

FRAME YOUR OWN PICTURES

How often have you wished to frame that art study of flowers given away with your favourite periodical, but have been discouraged by the cost of framing? Framing is expensive for the simple reason that it takes time to cut mitres and assemble the frames. The materials themselves are quite reasonable in price, but time costs money, so why not use a little of YOUR time and produce some really worthwhile frames?

It really is easy and few tools are required. You will need a tenon saw, mitre block, hammer and bradawl. With these you can with care cut close fitting mitres and produce satisfactory frames for your pictures.

The mitre block, seen in Fig. 1A is usually made from top quality hardwood such as beech and provides right-angle and 45 degree slots. A little more expensive, but providing double guides for the saw, is the mitre box (Fig. 1B). The double guides mean less possibility of side play with the saw and therefore greater accuracy. Both block and box can be obtained from Hobbies Ltd., Dept. 99, Dereham, Norfolk, or from any Hobbies branch.

If you contemplate making a number of frames you may think it best to invest in a mitre cutting tool and corner cramp. This tool is one of the most useful for the handyman and is seen in Fig. 2A. It will cut mitres on moulding and similar work up to 4 in. wide by about 1 in. thick. The wood is held fast on a perfectly flat bed, and the tenon saw is gripped between the blades of the saw guide at an angle of 45 degrees. The guide can be thrown up out of the way and then the work can be cramped in the tool for gluing.

It is best to use a plain moulding for a start. This will present no difficulty and will encourage you, by your success, to experiment with more elaborate mouldings. The positions of the mitres must be measured accurately and the rebate measurement of the frame should be slightly in excess of the

dimensions of the picture. Assuming the picture to be, say, 10 in. by 8 in. — the rebate measurement should be $10\frac{1}{8}$ in. by $8\frac{1}{8}$ in.

When cutting the mitres, support the box firmly and lay the moulding in as seen in Fig. 3. Hold the moulding with the left hand with the rebate facing away. Insert the saw in the right-hand slot and cut the mitre. Now measure $8\frac{1}{8}$ in. in the rebate, slide the moulding along and cut through the moulding again, this time using the left hand slot. Keep the saw moving smoothly in the groove, not pressing to right or left, and cut with short strokes.

When all four sides have been cut, and you are satisfied with their accuracy, they may be glued together. Put one side, the long side preferably, in a vice if you have one, or get someone to hold it firmly. Apply the short side as seen in Fig. 4 and make a hole with the bradawl. Drive the bradawl nearly through the short piece before putting it in position, then drive it through into the long side as shown. Notice that the pieces are displaced about $\frac{1}{8}$ in. Remove the bradawl, glue the mitres and insert a suitable panel pin. As the pin is driven home the upper face of the mitre should slide down to make a perfect joint. With a little practice a good joint can be made every time. The remaining two pieces of moulding are then joined and finally the two halves of the frame, repeating the procedure described.

When all four corners have been glued and pinned, the frame is laid on a flat surface and tested for squareness. If the frame does not lie flat it should be tapped lightly with a hammer, interposing a piece of soft wood to prevent marking. Leave under weights until dry. Small corner cramps such as the Hobbies all steel corner cramp shown in Fig. 2B, are useful for correcting a fault since the work can be cramped tight while the glue is drying.

If you possess a Hobbies four-corner picture framing

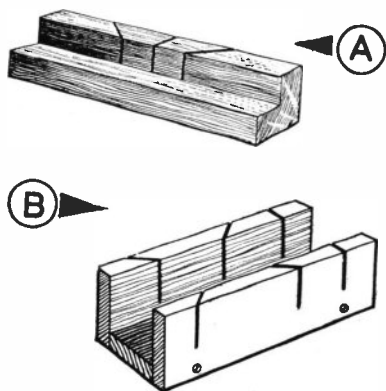


Fig. 1—A. Mitre block 3/3 (post 1/2)
B. Mitre box 5/11 (post 2/9)

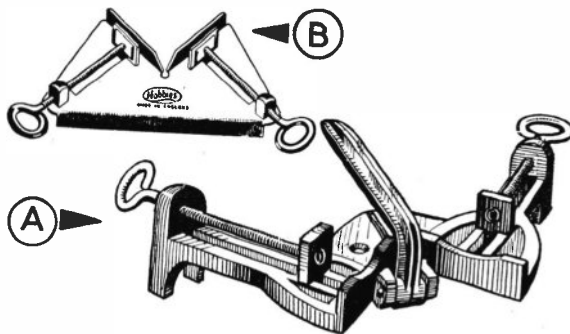


Fig. 2—A. All steel corner cramp 15/6 (post 1/6)
B. Mitre cutting tool and corner cramp 57/6 (post 3/6)

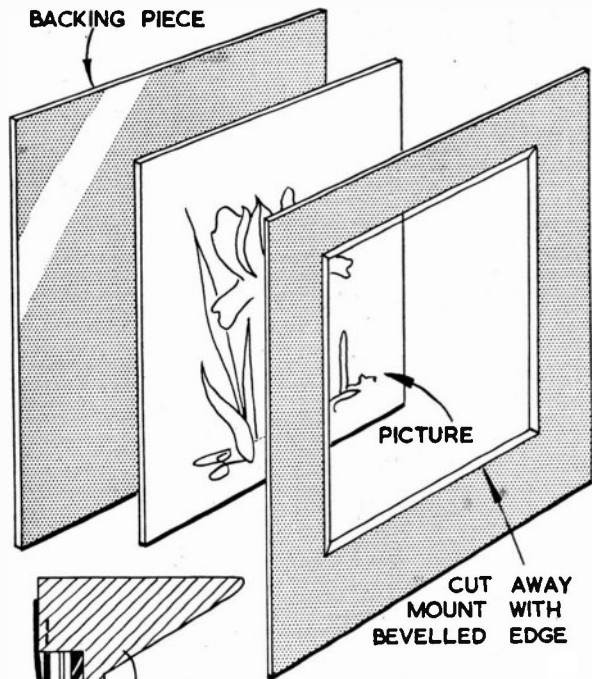


Fig. 6

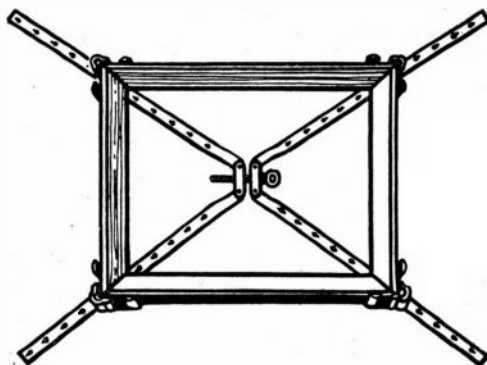
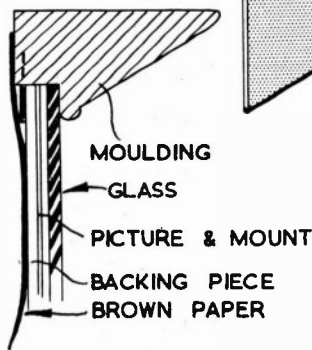


Fig. 5—Four-corner cramp 67s. 6d. (post free)

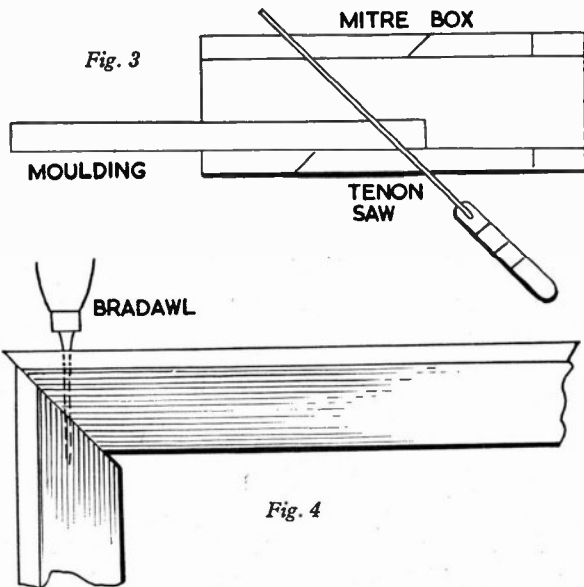
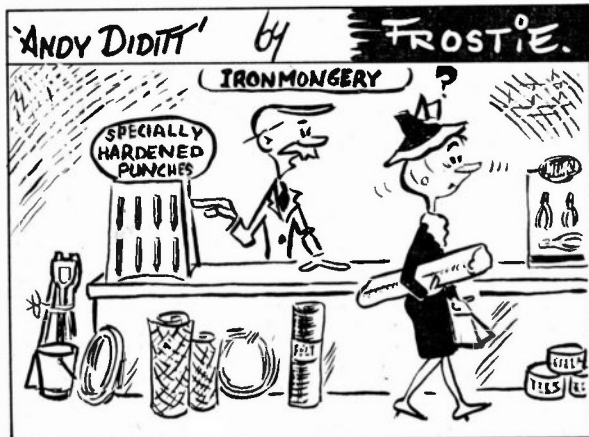


