starting to tie it up, otherwise you may have a lot of deformed shoots which will look very unsightly and give a poor display.

**P**LANT supporting forms an important part of the gardener's work. It is really a waste of time and money to grow plants and then leave them lying about the ground in an untidy mess.

There are many plants including practically all climbers, which need support in some way or another. This should be provided early in the life of the plant, otherwise branches may get deformed and never grow on to produce a healthy well-shaped specimen.

The support should also be as unobtrusive as possible — it is the plant that you wish to admire and not its surroundings, although in some cases a well-designed support can be quite attractive and fit in with the general scheme.

A well-designed support can be an asset to many gardens and the hints and illustrations on this page should help you to achieve this. No measurements are given, as this will depend on the individual requirements of each plant, and these can vary quite a lot.

### Use hardwood

Due consideration should be given to the type of wood used, and if it is to stand several years a good hardwood such as oak, ash or elm are all suitable. For short term jobs or in dry situations practically anything can be used, but see that it is straight grained and free from knots.

Make the uprights substantial in proportion to their height, and long enough to go well into the ground, especially if the plant is of a vigorous type. The top crossbar may be fixed to the uprights with a halving joint, but for the bottom crossbar it is better to use two thinner

strips of wood and fix one on either side.

Besides helping to preserve the wood its appearance will be greatly improved

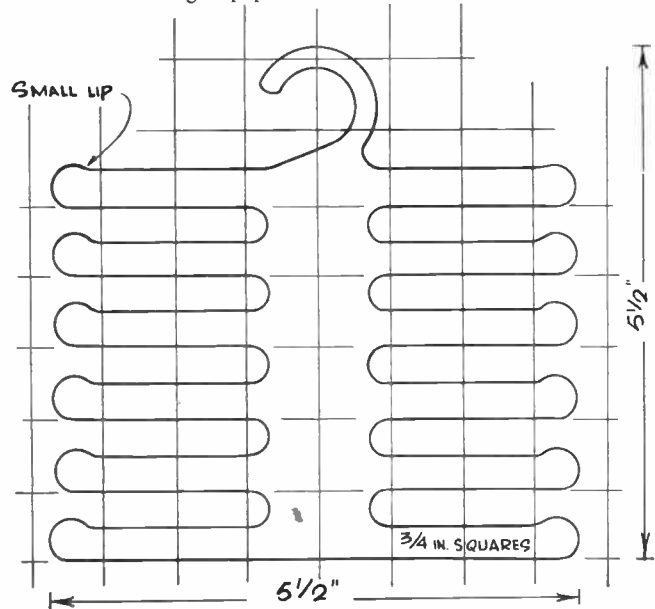
## MULTIPLE TIE-TIDY

**T**HE neat tie-tidy illustrated will hold a number of ties, and each one will be instantly accessible yet safely stored away. The tidy or multiple hanger is easily made. In the matter of an hour it may be cut from plywood, plastic, or hardboard about  $\frac{1}{4}$  in. thick. Use a fretsaw and file or glasspaper all

edges absolutely smooth, so as to be free from splinters.

Finish the wood or hardboard with two or three coats of chinese lacquer in any pastel shade to suit the individual taste. A hook fixed inside the wardrobe door will support the hanger and its load of ties.

T.H.M.





# TAKE YOUR CAMERA TO THE FARM

THE amateur photographer who lives on or near a farm has a wealth of picture-making material on his very doorstep. Even those whose country visits are confined to week-end outings and holidays can find enough material to fill many spools of film.

Often the subconscious desire is for a masterpiece in light and shade, with billowy clouds — a pastoral scene of cattle knee deep in buttercup meadows with a sun-splashed stream. Or ancient farm buildings with a duck pond and green trees etched against sundrenched summer clouds.

By E. G. Gaze

Yet it is an old photographic maxim, with much truth in it, that often the part is as great or greater than the whole. Keep your photographic weather eye open for the broad scene redolent of the countryside — but, don't overlook the simple, everyday material all around you. Many a photographer returns from a farm visit with lingering visions of broad pastoral scenes — to find that

those broad scenes depend on massing and light and shade effects that somehow seem to have got lost on the small confines of his negative space.

