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'DO-IT-YOURSELF'
MAGAZINE

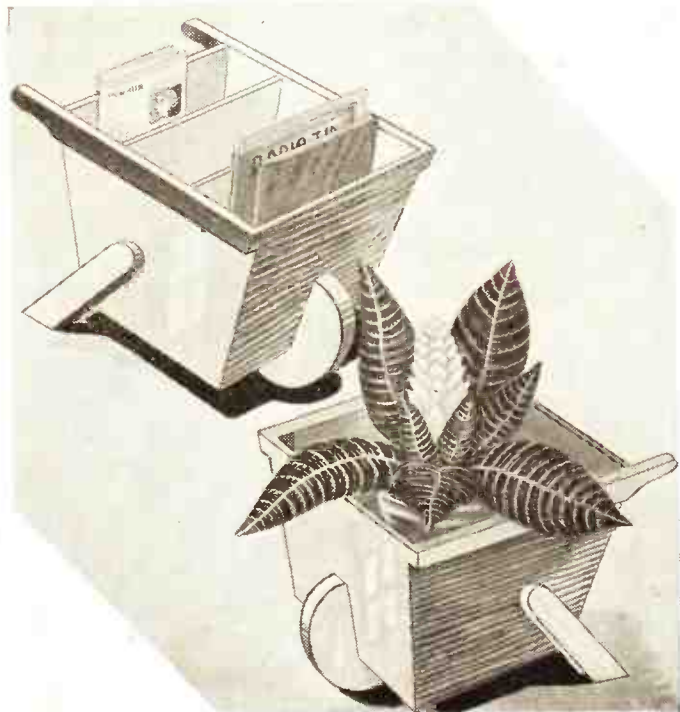
HOBBIES *weekly*

FOR ALL
HOME CRAFTSMEN

Make this handy MAGAZINE RACK

Also in this issue:

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PHOTOGRAPHY FROM
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ETC. ETC.



OR PLANT HOLDER



Up-to-the-minute ideas

Practical designs

Pleasant and profitable things to make

World Radio History

5^D

which it kills with violent blows from its feet. The Secretary bird has a long crest of feathers which projects from the back of its head and which reminded people of the last century of the quill which secretaries in those days put behind their ears — hence the peculiar and rather descriptive name.

12½ cents: The Pink Arum. This is one of the several species of 'Arum Lily' occurring in Swaziland, and exists in at least three colour varieties. It occurs in the highveld throughout Swaziland, the white-flowered variety growing in profusion in some localities.

15 cents: Swazi Married Woman. Like their menfolk Swazi women wear their hair long. When they reach marriageable age they change their hair style from that of a young man (shown in the 25 cent stamp) and put it up in the style shown. Married women, to mark their status, wear a goat skin apron which shows on the stamp on the woman's right shoulder. The apron is slung from the right shoulder and hangs loosely

down to be tied by a band around the waist. The necklace worn by the woman on the stamp is probably made of traditional beadwork known as Ingcibo.

20 cents: Malaria Control. Symbolic design featuring an anopheles mosquito, the vector of malaria, which once was endemic in low lying areas of Swaziland, causing thousands of cases every year. As a result of the Government's malaria control measures, the disease has now been practically eradicated.

25 cents: Swazi Warrior. Swazi men normally wear their hair long and only cut it short as a mark of bereavement. To keep their long hair clean the men wash it almost daily in running water; if they can, they wash it in the white water of rapids or waterfalls. The daily washing stretches the hair and bleaches it a golden brown colour. When they are unable to bleach it in the traditional way they use soap which they lather into their hair and leave there to dry. This bleaches the hair until it is almost white. A long hairpin is sometimes stuck into the hair

as a useful ornament which is used as a scalp scratcher.

50 cents: Ground Hornbill. The ground hornbill, or Nsingisi as it is called in Swazi, is an unmistakable bird which looks not unlike a rather low slung turkey. Its diet consists of insects and small animals. It has a very characteristic booming call and, like the domestic fowl, calls at the first sight of dawn.

R.1.00: Aloes. The stately Aloe depicted on the stamp is the most abundant of the Swaziland tree species, growing in thousands on some of the rocky hills in the middleveld and extending into the lowveld. In sheltered positions the stem may reach or exceed a height of 20 ft. The massive leaves bear sharp prickles.

R.2.00: Msinsi The Swaziland Kafirboom or Flame Tree is a small thorny tree up to about 25 ft. high, found scattered throughout the territory between about 1,000 and 4,500 ft. altitude. The seeds are bright red and very hard, and are sometimes used as beads.