Fig. 3

Fig. 4



"... AND TELL ANDY I'VE GOT A REAL HARD PUNCH WAITING FOR HIM NEXT TIME HE CALLS IN."

cramp Fig. 5 then the whole frame can be glued together at once. This cramp will ensure that the frame is square and true all round.

To frame the picture it should be mounted on a back-board of card, or behind a cut out as shown in Fig. 6. The opening can be cut with a sharp modelling knife and should be cut on a bevel. Insert the glass into the frame, lay the mount and picture face downwards and finish off with a backing piece of card, plywood or hardboard. Secure with pins or sprigs driven sideways into the frame and finally, to keep out dust, paste a piece of brown paper over the back. For hanging, a pair of picture rings may be screwed in each side. (M.h.)

You too can

BUILD A BOAT

Says P. W. Blandford



Goblin



Corrib

THAT often misquoted bit by Water Rat about the joys of messing about in a boat can be taken a stage further. The greatest satisfaction comes in being skipper of a boat you have built yourself. With the help of modern materials it is possible for anyone, even if they lay little claim to being handymen and have only a meagre tool kit, to build a safe seamanlike boat.

Not many boats are built by traditional methods, even by professional boat builders. It was the development of waterproof synthetic resin glue which brought about the revolution. Besides its use in general construction, this glue made possible the manufacture of fully waterproof plywood.

In Britain there is a British Standard Specification and any plywood marked 'B.S.S.1088' is a boat building quality, which can be used to make a boat that will have a long life. Besides simplifying the work, plywood boats involve much lighter work with fewer tools. Many successful boats have been built by young people using a few hand tools and a kitchen table as a bench.

The simplest craft to build are fabric-covered canoes. These have a framework consisting of widely-spaced laths, over which is stretched fabric. At one time this was stout canvas which was painted after fixing, but nowadays most people use a fabric coated with plastic, which is tough and does not need paint.

In a fabric-covered canoe there are no difficult joints to cut. Most of the assembly of the framework consists of putting one piece of wood on top of another and fixing it there with glue and screws. The plans give the shapes of the crosswise frames full-size. In most canoes these are cut from $\frac{3}{8}$ in. plywood, with a coarse fretsaw or a coping saw. Lengthwise parts may be any reasonably-straight-grained soft wood, such as spruce, deal or pine.

The hull fabric is stretched over and fixed around the gunwales with copper tacks. At the ends it is cut and sealed with adhesive as well. Wood strips are fixed outside to take any rubs. The deck may be a coloured plastic or canvas. A wood coaming around the cockpit completes the job.

The cost

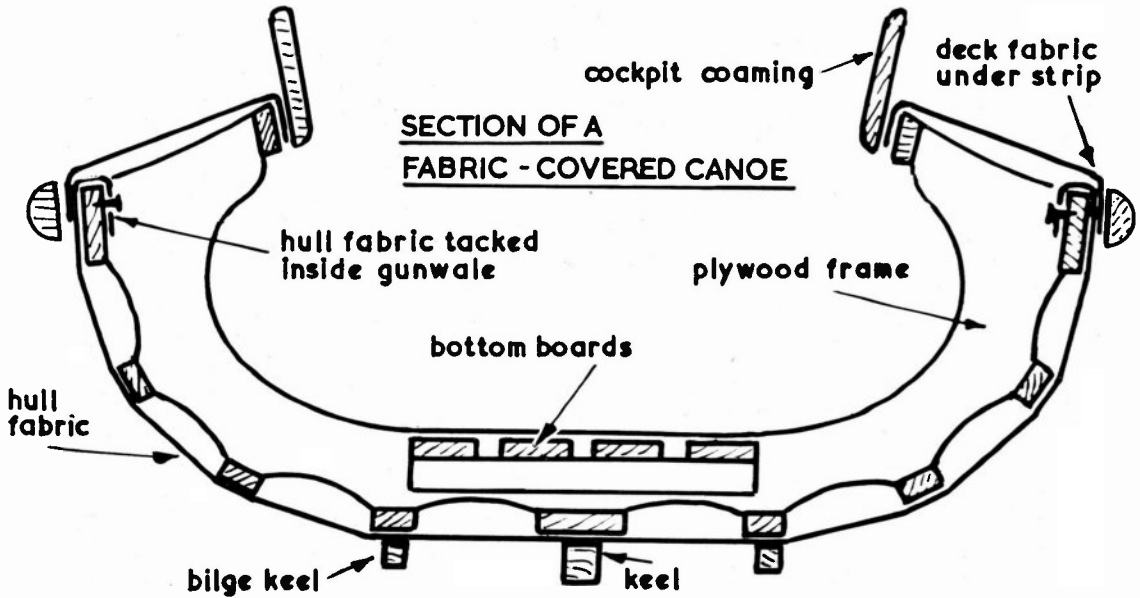
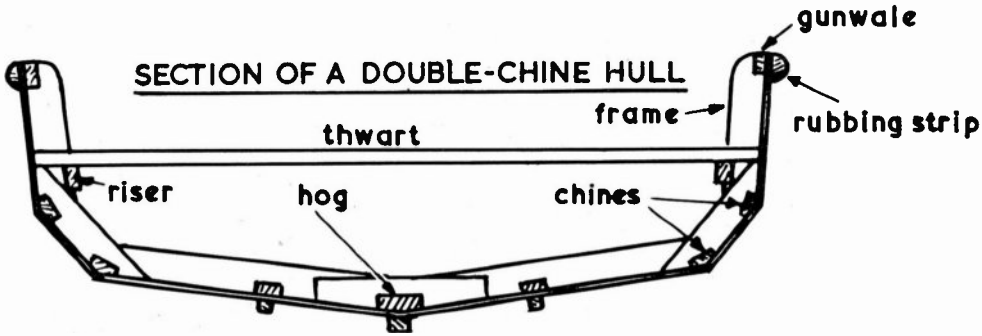
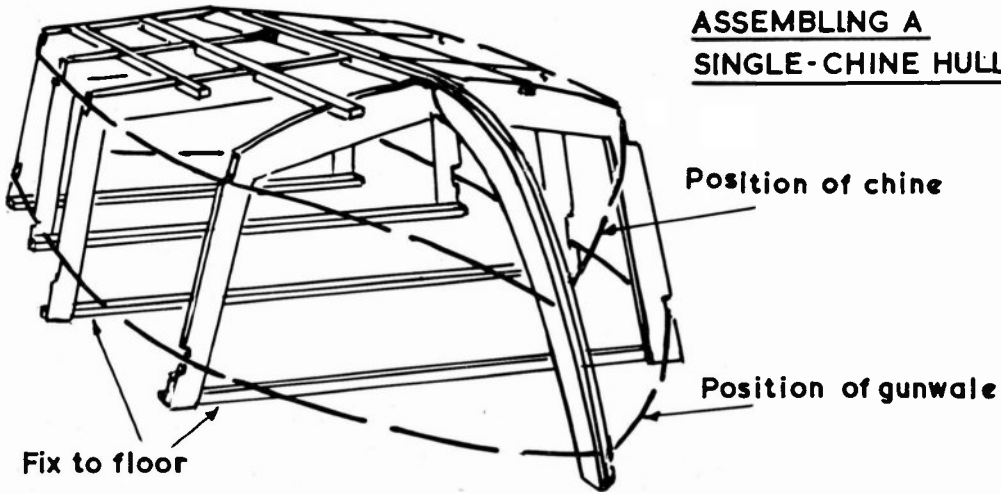
What does it cost and how long will it take? Although it is possible to buy kits, most canoe builders buy materials locally and build from scratch, following the step-by-step instructions with the plan. By careful shopping it is possible to buy all the materials for an 11 ft. canoe for about £9. A 15 ft. two-seater may cost about £12. Although it is possible to make paddles, good professionally-made ones cost upwards of £2 each.