Broad skies and meadows and woodlands call for careful composition and lighting effect to give a 'mood': study some of these in your local photographic exhibitions and the successful ones, those you pause to admire, have an atmosphere, a mood about them that is not due solely to the intrinsic interest of the subject matter.

So, while not forgetting the broad pastoral scene, do not forget either the parts that make it up — the small parts that go to make up life on the farm the

whole year round. And the holiday-snapper with a simple box or folding camera can find as much photographic fun and pleasure as the man with the expensive outfit.

Ploughing, sowing, reaping, harvest-home — there is plenty of interesting material even with the modern tractor and combine harvester. A snap of an old fashioned horse plough team is something to be looked for — it is a fast disappearing country scene, with record value as well as beauty.

In everyday activity on a farm lies a great wealth of interesting picture-making that is so often passed by as being of mere 'record' interest. And yet these everyday activities can give many a worth-while snap for the album.

## Simple contrasts

The piglets enjoying their meal, tails a-quiver. A single black and white cow contrasting with a Spring blossomed pear tree — a simple scene of contrast that may well be worth a dozen broad views of a whole meadow of cows.

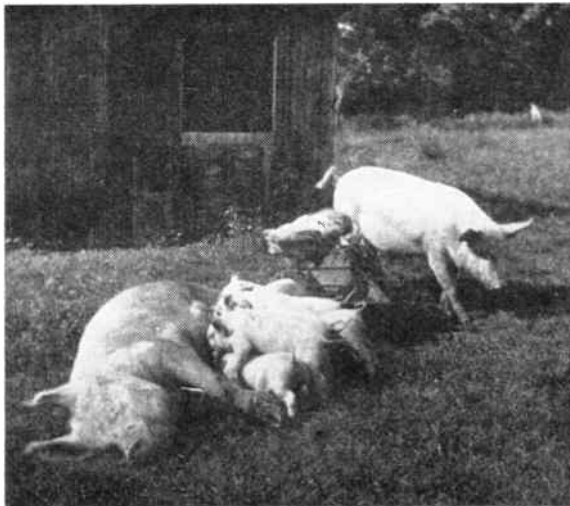
The farm horse enticed to the gate by an offering of grass that always seems greener the other side of his fence. Hens hustling after the pail of corn at feeding time. A few ducks sporting on a pond. Just small parts of everyday activity on a farm and probably more rewarding in picture making.

In other words: choose a small part of everyday farm activity, and fill your negative space with the subject matter.

Keep these simple hints in mind on your next week-end jaunt to the country and you will find many interesting snaps for your album. Look closely and not too far afield; choose simple things.



*Blossom and the beast*



*Piglets enjoying a meal*

*Make them up at home*

# USEFUL SUMMER RECIPES

**W**HETHER you garden, hike, fish, sail or cycle, the summer months will almost certainly find you using preparations to promote or counteract sunburn, to repel midges, to deal with foot troubles or to handle perspiration problems.

These are easy to buy over the counter, but it is more fun making your own. Wherever possible in the following formulas amounts will be given in ounces so that the reader who has no means of metric weighing and measuring can turn out something useful for himself.

Whether we are going to be favoured with plenty of sunshine this year remains to be seen, but we can hope and prepare for it with sunburn products. An oil which promotes a pleasant tan on exposing the skin to the sun can be made by thoroughly mixing 6 fluid ounces of peanut oil and 3½ fluid ounces of olive oil in a clean bottle.

If you have been sunburned, a soothing oil can be made by shaking together 3 fluid ounces of colourless steam distilled pine oil and 1 fluid ounce of olive oil. Spread a thin film of oil over the sunburned surfaces.

Another good remedy for sunburn is calamine lotion. To make this stir ¼ fluid ounce of glycerin with 2 fluid ounces of distilled water until evenly mixed. Then stir in ¾ ounce of calamine and ¼ ounce of zinc oxide. Finally, bring up the volume of the mixture to 5 fluid ounces with distilled water. This is painted on the skin and allowed to dry.

## Midge repellent

Midge protection will be especially welcome to fishermen. Various oils may be used for smearing over the exposed parts of the skin to keep off these pests. Oil of lavender is common. Also useful are oils of pennyroyal, citronella, bergamot, cloves and cassia. Even cod liver oil has given good results.

An excellent product for the purpose consists of 1 volume of cedar oil, 2 volumes of citronella oil and 4 volumes of spirit of camphor. Just shake these together in a dry bottle.