150TH ANNIVERSARY OF THE RED RIVER SETTLEMENT

THE history of Canada's Western Provinces is marked by many significant events, each one playing a vital part in its development. Probably the most outstanding of these events was the establishment of the Red River Settlement near the present site of Winnipeg in 1812.



At the beginning of the nineteenth century an economic revolution was in progress in the Scottish Highlands and was causing widespread distress. To relieve this situation, Lord Selkirk proposed immigration of evicted crofters to British North America, and the establishment of a colony in the Red River area. This was effected in 1812.

From the first, the colony had aroused the suspicion of the North West Company, which feared that it would prove a threat to the supply of pemmican for the company's lines of communications, and its posts in the far west furbearing regions. The company decided to destroy the colony by instigating desertion among the settlers and offering free transportation to Canada. The remainder of the settlers were finally driven from the area in the Seven Oaks Massacre of 1816, which claimed the lives of

Governor Robert Semple and 19 of his officers.

In 1817, Lord Selkirk led a force of veterans recruited from former regiments from Montreal and re-established the Red River Colony. The colony continued to progress without further trouble from the North West Company, and virtually all danger from this source was eliminated with the merger of the two companies in 1821.

The new stamp is designed to recognize the tremendous task accomplished by Canada's western pioneers, and it honours the descendants of these pioneers who have made the Canadian West a modern productive segment of the nation's economy. The stamp is intended to bring into the foreground the importance of the founding of the Red River Settlement and draw attention to the vast changes and advances made in Canada's Prairie Provinces, changes and advances which have caused this region to become known as the Granary of the World.

AMERICA — NEW ISSUE 'HOMESTEAD' ACT

THE 4-cent Homestead Act commemorative stamp, issued by America on 20th May shows a sod hut, typical of the early homestead dwellings, with a brightly lighted doorway, against the background of a bleak and wintry sky. A settler with his shovel, the combination that produced the hut, is featured in the design, with his wife — who made the hut a home — standing beside the open doorway with her dishpan in her hands.

The design, realistic in its treatment symbolizes the forerunners of the prosperous farms and cities of the Great Plains today, and honours the courageous men and women who built them. A bluish grey colour has been selected for the stamp, representing a late evening scene, and emphasizing the bleakness of the plains.

An initial printing of 120 million has



been authorized. The new stamp was first placed on sale in Beatrice, Nebraska, on 20th May, one hundred years after the Homestead Act was signed by President Abraham Lincoln. The Act, which became effective on 1st January 1863, provided that any person who was the head of a family or had reached the age of 21; a citizen of the United States or one who had filed declaration of intent to become a citizen, could enter a claim for 160 acres of public land. A nominal filing fee of a few dollars was the only cash outlay required. After five years residence on the land, and meeting certain conditions regarding cultivation, the settler became owner of the land.

In less than 60 years, the Government had given away a land area nearly as large as Louisiana and Texas combined, to over one million individuals.

Taking Photographs from moving Ships

THERE are many times, either when on holiday or perhaps only on a day's outing, when we must make part of the journey by cross-channel steamer, ferryboat, river bus, or pleasure steamer. This way of travel often presents us with opportunities for taking many pictures from unusual angles. We can photograph other shipping at close quarters, harbours and ports as we enter or leave them, and the breathtaking scenery encountered when

By C. Robinson

travelling on inland waterways and lakes. To obtain the best possible results under these circumstances, there are certain precautions we must take, and snags we must be constantly on the look out for.

When photographing a moving subject, if we wish to obtain a clear picture we must use a high shutter speed. Under the conditions I am describing, it is, of course, ourselves who are moving, the subject usually remaining still; but the same rule still applies. Use the highest shutter speed you have; never less than 1/100th of a second. The blur caused by movement of travel can be lessened considerably by taking, whenever possible, a scene you are either moving directly

towards or away from, and not horizontally across your line of vision.

If you must photograph anything which is moving directly across your line of vision, an exceptionally high shutter speed must be used, 1/250th to 1/500th of a second at least.

Subject movement, or in this instance, the movement of travel, is often wrongly blamed for unsharp pictures; the most common cause is vibration due to the ship's engines. Trouble from this source

is minimised by shooting when the ship is travelling at reduced speed, and standing firmly on the deck, legs slightly apart, and making sure that no part of the body is touching any part of the ship, such as rails, seats, gangways, etc, which all transmit vibration through the body to the camera, causing camera shake.