Fabric-covered canoes are often built completely on week-end courses. It is likely that a father and son could do most of the work in two week-ends, with several evenings making parts and varnishing — altogether three weeks from start to finish is a reasonable estimate of spare time working, providing the workers think ahead and have materials ready when they need them.

Although there is more work in building a plywood-skinned boat, there is nothing very difficult providing the job is tackled a stage at a time. The method of building some of the smaller boats allows them to be moved and put away after a working session. Larger boats have to be fixed down at one stage during building. This may only be for a few hours in the case of a dinghy, or several working days for a sailing boat or motor cruiser. Fixing down is best done by screwing to a wooden floor, although a framework of planks can be used on a concrete floor.

For a small dinghy, such as Pete or Gremlin, the full-

ASSEMBLING A
SINGLE-CHINE HULL



size plan gives the shape of the bottom panel. This is made first and some framing attached to it, using synthetic resin glue in all joints and either brass screws or special barbed-nails. The ends are attached and the action of fitting the sides will pull the boat into shape. There is then some internal fitting out, but the whole job takes little longer than building a fabric-covered canoe. Pete has been built for less than £5 and this is the cheapest way to get afloat. Gremlin costs about twice that, and it can be converted for sailing for a total cost of about £16.

Single and double chine

Plywood cannot be bent two ways at once, so most plywood boats are built with straight lines in their cross section, either with one angle between side and bottom (single-chine) or two angles (double-chine). There is not much to choose between the methods of construction. There is a little more work in double-chine, but the boat is more seaworthy. For a high-powered outboard boat single-chine is faster.

For a boat which has to be fixed down, the frames transome and stem are made to full-size drawings. They have legs which extend and are attached to the workshop floor. Lengthwise parts are bent into shape, fitting into notches, where they are glued and screwed. Nothing has to be steamed. All of the framework is 'faired off', i.e. made level to take the plywood. Usually, plywood panels are cut approximately to shape and glued and screwed or nailed to the framework, then trimmed off afterwards.

On a single chine boat the bottom panels overlap the side butt against each other. Where sheets have to be joined to make up length, this is done by fixing joint covers inside. In all of this construction, synthetic resin glue takes care of waterproofing joints as well as making them as strong as the wood itself.

After the skin has been fitted, the boat is turned over and

the frame extensions cut off. In a small dinghy, fitting out consists of adding seating. In a cruiser it may involve making the cabin and all its internal fittings. Many small cruiser owners get a lot of satisfaction out of improving their boat over many years of use.

The amount of work involved depends very much on the boat chosen. We know a professional who has built three 10 ft. Corribs in a fortnight, but the amateur handyman tackling the boat for the first time might allow the equivalent of a fortnight full-time for one boat. Progress in the early stages seems fast, and the hull of a boat is fairly quickly produced, but if a fine finish is to be achieved there can be many hours work towards the end when there seems little to show for the effort.

Saving on labour

How does this compare with buying a readymade boat? Much of the cost of boat building is in labour. Wages usually account for more than half the cost. This means that in a simple boat the cost of the material is only about half the cost of a complete boat. With a more advanced boat it may well be nearer one-third. Wensum sailing dinghy, fully equipped to sail, or Nomad cruiser, equipped for living on board, are likely to have a market value three times the cost of materials.

Anyone who has not tackled anything as ambitious before may wonder if they are capable of seeing the job through to a successful completion. This is a fair question, but thousands have already done it. For instance, there are over 6,000 Venturers and nearly 2,000 Nomads in use. Probably 90% of these are amateur-built from scratch, mostly as first attempts at boat building. With modern materials, which are easily obtained, and fully-detailed plans and instructions, which tell you everything, there is really no reason why you should not join the ranks of proud boat users and builders, who find their relaxation afloat.

All correspondence on any subject covered in this magazine must be addressed to: The Editor, Hobbies Weekly, Dereham, Norfolk. If a reply is required, queries should be accompanied by a stamped addressed envelope and reply coupon inside back cover.

Miscellaneous Advertisements

FIRST BOOK OF BELLS

By Helen Jill Fletcher

THE lore and language of bells, like their variety, is fascinating. The author tells of church bells, the use and history, how bells are made and tuned, and the various methods of ringing that include the intricate changes which form one of the glories of English churches. Bells old and new, bells for animals, and bells at sea — these are some of the many aspects described in a delightful way. Published by Edmund Ward, 200, Bishops-gate, London, E.C.2. Price 11s. 6d.

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

FOR SALE 475 copies Hobbies Weekly, plus 13 Handbooks. Offers. — B. Connolly, 56 Wedgwood Street, Wolstanton, Newcastle, Staffs.

PENFRIENDS home and abroad, all ages, s.a.e. for details — European Friendship Society, Burnley, Lancs.

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

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

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

2,000 STAMPS FREE. Send for approvals and details. T. Brown, 23 Regent Avenue, Haydock, St. Helens, Lancashire.

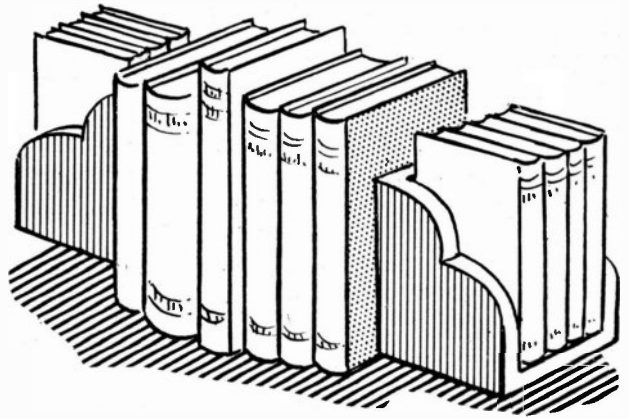
25 STAMPS FREE — Whole world approvals. BEG/MED collectors with discount — Ryan, 5 Hartfield Road, Wimbledon, SW19.

ONLY 4d. PER WORD
Classified advertisements on this page are accepted at a cost of 4d. per word prepaid. Use of a Box No. is 1/- extra. Send P.O. with advertisement to *Hobbies Weekly*, Advert. Dept., Dereham, Norfolk. Rates for display advertising on application.