If you happen to have been bitten when unprotected by one of the above, remember that Nature has provided a convenient soothing remedy in our own mouths — the saliva. Persistently itching bites miraculously stop itching under a liberal application with the finger tip. Application of a moist cake of soap or of some ammonia diluted until the smell is only just perceptible will also relieve the irritation. These remedies apply only to small raised bites. Where swelling occurs, especially if on the face,

you should see a doctor, who will probably advise hot boric fomentations.

A useful fact to know is that hairy caterpillars can cause an irritating rash. The remedy for this is to rub in vinegar or olive oil. Some types of jelly fish, too, will cause a similar rash and the remedies are the same as for the caterpillar rash.

Going to the seaside for your summer holidays? Then take along some of your own preparations to protect the skin against the powerful action of sun and wind.

Going to the country? Then a midge repellent will be found useful.

For the hiker, foot powders make for better walking. After washing the feet, dust them over liberally with a mixture of 1 ounce each of boric acid ('boracic powder'), orris root and medicinal talc, all in fine powder.

Another good powder calls for 1.5 grams salicylic acid, 6 grams boric acid, 2 grams elm bark, 2 grams orris root and 72 grams medicinal talc, all in fine powder. Mix them by turning them about in a large dry jar.

If you are troubled with perspiring feet, either of the following recipes will improve matters. For the first, mix ¼ fluid ounce of formic acid and 6 fluid ounces isopropyl alcohol. To this add ¾ ounce of powdered chloral hydrate and shake well.

For the second, put 33 c.c. of glycerin into a mortar. Grind into this 1 gram of boric acid, 21 grams of borax and 21 grams of salicylic acid. Thin this gradually with 85 c.c. of isopropyl alcohol and pour into a bottle. Both of these preparations may be applied to the feet with cotton wool.

A perspiration deodorant for general use and which is extremely effective can be made by first dissolving 1 gram of salicylic acid in 15 c.c. of Eau de Cologne. Stir into this a solution of 2 grams of aluminium chloride in 27 c.c. of rose water. Then stir in 5 c.c. of glycerine. This preparation may be coloured attractively by adding enough cochineal to give a pink tint. Shake the bottle before use and dab on with cotton wool.

For those who prefer a paste type deodorant 1 gram of salicylic acid and 6 grams of zinc oxide should be thoroughly incorporated, by grinding, into 48 grams of vanishing cream.

There is no need to buy vanishing cream for this. It may easily and very cheaply be made for oneself. Melt 9 grams of stearic acid in a water-bath. In a separate vessel, dissolve 0.6 grams of potassium carbonate and 2.5 c.c. of glycerin in 37.5 c.c. of boiling water. Stir this solution into the melted stearic acid in a thin stream stirring constantly. When all is added, remove the vessel from the water-bath and continue stirring until the cream is lukewarm. If desired, perfume may be stirred in now, but it is not necessary for the purposes of making a deodorant.

If the hiker or cyclist returns home with stiff muscles, an easily mixed liniment will help matters. Simply shake together in a dry bottle 2 fluid ounces of olive oil and 1 fluid ounce of methyl salicylate until thoroughly mixed. Massage a little of this into the stiff areas in the usual way.

## Brilliantine

Windy days call for something to hold the hair in place. Solid brilliantine is especially convenient to campers, since there is nothing to spill. One of the simplest of these consists of 4 fluid ounce of medicinal liquid paraffin and 1 ounce of spermaceti. The two ingredients are incorporated by melting together in a water-bath or even in the oven. When a clear liquid results pour out into tins or heated jars (they may crack if cold) and allow to cool and set. If you would like a perfumed brilliantine, add to it while still liquid enough oil of lavender to give the degree of fragrance you want.

Should a non-greasy hair preparation be preferred, then a gum tragacanth fixative should be made. First place 1 gram of gum tragacanth in 80 c.c. of water and leave it overnight to swell. Any lumpy areas should be dispersed by warming in the oven and stirring. Next dissolve 0.8 grams of salicylic acid in a few c.c. of hot water and stir this and 5 c.c. of glycerin into the gum tragacanth mucilage. Perfume may be added if desired. A little cake icing colour may also be stirred in to give a pleasing tint.