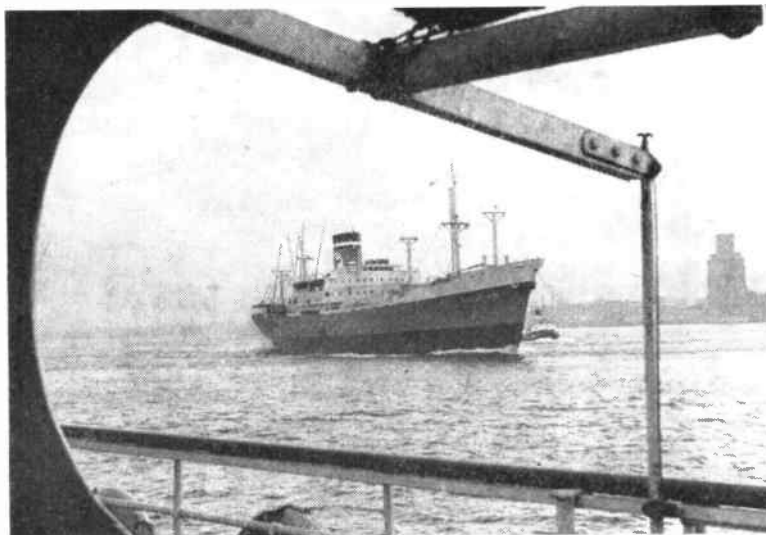
Whenever pictures are being taken on or near water, there is always another hazard for which we must constantly be on the alert. That is the sudden splash of spray which, if it came in contact with the camera lens, could severely damage it, as it is made of a soft optical glass. The easiest way to guard against this is to use a filter over the lens, and a lens hood at all times. Incidentally, as there will usually be quite a fair proportion of sky in your pictures, make this filter a 2x yellow one, and it will serve the double purpose of protecting your lens and ensuring a good rendering of the sky tones.

Looking at the aesthetic side of things, pictures taken from ships, especially if you are a fair way off shore, can be very disappointing due to the large expanse of open sea one must use as foreground. One way of overcoming this, and giving your pictures impact, is to include part of the ship's structure — port holes, rails, etc — in your pictures, using them to 'frame' the actual subjects.

One final word of warning; keep tight hold of your camera. It only needs an unexpected lurch of the ship, and your camera can be at the bottom of the sea.



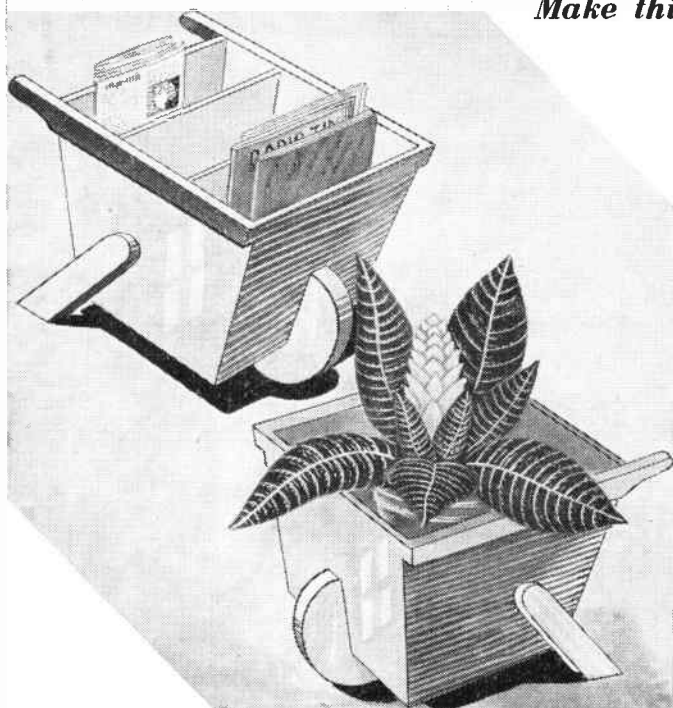
Approaching Ambleside on Lake Windermere. Taken from a lake pleasure steamer.



Moving down the Mersey.

Make this dual purpose

Magazine Rack or Plant Holder



Make a start by constructing the box as seen in Fig. 2. The floor A is $\frac{3}{4}$ in., the ends B and C $\frac{3}{8}$ in., and the sides D $\frac{1}{4}$ in. plywood or $\frac{1}{8}$ in. hardboard. They are glued and pinned together.

The handles E are $\frac{3}{4}$ in. thick, and are screwed and glued along the sides as shown in Fig. 3. The legs G are also $\frac{3}{4}$ in., and are glued in the approximate

THE attractive 'barrow' makes a pleasing novelty for the lounge, hall or garden. Indoors it will serve as a rack for magazines or for a wastepaper basket. Outside it is used as a holder for a decorative pot plant. The pot will need to be wedged up inside to enable it to stand level.

The side and end views in Fig. 1 show the general construction, and give the main dimensions. The various parts are lettered so that the diagrams may be more easily understood. If it is to be used outside you will, of course, need to use waterproof glue and exterior grade plywood or oiltempered hardboard.