HOME BILLIARDS FOR FAMILY FUN

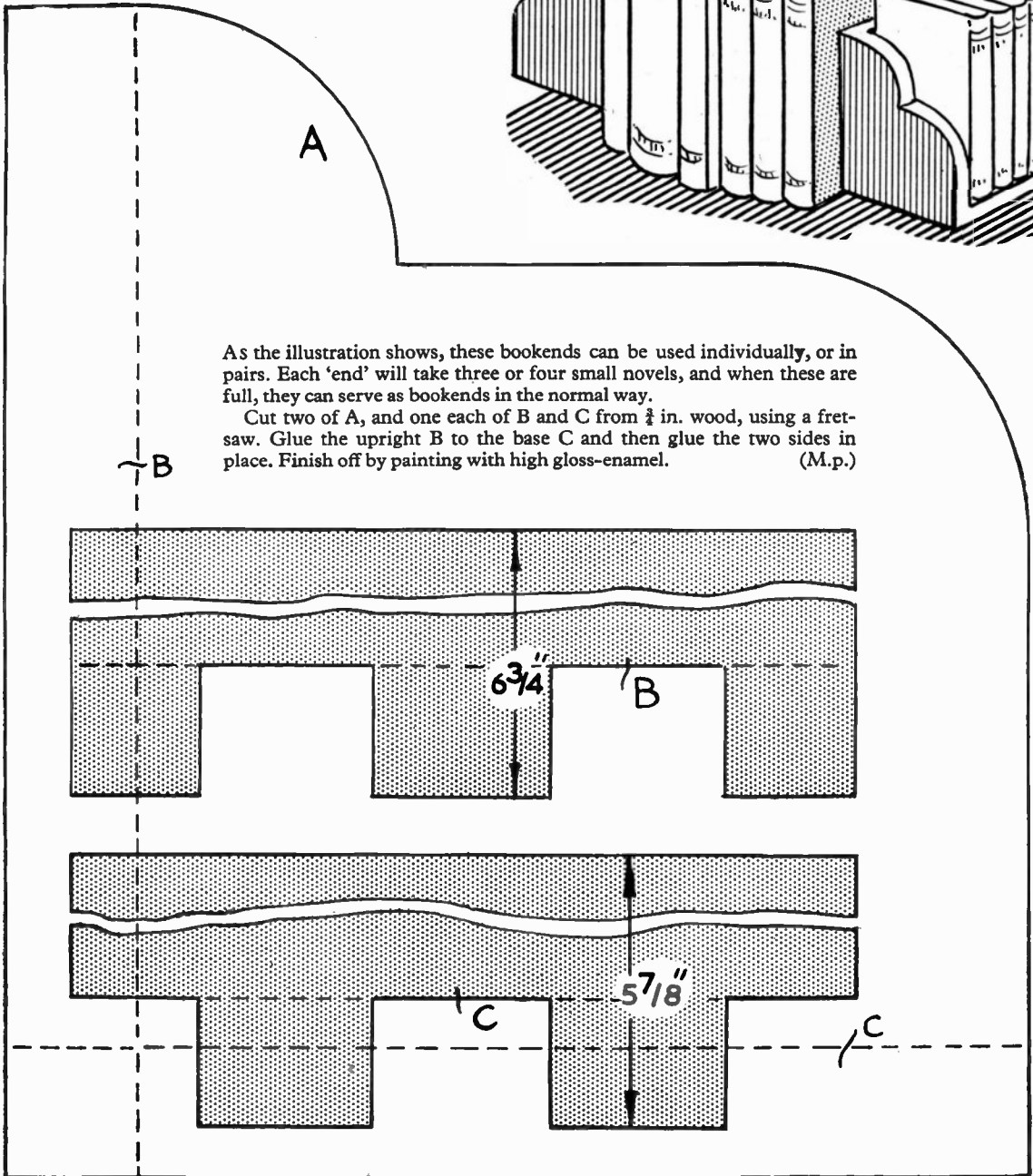
Tables in three sizes, 4 ft., 5 ft., and 6 ft. from £9. 10s. od. to £18. 10s. 6d., including snooker and billiard balls, cues, marker, and rules. Available at all branches. Send for full details from Hobbies Ltd, Dereham, Norfolk

Three-Way Bookends

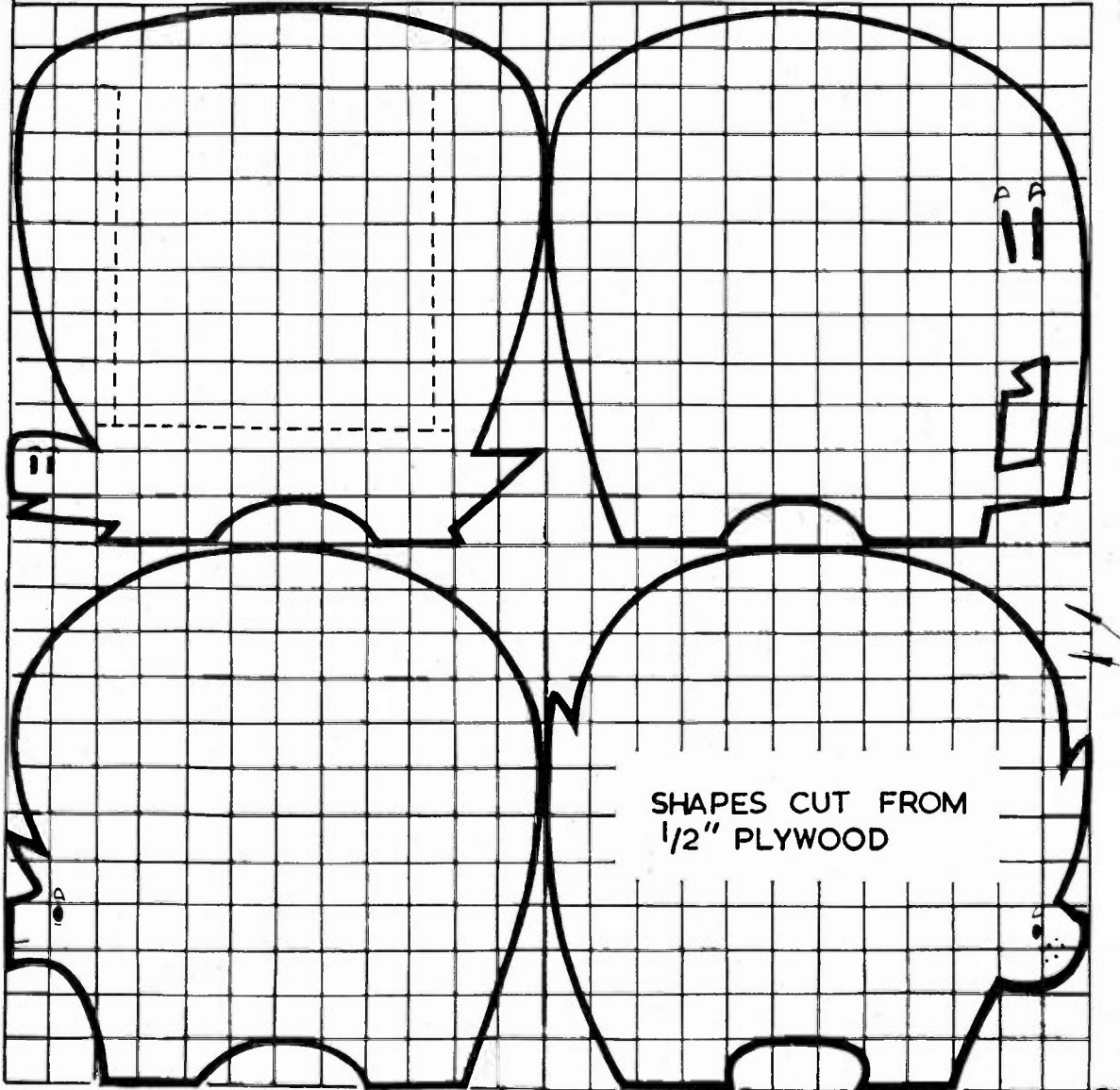


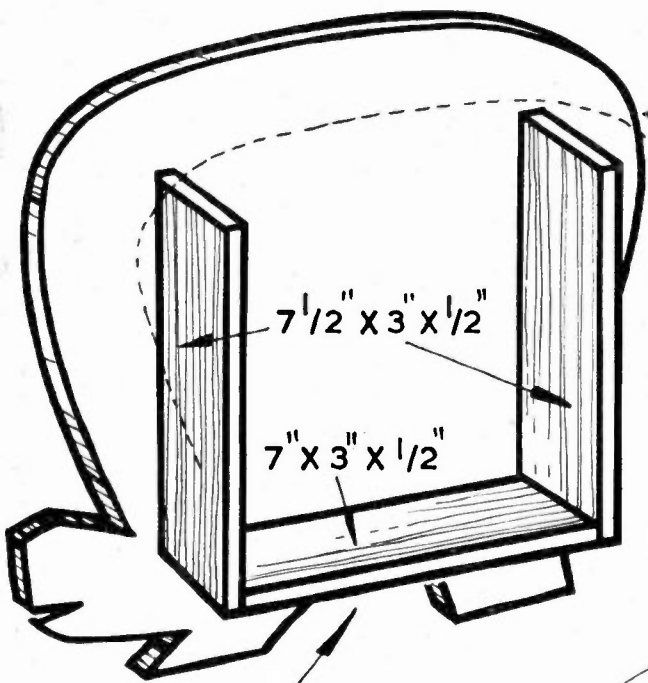
As the illustration shows, these bookends can be used individually, or in pairs. Each 'end' will take three or four small novels, and when these are full, they can serve as bookends in the normal way.