Naturally, pure substances must be used for the above products. When buying them ask for 'B.P.' or 'B.P.C.' quality and, where these are not available, for 'pure laboratory grade'. This will assure your not being sold technical grades, which are not suitable for toilet products. (L.A.F.)

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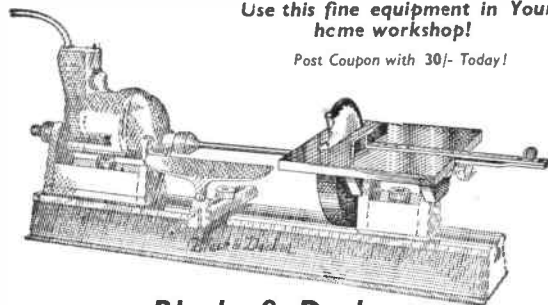
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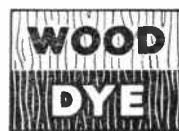


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# Mending a Fishing Rod

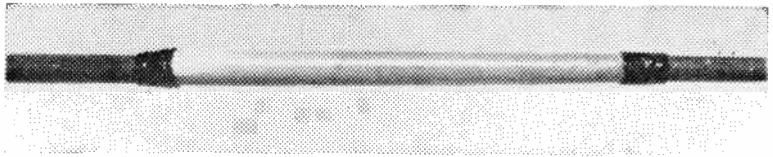
IS fishing one of your hobbies? If so, it is almost certain that you have had the bad luck to break the top joint of your rod at some time or another.

This article describes a quick and easy method of repairing a broken top joint. It is quite satisfactory, as I proved two years ago when fishing in Ireland. Almost anyone should find it within their power. All the equipment needed is a feather; a tube of glue; a pocket knife or a razor blade, and a piece of glasspaper.

First, take two or three large wing feathers of a goose or other big bird. The ones I used were sea-gull's feathers, collected from the strand in County Kerry. Cut off about 3ins. of the thick hollow ends, and trim off the tips. This converts them into little tubes or sleeves — very tough, strong and flexible.

Slide the broken ends of rod into the sleeves and select one which forms a close fit. Use a piece of the broken rod to clean out the bore of the tube by working it through the sleeve until quite clear.

Next, make a simple tapering cut with a pocket-knife on each broken end of rod, so that when the two broken ends are placed one on top of the other, the overlapping portion is congruous with



Actual photograph of the fishing rod repaired with a feather, taken after two seasons' use

the taper of the remainder of the rod, and fits snugly inside the quill sleeve. The piece of sandpaper on a match-box is useful for smoothing the cut ends and ensuring a level surface.

The idea now is to stick the two ends of the top piece firmly together inside the sleeve and fasten the sleeve securely to the wood. The nozzle of a small tube of quick-drying glue or adhesive such as Durofix fits easily inside the ends of the quills. Squeeze in an ample amount, turning the quill until the inside is thickly coated with the adhesive.

Now insert a piece of the broken end of the top piece into each end of the quill. Hold the top piece and quill up to the light; gently press the pieces of rod into the quill, and watch the two broken

ends join together. The two ends, under steady pressure, will jam firmly together, and an extraordinarily tight joint should be formed roughly in the middle of the sleeve. Wipe away the surplus adhesive forced out of the ends of the sleeve.

When the adhesive is thoroughly dry, smooth the edges of the joint with fine glasspaper; bind each end of the quill with a few wrappings of silk, and apply a coat of varnish.

I found my mended top piece behaved splendidly both for fly-fishing and for light spinning; the mend makes no discernible difference to the action of the rod. Apart from being about 2ins. shorter and a trifle stiffer in its action, the top piece seems to be none the worse for having been repaired. (C.O.H.)

## Stamp News

### IT'S A GIFT!

CATCH-PENNY advertisements seldom appear in the British Press today. Philatelic dealers use the free gift system as a medium for introducing their wares to the stamp collecting public, not to deceive them. So do not regard free gift offers with suspicion.

Some years ago a trader presented two mint, Greek 1896, to customers buying his special 'Bob' packet of British Colonials. They were Olympic Games pictorials (25 and 60 l. Quadriga). The gift stamps are now catalogued at 6/6 and the colonials £2. I know, because I sent for them!