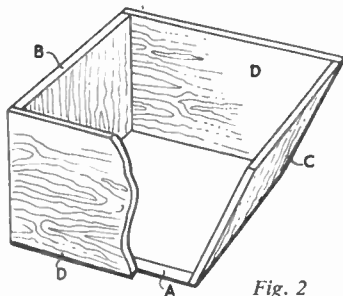


Fig. 2

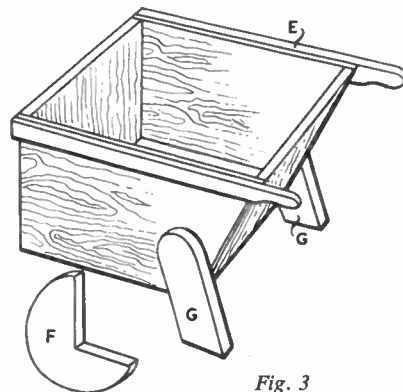
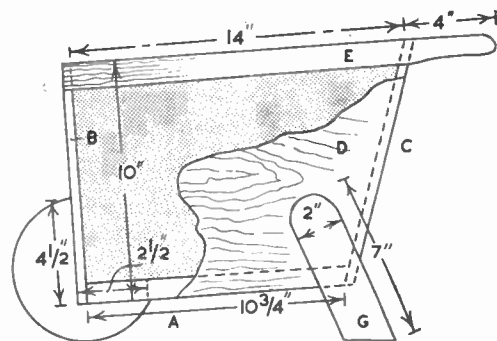
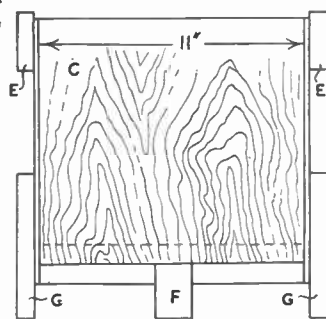


Fig. 3



SIDE VIEW

Fig. 1



END VIEW

position shown. The 'wheel' F needs to be a little thicker, about 1 in. being sufficient. The wheel is cut from a 6 in. diameter circle and glued to the box. It can be pinned from the inside for extra strength.

Used as a plant holder, the bottom is drilled to allow water to drain away or alternatively provided with a small galvanized tray.

As a magazine rack two or three partitions of $\frac{1}{4}$ in. plywood should be inserted as seen in the main illustration.

Clean up with glasspaper, fill the grain, and give a suitable undercoat. Rub down lightly, and apply two finishing coats of high gloss enamel.

(M.h.)

EXPERIMENTS IN ELECTRICITY

THESE experiments can be made with very simple equipment, and they will help to explain the working of many items of electrical apparatus and machinery. The materials needed may be to hand, but will in any case cost very little.

Magnetism

Electro-magnets are used in bells, buzzers, motors, and many other things. An electro-magnet can be made by taking an iron nail, and winding some thin insulated wire upon it, as in Fig. 1. The kind of wire, and number of turns, are not important. About 50 or 100 turns of 28 s.w.g. cotton-covered wire would do well.

Current can be drawn from a single dry cell, or any dry battery. When current is flowing in the winding, the magnet will pick up other iron or similar objects. Magnetism ceases when the current is interrupted by taking one wire off the battery.

If the coil of wire is placed round a steel object, such as a needle, some magnetism will remain, even when the battery is disconnected. The needle has thus become a permanent magnet, and this is how permanent magnets are made, a very powerful current being used.

If the polarity of the battery is reversed, by reversing the leads, the magnetic polarity of the electro-magnet will also be reversed. That is, it will change from a North pole to a South pole, at one end, the other end changing from South to North.

and polarity is reversed, the compass will turn the same way as in the first experiment. So if a complete turn of wire is made round the compass, the needle will move even more strongly in one direction. That is, the magnetic field of the wire above the compass helps

the turns upon a strip of paper or tape, to avoid any chance of shorted turns, especially with enamelled wire.

To use the meter, place it so that the needle is roughly in the position shown in Fig. 3. Long ends can be left to the winding, to connect elsewhere. The compass should be well away from metal objects or magnets.

By 'Modeller'

strengthen the magnetic field of the wire running back under the compass. This fact is utilized in the galvanometer.

A galvanometer

A galvanometer is a very sensitive device, and it will show the presence of extremely small currents. One similar to that in Fig. 3 can be made up, for the further experiments described.