Cut two of A, and one each of B and C from $\frac{3}{4}$ in. wood, using a fret-saw. Glue the upright B to the base C and then glue the two sides in place. Finish off by painting with high gloss-enamel. (M.p.)



ANIMAL TIDY *For the* CHILDREN'S COMICS





FOR A FREE
STANDING UNIT
FIX ANIMAL SHAPES
ON EITHER SIDE
OF BOX

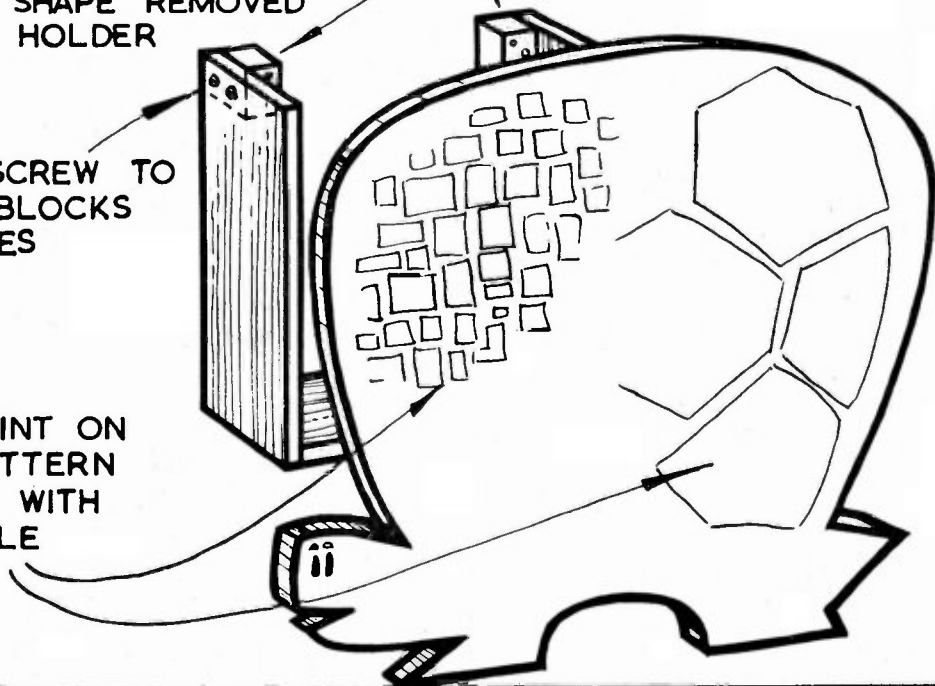
AS A HANGING
FITMENT ONLY
ONE ANIMAL
SHAPE IS NEEDED

TORTOISE SHAPE REMOVED
TO SHOW HOLDER

BLOCKS PLUGGED TO
WALL

SCREW TO
BLOCKS
1 IN. SQUARES

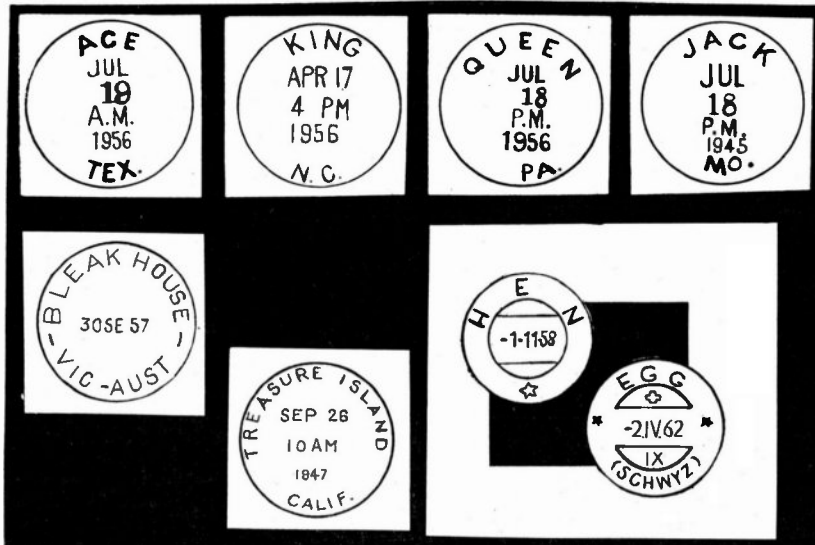
EITHER PAINT ON
SHELL PATTERN
OR COVER WITH
MOSAIC TILE



TOPICS FOR COLLECTORS

I now have
over 50,000
Postmarks

Says *R. K. Forster*



Some of the unusual postmarks in the author's collection

GLANCING through some files of old magazines a few weeks ago I came across a copy of *Hobbies Weekly*, dated January 15, 1938, to which I had contributed an article on a hobby I had then just taken up.

The hobby I had 'discovered' was postmark collecting, and I see that in the course of my enthusiastic article I referred to the fact that I had gathered over 3,000 different postmarks from various parts of the world.

I still collect postmarks, and in the twenty-seven years that have passed since I wrote that article I have accumulated over 50,000 postal date-stamps to form what is now, perhaps, the largest collection of its kind in Great Britain. In that time I have acquired thousands of postmarks from places with zany, believe-it-or-not names and I've gathered in specimens from ships, hotels, hospitals, palaces, airports, schools and even an odd jail or two.

They have congregated, these humble black imprints, in my carefully catalogued files after journeying by land, air and sea from the world's far corners. Within my files are date-stamps from Iceland and from Peru, from China and Ceylon, from Monaco and Madagascar, from the Yukon and the South Pacific Islands. And by the time one has accumulated 50,000 unusual postmarks one has learnt quite a lot about the places from which they started their journeys.

In my search for unusual specimens I have come across date-stamps from places bearing strange and sometimes almost incredible names. Switchback, Hot Coffee, Tomboy, and Looking Glass. How do places come to be so named?

Who christened Peculiar? What is so wildly funny about Ha! Ha! Bay? What happened at Accident, and how did Double Head Cabbage come by its zany name?

Place names like these are calculated to make even the ears of a hardened collector begin to twitch. One speculates about Sleepy Eye, smiles at Shickshiny, and wonders who gave Go Home its inhospitable name. The world is full of places with names as intriguing as these, and whenever I receive a postmark 'queeriosity' with a name like Mumps, What Cheer

or Joe Batt's Arm it immediately sets me map-wandering to discover where it came from.

Many postal place names which might be commonplace on their own are apt and amusing when brought into association with other place names in the pages of a collector's album.

In India, for example, there's a place named Pen and in Arkansas (U.S.A.) a hamlet called Ink. Back is in Sweden; Front is in Italy. Norway has a town named Hen, and in Switzerland there's a community named Egg. Scores of amusing postmark couplets can be gathered together in this way from such places as Pains and Relief, Love and Romance, Pepper (in Jamaica) and Salt (in Spain), and many others.

Behind many postmarks lie fascinating stories of local lore and legend. A pioneer map-maker in the Black Hills region of South Dakota wrote the word 'mystic' on a map of the district. He intended to convey the fact that a 'mistake' had been made — but his spelling was somewhat erratic. Later, surveyors took the word 'Mystic' to be the name of a community — so the town of Mystic, South Dakota, was named by mistake.

The town of Goodnight, New South Wales, Australia, took its name from the greeting of a lonely old shepherd on the banks of the Murray River. In the early days the old man's only contact with the outside world was the paddle boats that plied the river. As they passed he would stand by the water's edge and call 'Goodnight'. The steamer men started to look out for him: "Soon be reaching old 'Goodnight'" they would say. The name persisted, and when the area was opened up the name Goodnight was given to the settlement and its post office.