In ancient times the word Quadriga described a carriage drawn by four horses abreast, and especially applied to the racing chariots of the circus, or those employed in public processions, triumphs, etc.

Many cheap packets of Elizabethan issues now offered for sale, or gratis to approval applicants, in the advertisement columns of *Hobbies Weekly*, probably contain items of future value. Unused stamps will never decrease their face value. And approval buying pre-

vents undesirable duplication.

Recent television programmes and newspaper articles on the hobby suggest that people are becoming more stamp conscious. Consequently, I am keeping all relevant literature appropriately filed for future reference.

Here is my latest thematic idea: The Union Jack is flown on government and public buildings from 8 a.m. to sunset on certain days in the year. Dates and reasons for this custom may be pictorially recorded in stamps:

February 6th. Flag flown to mark the Queen's Accession to the Throne. And the stamp — 1953 issue of New Zealand, 9d. value (cat. 3d.).

March 31st — Duke of Gloucester's Birthday — Australia. 1945 Gloucester commem's. 2½d. lake (2d.).

April 21st: The Queen's Birthday — New Zealand, 1953. Queen on horseback in regimental dress; 3/-. bluish green (1/6).

April 25th: Princess Royal's Birthday. No stamp exists bearing the Princess's portrait, but one depicting Queen Mary, her Mother — Newfoundland 1938.

7 cent blue (1/3) — may be used here, with explanatory note.

May 24th: Empire Day. Canada. 1932. Allegory of the British Empire. 13 cent green (2/-).

June 2nd: Coronation Day. Great Britain. 1953. Coronation. 1/3 green (1/6).

June 10th: Duke of Edinburgh's Birthday. Australia. 1954. Royal Visit. 3½d. scarlet (4d.).

August 4th: Birthday of the Queen Mother. Newfoundland. 1938. 3 cent carmine (3d.).

Aug. 15th: Princess Anne's Birthday. New Zealand. 1952. Health. 1½d.+½d. red (4d.).

August 21st: Princess Margaret's Birthday. New Zealand. 1943. Health. 1d.+½d. green; triangular. (6d.).

November 14th: Prince Charles' Birthday. New Zealand. 1952. Health. 2d.+1d. brown (6d.).

November 20th: The Royal Wedding Day. New Zealand. 1953. Royal Visit. 4d. blue (8d.).

The flag is also flown on the following ceremonial occasions: The Queen's 'official' birthday, Remembrance Day, and the opening and closing of Parliament by the Queen.

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### Curing Skins

I WOULD like to cure some sheep skins for rugs; please advise me the best process. (H.C.—Kirkham).

THE preparation of skins for use as rugs, calls for considerable technical knowledge and skill, but probably a reasonably satisfactory result can be obtained by the following method. First select skins that are undamaged, flexible and with close wool, uniform in texture. As soon as possible, thoroughly wash the skins to remove bloodstains and dirt, endeavour to do this before the blood has dried, as this may cause staining. To commence the processing proper, well wash and thoroughly soak the skins, then remove all traces of fleshy matter from the flesh side of the skin. Next, well wash the wool with soft soap and water, taking care to work the soap well down into the wool. Well wash the skin, then 'leather' it by well rubbing into the flesh side of the wet skins, a mixture of three parts alum to two parts of common salt, and continue until the skin is practically dry. Leave for twenty-four hours or so, then repeat

the same process two or three times. Next bleach the wool by washing with hydrogen peroxide, then rinse and wash off with a weak vitriol solution. The skin should again be washed, and the flesh side rubbed with alum and salt as before. A final wash and the skin is ready for use—if it is to finish white—except for well beating and working to make it thoroughly flexible and soft.

\* \* \*

### Leaking Lead Lights

THE lead lights on one of my bay windows leak whenever there is rain. Can you tell me of anything which would serve as a sealer, or would it be advisable to have the whole window rereaded? (W.R.—Sale).

YOU should work white lead to a putty consistency with raw linseed oil. Remove the leaded light and lay flat on a table. Work the putty between lead strips and glass with a thin knife, aided with a pointed stick of wood, and be careful to fill all gaps before refixing the light in place.