The compass is placed in a small, shallow box with an open top, so that

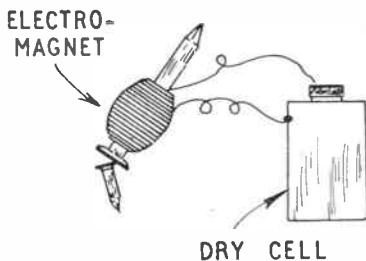


Fig. 1—How magnetism is produced

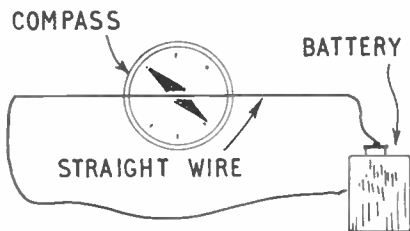


Fig. 2—Magnetic field around wire

Magnetic field

The magnetic field round a wire through which a current flows can be shown as in Fig. 2. The straight wire is placed in line with the compass needle. This will have no effect, until the cell is connected, and the needle will then try to turn at right angles to the wire.

If the battery polarity is reversed, the needle will turn in the opposite direction. If the wire is placed under the compass,

the needle can be seen. For the same reason, the winding is divided into two sections. Some 28 s.w.g. or any similar wire is suitable, and about 50 to 100 turns can be wound on. Both sections are wound in the same direction.

If the compass is easily seen from one side, and the wire is thin, the winding can equally well be in one section, round the middle of the compass, as in Fig. 6. Should the compass case be metal, wind

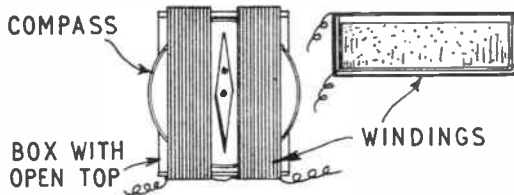


Fig. 3—How the Galvanometer is made

Primary cell

A primary cell produces current, when it has been made, and an ordinary dry battery is an example. If dissimilar metals, such as copper and zinc, are placed in a solution called an electrolyte, current is produced.

This can be demonstrated as in Fig. 4. The electrolyte can be ordinary salt, dissolved in a little water, and a small piece of blotting paper may be dipped in this. The electrodes can be a copper coin, and small piece of zinc, placed each side of the blotting paper.

When the meter is connected, it will show that a current is produced. If the leads are reversed, the meter needle will move the other way.

Other metals or materials can be used. Dry cells have a zinc case, forming one electrode, and a carbon central rod (instead of the copper) for the other. The electrolyte is sal-ammoniac paste. The zinc forms the negative pole, and the carbon the positive pole.

A larger battery can be made by hanging copper and zinc plates in a vessel containing the electrolyte.

An ordinary dry cell is about $1\frac{1}{2}$ V. In

larger batteries, a number of cells are joined in series. For example, two cells would total 3V., and three cells would form a $4\frac{1}{2}$ V. battery.

Secondary cells

A secondary cell does not produce current, when made, but will store current obtained from elsewhere. An accumulator is a secondary battery of

several cells, storing current from a dynamo or mains charger.

A secondary cell can be demonstrated by placing two coins of the same metal each side of the blotting paper, or by suspending them in a vessel of electrolyte (salt and water). If the meter is connected to the cell, it will not show any current.

The cell can be charged by connecting it to a dry battery for a minute or so, as in Fig. 4. Gassing takes place, as the current causes chemical changes.

only arises when the permanent magnet is *moving*. If the permanent magnet rests still against the electro-magnet core no current is produced. When the permanent magnet is drawn away from the core, the current produced is of the reverse polarity to that produced when the magnet approaches the core.

In some types of dynamo (such as may be used on cycles) the magnet is kept in motion by rotating it, thus producing a continuous current. It was seen that the polarity of the current changes,

This explains why transformers cannot be used with direct current — the current in the primary must be changing all the time, either in polarity or intensity, or no current is produced at the secondary.

If the transformer were 100 per cent efficient, so that no power was lost, the power obtained from the secondary would be the same as that applied to the primary. In practice, transformers are much less efficient than this.

The voltage may be stepped up or

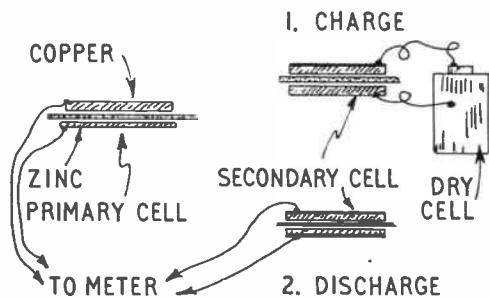


Fig. 4—Batteries and accumulators

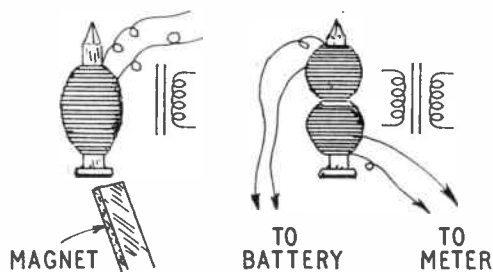


Fig. 5—Induction and transformers

If the cell is then disconnected from the dry battery, and connected to the meter, the latter will show a current is flowing. When the cell is discharged, it can be recharged as before.