There are something like half a million different post offices in the world, so there's plenty of scope for finding postmarks from unusual sources. The date-stamp of Cerro de Pasco, Peru, is an interesting one to acquire: located at a height of 14,385 ft. it's the highest permanent post office in the world. For a different reason the postmark of Zyznow, in Poland, is worth including in a collection: alphabetically

BUILD YOUR OWN CRAFT

Plans for CANOES, DINGHIES, POWER BOATS

MMUCH of the cost for a professionally built boat is for time, and a craftsman's wages can be a considerable item. As time costs the amateur nothing he can, solely for the price of the materials used, achieve first-class results if he is prepared to be patient and careful. The plans of the craft specified below are by the expert P. W. Blandford and provide all the information you need to build from scratch. Shaped parts are shown full size and there are detailed instructions. A list of firms supplying materials and kits is provided with each plan. Postage 10d. extra on each plan.

CRUISER

NOMAD. 16 ft. x 6 ft. 2½ in. double-chine cabin cruiser, with full-size bunks for two and room for two more on air beds in the cockpit. Space in cabin for cooker and toilet, and ample lockers. Performs well with outboard motor of 4-10 h.p. and will plane with 18 h.p. The complete boat weighs about 6 cwt. and is easily towed and launched from a trailer. Draught 12 in. Cabin 8 ft. long and 47 in. headroom, with 34 in. over the bunks. The prototype was built single-handed in one month at a cost of £100. **Price 45/-**

DINGHIES

WENSUM. 11 ft. x 56 in. double-chine plywood sailing boat. The basic boat is an open dinghy with a gunter rig of about 66 sq. ft. Weight complete about 220 lb. Draught of hull only 6 in. and with centreboard down about 30 in. The sailing gear is easily removed to make a general-purpose dinghy for rowing or outboard use. Suitable for sailing by a crew of two or will carry four for general use. **Price 17/6**

GOBLIN. 9 ft. 10 in. x 54 in. plywood pram dinghy of special form, light enough to be easily lifted on to a car roof. Construction is easy and quick. Good foredeck and buoyancy built in under side benches. Weight complete 120 lb. Sail area 52 sq. ft. in a single lug sail. Good performance as a racer and sail numbers are issued. **Price 16/-**

GREMLIN. 7 ft. 7 in. x 46 in. plywood pram dinghy of special form. This is the longest hull that can be got out of standard 8 ft. sheets of plywood. The bottom is a single sheet, split at one end and sprung to give a V forward and a curve aft. Has been built as a rowing boat for £10 and with rudder, dagger board and sailing gear for £16. Can be carried single-handed. **Price 15/-**

PETE. 6 ft. x 44 in. flat-bottom pram dinghy. The cheapest and simplest practicable boat. Can be built from one plywood sheet and may cost less than £5. Details of simple sailing gear included. Suitable for angling. Will carry two adults or three children. **Price 11/-**

CORRIB. 10 ft. x 51 in. single-chine V-bottomed plywood, general-purpose dinghy for rowing or outboard motor (3 h.p. is adequate). Simple construction, but a very shapely craft and a fine family boat. **Price 13/6**

VENTURER. 11 ft. x 54 in. double-chine fast outboard boat. Two versions are included. The basic design is a camping cruiser, adaptable to sleep two on air beds under canvas cover. Runabout version also described. A 4 h.p. motor is adequate for general purposes and the boat will plane with upwards of 10 h.p. The basic boat has been built for about £25. Not adaptable to sailing, but can be rowed. Normally seats four. **Price 17/6**

CURLEW. A very seamanlike, robust car-top boat for sailing, outboard motor and rowing. Plywood skinned, simple and cheap to build. Size 9 ft. long with 4 ft. beam. Excellent as a yacht tender, angling and family outings or exciting solo sailing. Will carry up to four persons. **Price 17/6**

CANOE (Folding)

PBK24. A short single-seater of similar lines to PBK10, but with a longer cockpit. Packs into one bag. 11 ft. long, 28 in. beam, 55 in. cockpit, draught 4 in. Normal maximum load 300 lb. **Price 13/6**

CANOE (Rigid fabric-covered)

PBK10. The shortest satisfactory canoe, carrying a man and camping kit. Suitable for most waters. 11 ft. long, 28 in. beam, 48 in. cockpit, draught 5 in. Normal maximum load 300 lb. **Price 12/-**

PBK14. Roomy single for the big man or a two-seater for an adult and child or two young people. A popular tourer. Has crossed Channel as a single-seater. 14 ft. long, 29 in. beam, 76 in. cockpit, draught 5 in. Normal maximum load 500 lb. **Price 13/6**

PBK15. Fast touring single-seater, suitable for rapid rivers and the open sea in capable hands. Safe and stable. The adult enthusiast's canoe. Many Channel crossings. 14 ft. 6 in. long, 26 in. beam, 48 in. cockpit, draught 4 in. Normal maximum load 400 lb. **Price 13/6**

PBK20. Very stable and seaworthy two-seater, with sufficient beam to carry an efficient sail plan. Very roomy and popular as a tourer on most waters. 15 ft. long, 32 in. beam, 7 ft. cockpit, draught 6 in., normal maximum load 600 lb. **Price 13/6**

PBK26. Fast and stable single-seater with a shorter cockpit and a rockered keel, making it a good boat for rapid rivers. Many successes in long-distance racing. 14 ft. long, 26 in. beam, 39 in. cockpit, draught 4 in. Normal maximum load 400 lb. **Price 13/6**

CANOE (Rigid plywood skinned)

PBK16. A two-seater, flat bottomed, safe and robust. May be left afloat. 16 ft. long, 32 in. beam, 7 ft. cockpit, draught 5 in. Normal maximum load 700 lb. **Price 13/6**

PBK23. A single-seater with the same main dimensions as PBK15, but with V-bottom and hard-chine section. Roomy and stable, may be left afloat. 14 ft. 6 in. long, 26 in. beam, 48 in. cockpit, draught 4 in. Normal maximum load, 400 lb. **Price 13/6**

To HOBBIES LTD. (Dept. H.55) DEREHAM, Norfolk

Please send me watercraft plan.....

for which I enclose to cover cost and postage.

Name.....

Address.....

speaking it's the last postal place-name in the world. In Raleigh county, West Virginia there's a small town named Odd. And even odder than Odd is Odder — the name of a post office in Aarhus province, Denmark.

In the United Kingdom and the Irish Republic there are about 25,000 post offices and from these, too, can be found many postmarks with fascinating names. Loggerheads, in Staffordshire, is one such place. London Apprentice, in Cornwall, is another. In Yorkshire there are post offices named Blubberhouses, Swine, Fortyfoot and Jump. From other parts of England one can get the postmarks of Trumpet, Bugle, Robin Hood, Red Cow, Hook, Crook, Good Easter and Up Down Hill.

Letters which go astray in the post are often productive of interesting postmark oddities. One such letter, posted in Wakefield, Yorkshire, reached its destination, a local address, after journeying by way of New Zealand. The journey took four months and the packet eventually arrived decorated with an elaborate display of postmarks to indicate its strange wanderings.

Another much-travelled cover was the subject of a competition in a well-known philatelic magazine. The envelope, addressed to a Mr S. H. Ahmed at Kabuli Gate, Bombay, India, had passed from one Kabuli Gate to another in search of the elusive Mr Ahmed until finally, almost black with superimposed postal markings, it had given up the attempt to get itself delivered. The envelope eventually reached the

offices of a philatelic magazine whose editor organised a competition with prizes for the entrants who correctly estimated the number of postmarks, or part postmarks, shown in a photograph of the cover.

Even more widely travelled is one cover in my collection. It began its travels in Ealing, London, on 2 September, 1913, addressed to 'Charles G. Hewitt, Apprentice, S.S. *Queensland Transport*, Batavia, Java.' The envelope turned up thirty-seven years later in a British stamp dealer's shop with fifteen postal endorsements including the postmarks of Batavia, Singapore, Kobe, Osaka, Yokohama, Hong Kong, Ocean Island and several smaller places throughout the South China Seas, the Pacific Islands and Australia.

Collectors use various methods of filing their postmarks. The method I personally prefer is the card index system. Each postmark is cut to a standard 4 in. by 2 in. size, and is then carefully stamp-hinged on to a plain white record card size 5 in. by 3½ in. A brief note regarding the place of origin is then typed in the top left-hand corner of the record card which is filed in country order, alphabetically.

I began my article in that pre-war number of *Hobbies Weekly* by saying that I thought few hobbies could give such a high dividend of pleasure and interest for so small a cash outlay.