### ☆☆☆ WORTH KNOWING ☆☆☆

☆☆☆ Colouring Wax ☆☆☆  
☆☆☆ ANILINE dye stirred into ☆☆☆  
☆☆☆ Amolten paraffin wax will ☆☆☆  
☆☆☆ generally produce a dye suitable ☆☆☆  
☆☆☆ for colouring waxed paper flowers. ☆☆☆  
☆☆☆ The dye is obtainable in powder ☆☆☆  
☆☆☆ form, and is a pure staining agent. ☆☆☆  
☆☆☆ Supplies can generally be had from ☆☆☆  
☆☆☆ any good artist's colour shop. ☆☆☆

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆

### Sealing Window Frame Gaps

I HAVE recently had new steel windows fitted, but owing to the fact that the wooden frame has warped there are gaps. Please tell me how to rectify this. (M.M.—Rednal).

YOU could fill up the gaps between a frame and window sash with a putty composed of white lead and raw linseed oil, pressing it well in the spaces with a thin flat knife. If not too many gaps, you might buy a tube gap filling composition, Plax for example, and save the trouble of the home-made one.

### H.A.C. RADIO KITS

We regret that owing to a printer's error the price of the one-valve radio kit offered in advertisements by H.A.C. Short-Wave Products (Dept. 22), 11 Old Bond Street, London, W.1, has been incorrectly given. Readers are ask to note that this should be 25/-.

DO-IT-YOURSELF BOOKS. List free.—S.P. Ltd., 28(H) Dean Road, London, N.W.2

KUKLOS ANNUAL. Indispensable cyclist's handbook. Tours, resthouses, money-saving hints, 2/10, post free.—Burrow, Publishers, 2 Imperial House, Cheltenham.

AMERICAN MAGAZINES. One year's 'Popular Mechanics' 32/-; 'Homecraftsman' 16/6; 'Homecraft' 18/-. Full list from Willen Ltd. (Dept. 57), 9 Drapers' Gardens, London, E.C.2.

PLYWOOD; large sizes, 14 lbs. 10/- delivered (Express) C.W.O.—H. Leader (1920), Gosford St., Middlesbrough.

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

200 USEFUL stamps Free—send postage requesting approvals—Star Stamp Service, (H2), Ebbw Vale, Mon.

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Campers. Length 7 ft. 3 in. sleeping base  $\times$  4 ft. 6 in. wide  $\times$  3 ft. 6 in. high  $\times$  12 in. walls, all approx. Weight 34 lb. Cash 42/- or 4/- deposit and 6/- monthly. With fly-sheet 70/6 or 9/3 deposit & 9/9 monthly. Both carr. 2/-. Don't delay send now.

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CONJURING Catalogue and Gravity glass Trick, 1/-.—DeHempsey, 363 Sandycombe, Kew, Surrey.