Most accumulators use special lead plates, in dilute sulphuric acid, and they can deliver quite heavy currents for long periods.

Induction

When a current was passed through the winding in Fig. 1, magnetism was produced. In the same way, if the winding core (nail) is magnetised, current will be produced.

This can be shown as in Fig. 5. The electro-magnet is connected to the meter by two long leads, so that the magnet does not touch the compass needle to move because of its own magnetic field.

When the permanent magnet is brought quickly near the electro-magnet core, a small current is produced, which will move the meter needle. This current

when the magnet moves away from the core, instead of approaching it. This means that the dynamo will produce alternating current: that is, a current which rapidly changes polarity.

In some types of dynamo, the permanent magnet is fixed, and the windings revolve. This has the same result. In other types of dynamo, there is no permanent magnet at all, another electro-magnet being used instead.

To produce direct current, the dynamo has a commutator and brushes, which 'change over' the circuit at the correct instant, so that the current coming from the dynamo always flows in one direction. There may also be several windings, as in a car dynamo.

Alternating current may be used for lighting, but direct current is needed for charging an accumulator. So most cars have a direct current dynamo. Some motor cycles have a flywheel dynamo which produces alternating current, and a rectifier, for charging the accumulator.

Transformers

If the core has two windings, this forms a transformer (Fig. 5). If a current starts to flow in one winding, some current will arise in the other winding, and will be shown by the meter needle. When current is flowing steadily in one winding, no current is produced in the second winding. But when the current in the first winding is interrupted, a momentary current again arises in the second winding.

down, in proportion to the number of turns. For example, if the primary had 100 turns, and the secondary 200 turns, this would be 1:2. If 6V. alternating current were applied to the primary, 12V. would be obtained at the secondary. Actually, no power would be gained, even if the transformer were 100 per cent efficient, because the current at the secondary would be only one-half that at the primary. Despite this, and the actual losses, transformers are very useful. One example is the bell transformer, which reduces 200/250V. mains supplies to 5/8V. or so, for the bell.

Thermo-couple

If dissimilar metals are in close contact, and this point is heated, current is produced. Such a junction of different metals is called a thermo-couple. This can be demonstrated as in Fig. 6. The thermo-couple can be made from dissimilar metals, such as a piece of copper wire, tightly twisted round a soft steel paper clip.

Some dissimilar metals work better than others, and can produce quite a strong current for the meter. This can be shown by trying various kinds of wire.

Thermo-couples are used to measure strong radio frequency currents. The RF current heats a small element, which is joined to the thermo-couple. The current obtained from the thermo-couple is steady, and flows in one direction only, and is shown on a sensitive meter.

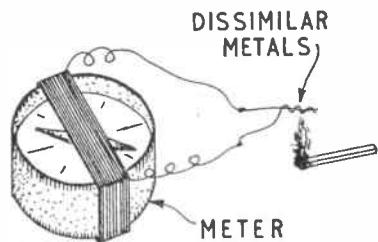
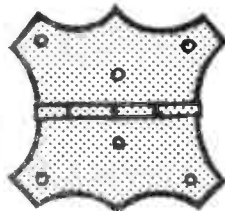
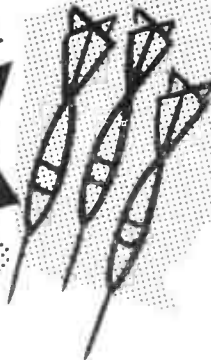