'Twenty-seven years and 50,000 postmarks later I still think this is true. There's fun and fascination to be found in the instructive hobby of postmark collecting!



THE MARVELETTES



THE Marvelettes were the first of the bluesy girl groups to break through in the United States. This they did in 1961 with a song called 'Please Mr Postman'. Since that time, they have consistently maintained best-selling status over there with each 'single' release in the face of strong competition from the innumerable girl groups on the American scene.

It all happened very suddenly for the four girls, who only a few months before had been students together at High School just outside Detroit. Just as Liverpool produces male groups, this town seems to produce girl groups (Supremes, Vandellas, etc.)

During their school days they used to sing at parties — or just at each others

homes — for nothing more than kicks. But fellow students liked the sound, and persuaded the girls to enter the school talent show. They so impressed one of the teachers that he arranged an audition for them with Berry Gordy Jr., boss of Motown Records Inc. Immediately, he signed the girls to a long-term contract.

Result? Their first record 'Please Mr Postman' stormed into the American sellers holding down the number one spot on the nation's charts.

This led to a string of coast-to-coast television appearances, and spots at famed American venues.

'Twistin' Postman' was their initial follow-up, and it was a medium sized hit without emulating the success of their first disc. But the next one, 'Beech-

wood 4-5789' sent them hurtling back into the Top Twenty over there, and paved the way for more hits, like 'Play boy', 'Locking up my heart' and 'As long as I know he's mine' (which marked their debut on E.M.I.'s Stateside label in this country).

The four girls — lead singer Gladys Horton, Katherine Anderson, Wanda Young and Georganna Tillman — followed up the release here of 'As long as I know he's mine' (Stateside SS251), with 'He's a good guy' (SS334), and 'Too many fish in the sea' (SS369). They were also featured on the LPs 'On stage' (Stateside SL10065), and 'Sound of the R & B Hits' (SL10077), and the EPs 'R & B Chartmakers', Nos 1 and 2 (SE1009 and SE1018).

CHEMISTRY AT HOME

It has long been known that ants eject an acid liquid. In the seventeenth century a chemist distilled red ants with water and obtained a new acid. As the entomological name for the common red ant is *Formica rufa* it was apt to call the new acid formic acid. Later investigation showed its formula to be H.COOH and that it occurs, too, in nettles and perspiration.

The acid normally sold for use by home experimenters is dilute and contains 25 per cent of formic acid. The concentrated acid is a pungent smelling liquid which produces blisters on the skin. On smelling the dilute acid one is struck by

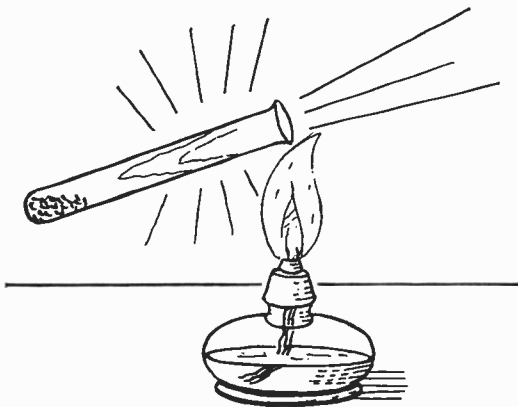
Formic Acid Experiments

By L. A. Fantozzi

the similarity of its odour to a solution of sulphur dioxide, SO_2 . How may we make a quick distinction between them? Dip slips of blue litmus paper in formic acid and in sulphur dioxide solution. The litmus reddens in both cases, but shortly that in the sulphur dioxide solution is bleached, whereas that in the formic acid remains unchanged.

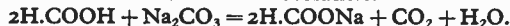
The salts of formic acid show some peculiar properties. One of them, sodium formate, H.COONa , is particularly useful for demonstrating that the formic acid radical has strong reducing properties.

To prepare a supply of sodium formate, little by little stir a solution of sodium carbonate (washing soda), $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$, into some formic acid until a drop of the mixture turns red litmus paper purple, which show the mixture to be neutral. A blue colour shows you have overshot the mark, but this may



Hydrogen from sodium formate

be rectified by adding formic acid drop by drop until the litmus paper reverts to purple. Carbon dioxide, CO_2 , is given off and sodium formate remains in solution:

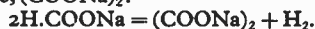


Boil down the solution to low bulk and then continue the evaporation to dryness on a water bath, when the sodium formate will be obtained as a white mass.

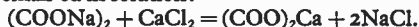
Before trying out the reducing properties heat a little to just below a red heat in a small hard glass test tube. Now hold the open end of the tube to the flame. A sharp pop will be heard and a momentary flame runs down the tube. Hydrogen, H_2 , is being evolved. What remains in the tube? Let the tube cool, dissolve the residue in a few ml. of water, filter the solution and add to it a solution of calcium chloride, CaCl_2 . A white precipitate forms.

If you add calcium chloride solution to sodium formate solution no such precipitate forms, since calcium formate, $(\text{H.COO})_2\text{Ca}$, is soluble.

The substance formed by heating sodium formate is sodium oxalate, $(\text{COONa})_2$:



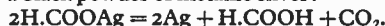
On adding calcium chloride to its solution insoluble calcium oxalate, $(\text{COO})_2\text{Ca} \cdot \text{H}_2\text{O}$, was precipitated and sodium chloride NaCl , remained in solution:



A notable example of reduction by the formic acid radical is that of silver nitrate, AgNO_3 , to metallic silver, Ag . Add silver nitrate solution to sodium formate solution. A white precipitate of silver formate, H.COOAg , appears:

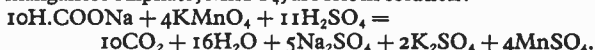


On standing, or more rapidly on heating, the precipitate changes to a black powder of metallic silver:



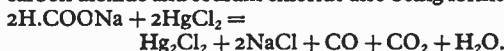
In very dilute solutions and in a test tube free from grease film the silver is usually deposited as a brilliant mirror on the walls of the tube.

Potassium permanganate, KMnO_4 , is also reduced in presence of sulphuric acid, H_2SO_4 . Carbon dioxide is evolved and sodium sulphate, Na_2SO_4 , potassium sulphate, K_2SO_4 , and manganese sulphate, MnSO_4 , are left in solution:

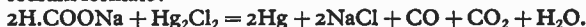


Dissolve about 0.5 gram of sodium formate in 2 to 3 ml. of water, add an equal volume of dilute sulphuric acid, warm the mixture and then add a few drops of potassium permanganate solution. The purple colour of the permanganate is immediately discharged with effervescence and a colourless solution is left.

With mercuric chloride, HgCl_2 , a double reduction takes place. To some sodium formate solution in a test tube add a few drops of mercuric chloride solution (caution, poisonous) and warm the mixture. The mercury is reduced from the mercuric to the mercurous state, a white precipitate of mercurous chloride, Hg_2Cl_2 , appearing, carbon monoxide, CO , carbon dioxide and sodium chloride also being formed:



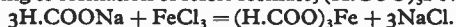
The mercurous chloride then turns grey owing to complete reduction to metallic mercury, Hg , in presence of the excess of sodium formate:



The normal salts of formic acid are all soluble in water,

with the exception of those of lead, Pb, silver and mercurous mercury, which are sparingly soluble. Basic formates on the other hand are not. The formation of two of these affords further analytical tests for the formic acid radical.