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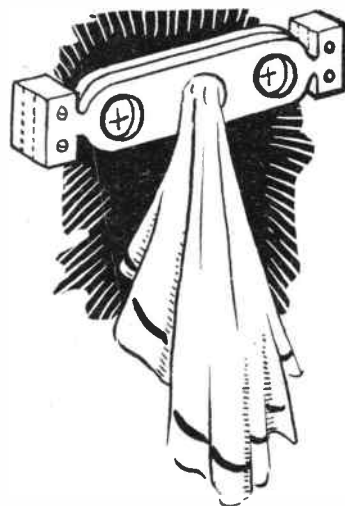
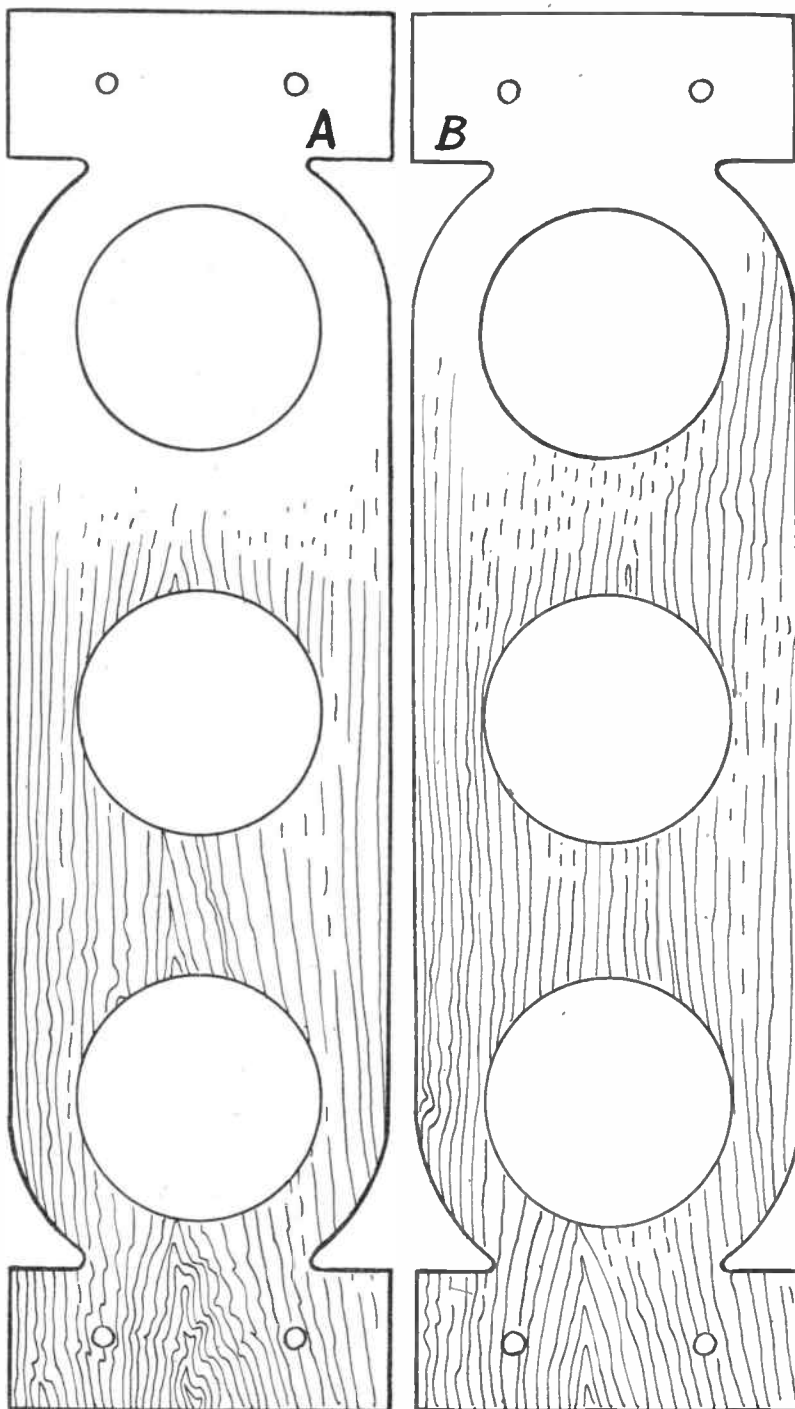
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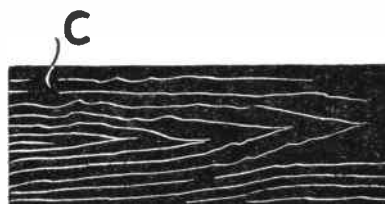
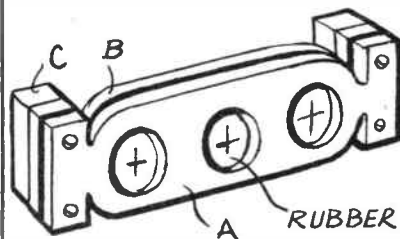
Neat and effective

# KITCHEN CLOTH HOLDER



**Y**OUNG fretworkers can easily make up this useful tea cloth holder for the kitchen. It consists of two pieces (A) and (B) of  $\frac{1}{4}$  in. wood and a piece of motor car inner tube sandwiched between.

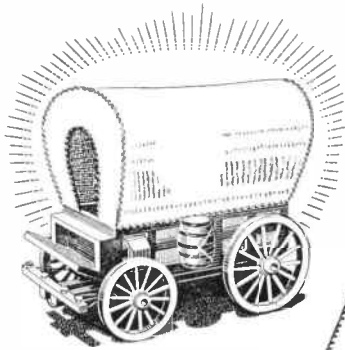
Two blocks (C) of  $\frac{1}{4}$  in. wood at the back keep the fitment from the wall, and all parts are held together by means of four screws. These should be long enough to go right into the wall or woodwork. In the former case Rawl-plugs should be used. Slit the rubber to form a cross as shown in the illustrations. (M.p.)