Fig. 6—Heating thermo-couple with match

Hobbies

**BONUS
PLAN**

DART BOX

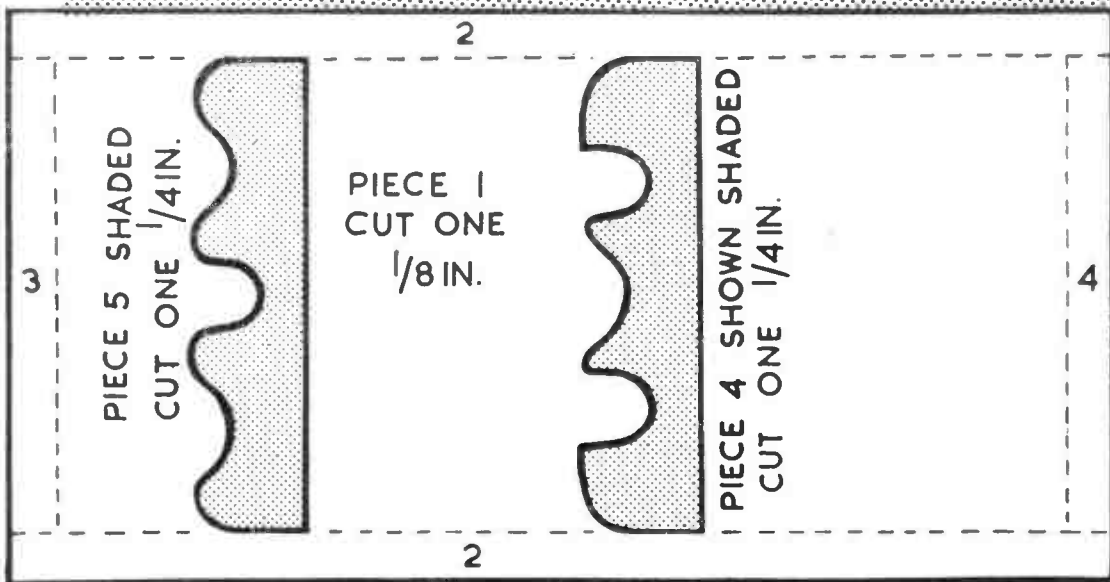


HOBBIES FANCY
HINGE No. 5308
1 IN.

PIECE 3
CUT ONE
 $\frac{1}{4}$ IN.

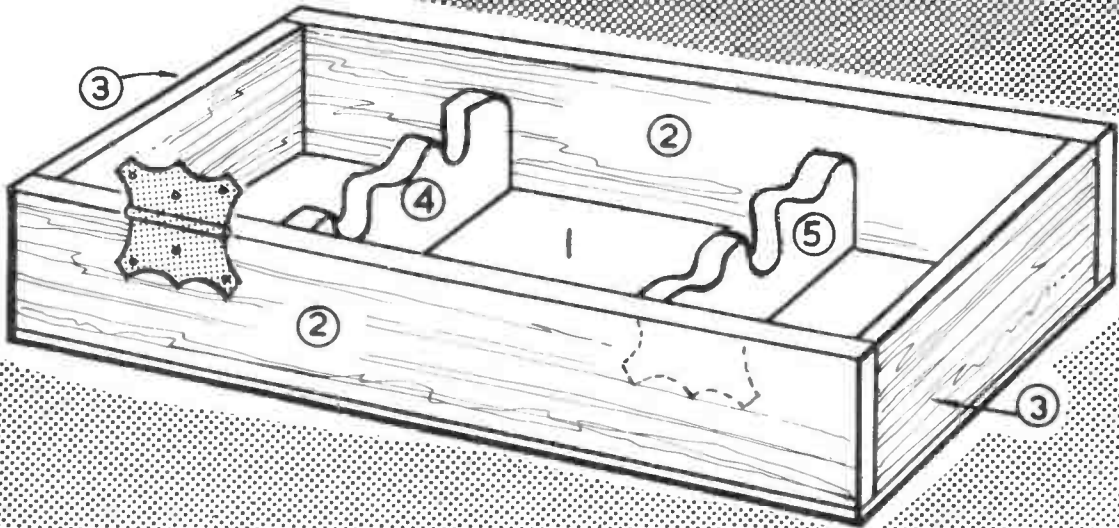
PIECE 3
CUT ONE
 $\frac{1}{4}$ IN.

PIECES 2 CUT TWO $\frac{1}{4}$ IN.



LID

A SUITABLE CATCH
IS HOBBIES No. 5474



LID CUT ONE $\frac{1}{2}$ IN.

CHEMISTRY

AT HOME

A PLEASANT old-fashioned perfume known as Court Bouquet may be made by putting into a small dry bottle 1 gram of oil of bergamot, 0.15 gram of oil of orange blossom, 3 grams of orris root, 0.05 gram of liquid storax, 0.02 gram of musk, and 18 c.c. of rectified spirit. Cork the bottle, swirl lightly to mix, and allow to stand for 14 days. Filter the mixture, and the perfume is ready for use.

Curry powder. This is easily made by intimately mixing the following finely powdered spices: 4 ounces of turmeric, 2½ ounces of white pepper, ¼ ounce of black mustard, ½ ounce of caraway, ¼ ounce of coriander, and ¼ ounce of Cayenne pepper.