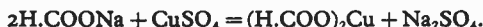
Mix solutions of ferric chloride, $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$, and sodium formate. The orange colour of the ferric chloride changes to red owing to formation of ferric formate, $(\text{H.COO})_3\text{Fe}$:



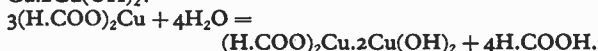
Boil the mixture. An orange-brown precipitate appears. The mixture now smells of formic acid. The reason for these changes is that the ferric formate has reacted with water and split into insoluble basic ferric formate, $(\text{H.COO})\text{Fe}(\text{OH})_2$ and formic acid:



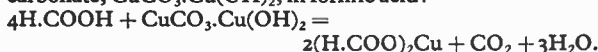
Now mix solutions of copper sulphate, $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$, and sodium formate. The blue of the copper sulphate deepens owing to formation of copper formate, $(\text{H.COO})_2\text{Cu} \cdot 4\text{H}_2\text{O}$:



On boiling the solution a beautiful green sandy powder deposits. This consists of basic copper formate, $(\text{H.COO})_2\text{Cu} \cdot 2\text{Cu}(\text{OH})_2$:



It is obvious from this reaction that one cannot obtain copper formate by boiling down a solution to low bulk and crystallizing. To prepare it one must first dissolve basic copper carbonate, $\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$, in formic acid:



A slight excess of the carbonate should be present at the end of the reaction so as to ensure complete neutralization of the acid. Filter the solution and let the filtrate evaporate at the ordinary temperature. Blue crystals of copper formate are thus obtained.

TRIPLE PUZZLE TO MAKE AND SOLVE

IN Fig. 1 you will see four shapes linked together and which are the parts of a most interesting triple puzzle. They can be formed into a triangle, a square or when linked together will make both these geometric shapes by turning one way or the other.

It will be best to first describe how the pieces are cut out from an equilateral triangle of thin cardboard and I would suggest the base be about 3 in. long. Fig. 2 shows how the cuts are to be made but carefully note the following instructions.

Bisect AB at D and BC at E. Extend AE to F making EF equal to EB. Bisect AF at G. Using G as the centre describe arc AHF. Now extend EB to H. Using E as the centre describe

triangle while if they are closed together counter-clockwise you will produce the square.

This is a fascinating little puzzle to make but you must be accurate with the preparation of the parts then see whether your friends can make the two shapes. (S.H.L.)

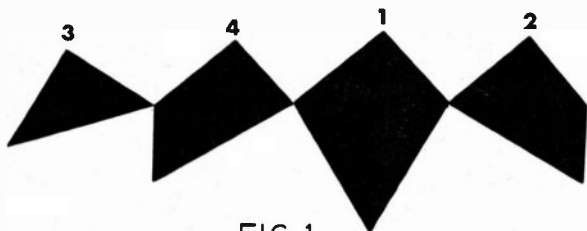


FIG 1

HJ. Make JK equal to BE. Drop a perpendicular from D to the line EJ to obtain L. From K produce a perpendicular to point M. The four pieces are numbered one to four and can now be cut out. The puzzle is to re-arrange them in the form of a triangle and in the form of a square. The solution to the latter is shown in Fig. 3.

If the four pieces are now laid out flat on the table in the order shown in Fig. 1 and linked together by pieces of string glued across the joints we have another fascinating puzzle. The problem is to form the linked pieces into either the triangle or the square.

There is no need to turn the pieces over whatever but you will find that if they are closed clockwise you will make the

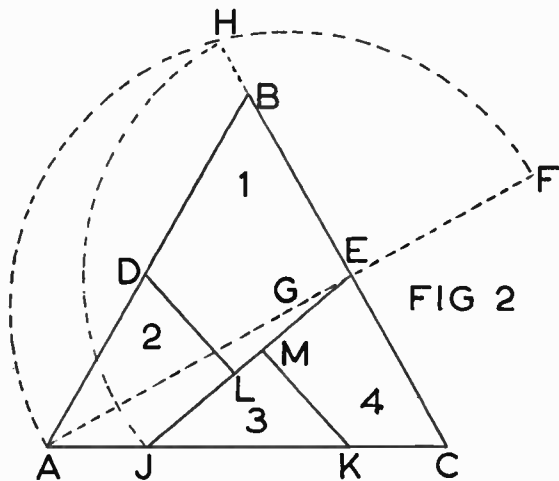


FIG 2

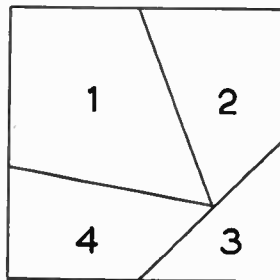


FIG 3

HOBBIES ANNUAL 1966

Over 200 exciting pages of things to make — from greenhouses to guitars ... doll's houses to dinghies.

**FURNITURE
MODELS
TOYS**

HOBBIES ANNUAL 1966

**FOR THE
MAKE-IT-
YOURSELF
ENTHUSIAST**

Free inside!

- 4/- PLAN for Toy Shop
- 12/- VOUCHER for musical box kit

How to make

- CUPBOWL — also makes CROQUET
- TROLY PLUGS — for FRIGIDERS
- GREENHOUSE — with GARDEN FRAMES
- DOLL'S HOUSE — with 4 ROOMS
- TOY TITS — for CHILDREN
- with 1000+ MODELS to make



READY TO GO! ONLY 3/6
EASY TO ASSEMBLE KIT

3/6

OVER 200 PAGES FOR ONLY

You can't afford to miss it!



FREE 12/- VOUCHER

**EXCLUSIVE
OFFER** only to
readers of the *Annual*
A 22/6 Ready-to-
assemble musical box
kit for only 10/6.

NEW!

SUPER MARY 'POPPINS' PLAY HOUSE

Styled on the house in Walt Disney's famous musical. Every girl who has seen the film will want this play house and be really 'with it'.

FREE 4/- PLAN

**IN
EVERY
COPY**

TWINPLAY MOTEL

A garage and
doll's house
combined.
Wonderful
play value
for children.



*... soon sold out—
get it NOW!*

From branches,
newsagents, etc, price 3/6
or by post (9d. extra)
Use coupon below.

Please send Hobbies 1966 Annual for which I enclose 4/3 (including postage).

Name

Address

HOBBIES, H 58, Dereham, Norfolk.

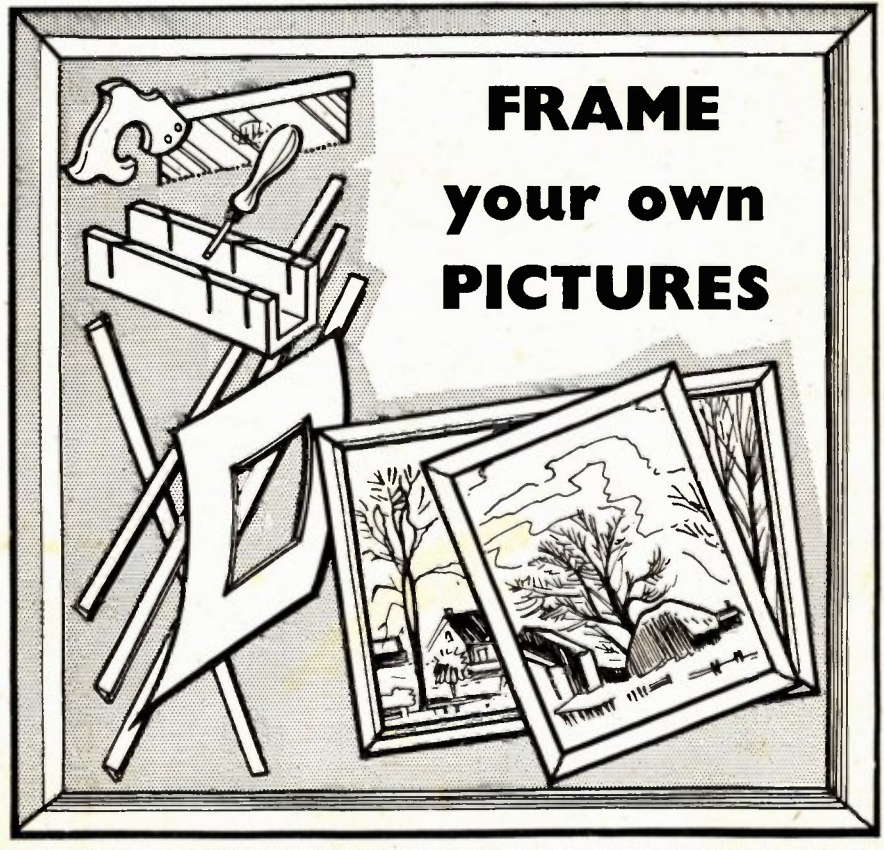
HOBBIES

weekly

28th JULY 1965

VOL. 140

NUMBER 3633



FOR CRAFTSMEN OF ALL AGES

6^p