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| <input type="checkbox"/> Covered Wagon<br>No. 3156, 24/6 | <input type="checkbox"/> Egg Timer<br>No. 3118, 3/6    | <input type="checkbox"/> Tug 'Climax'<br>No. 251 Spl., 52/6   |
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NAME .....

ADDRESS .....

P.O. enclosed for .....

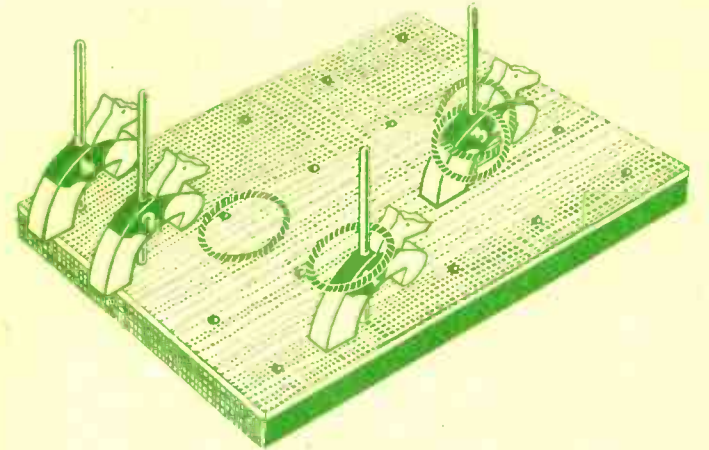
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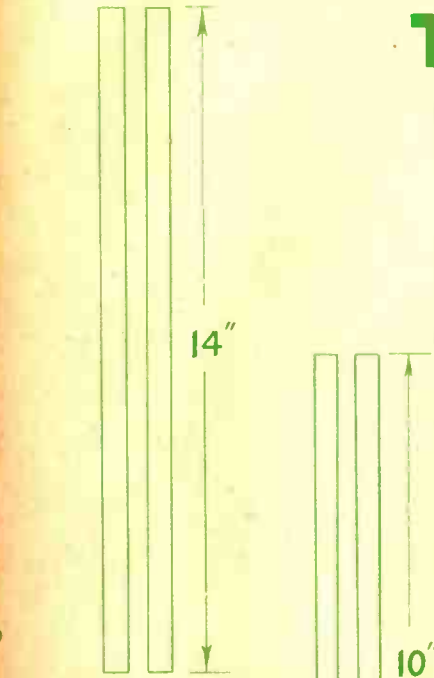


# TOY RACE GAME

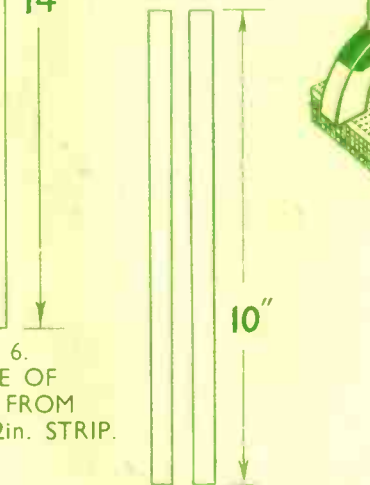
SIZE LENGTH 14ins.  
WIDTH 10ins.



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

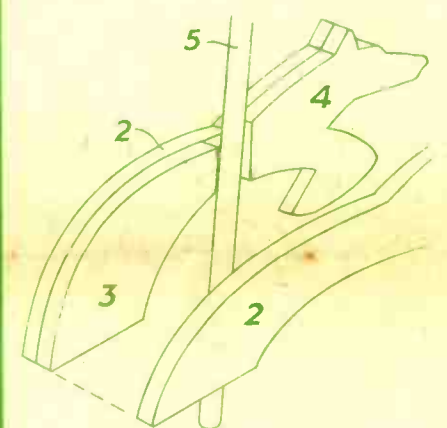


PIECES 6. CUT ONE OF EACH FROM 1 2in. BY 1 2in. STRIP.



PIECES 7. CUT ONE OF EACH FROM 1 2in. BY 1 2in. STRIPWOOD.

ARROWS INDICATE DIRECTION OF GRAIN OF WOOD.



DETAIL SHOWING CONSTRUCTION OF MARKER.

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