Seidlitz powder. This popular effervescing medicinal drink may be made cheaply at home, using pharmaceutical grade ingredients. For each blue paper intimately mix 7.77 grams of potassium sodium tartrate (Rochelle salt) and 2.59 grams of sodium bicarbonate. In each white paper wrap 2.46 grams of tartaric acid. For use, dissolve the contents of the blue paper in a half to one tumbler of warm or cold water, stir in the contents of the white paper, and drink while the liquid is effervescing.

Chlorinated soda disinfectant. This is a powerful germicide, and so useful for sinks, drains and similar septic foci. It is made from bleaching powder ('chloride of lime') and washing soda. A convenient volume of the finished product can be contained in a winchester, either provided with a glass or rubber stopper, or with a screw cap fitted with a rubber disc.

Stir ½ pound of bleaching powder to a smooth cream with 3 pints of cold soft water (rain water will serve if your piped water is very hard). Allow the mixture to stand a few hours, and then filter it. Dissolve 12 ounces of washing soda in a pint of warm water, let it cool, and then stir it into the bleaching powder solution. A white precipitate forms; filter this off, collecting the clear filtrate of chlorinated soda in the winchester.

Keep the disinfectant in a cool dark place. It may be used undiluted. As it has a good bleaching action it may also be used to remove stains from ceramics, such as sinks and toilets. We thus have a two-in-one product; that is, a disinfectant and a bleacher.

Linoleum polish. This is an excellent pleasant smelling polish. Boil up a large water bath, turn out the flame and warm

160 c.c. of genuine oil of turpentine (NOT turpentine substitute). Add 1 gram of paraffin wax, 7 grams of yellow beeswax and 16 grams of carnauba wax. Stir until the waxes have dissolved. If the waxes are slow to dissolve, remove the vessel from the water bath and boil up

RECIPES FOR MAKING USEFUL PRODUCTS

By L. A. Fantozzi

the water again. Turn out the flame and again put in the wax/turpentine mixture, stirring until dissolved. Pour out into tins to set.

Metal polish. To make this essential domestic product first well mix 62 c.c. of solvent naphtha and 1 gram of oleic acid. Separately, dissolve 0.33 gram of triethanolamine in 128 c.c. of cold water, and stir in 7 grams of precipitated chalk. Now add the naphtha/oleic acid mixture, and stir rapidly until a creamy emulsion forms. Continue stirring a few minutes, and finally stir in 1 c.c. of strong ammonium hydroxide (of specific gravity 0.88).

Colour distinction. It is often difficult to tell blue shades from green in artificial light, but if a strip of magnesium ribbon is lit the difference is easily seen.

To lighten blueprints. Blueprints which are too dark may be lightened by treatment with a 4 per cent solution of washing soda in water. Treat until light enough, then rinse in water.

Marking blueprints. Where it is desired to make additions to blueprints a 2 per cent solution of washing soda plus a little red ink may be used as a writing fluid.

Polishing cloths. Self polishing cloths for furniture are an obvious advantage. They are made by dipping squares of soft cloth in a wax solvent mixture and hanging to dry (in flame-free conditions, since the solvent is inflammable). Boil up a large vessel of water, turn out the flame and stand in the water a large clean tin containing two and four-fifths pints of genuine oil of turpentine and four-fifths pint of white spirit ('turpentine substitute'). When this solvent is hot

add 7½ ounces of carnauba wax, 9½ ounces of white montan wax, and 12 ounces of ceresin, and stir until they have dissolved. If solution is difficult, the solvent has cooled too much. In this case remove the tin from the bath, boil up the latter again, turn out the flame, and re-immerses the tin. If a pleasant smell is desired for the cloths, add one-fifth ounce of oil of spike lavender. Dip cloths in the hot mixture, and hang as previously stated.

Fireproofing straw. Should you plan to build a thatched structure, such as a rustic summer house, it is advisable to fireproof the straw. To treat enough straw to cover 50 square feet a vessel capable of holding about 10 gallons will be needed. Into this put 5 gallons of water. In 2 gallons of hot water dissolve 4 pounds of ammonium sulphate, 2 pounds of ammonium carbonate, 1 pound each of borax and boric acid, and 2 pounds of alum. Add this solution to the water in the vessel, and stir well. Soak the straw in the solution until it is thoroughly wetted out, lift and allow to drain on rods laid across the vessel top until the straw ceases to drip. It may then be set aside to dry, when it is ready for use.

Dubbin. A first quality product for treatment of sports shoes and similar leather goods is easily made. Simply warm together 2 ounces of tallow, 4 fluid ounces of cod liver oil, and ¼ ounce of paraffin wax or ¼ ounce of ceresin. If a pleasant almond-like odour is desired, add a few drops of nitrobenzene. When a clear liquid results, pour out the dubbin into a large flat tin to set.

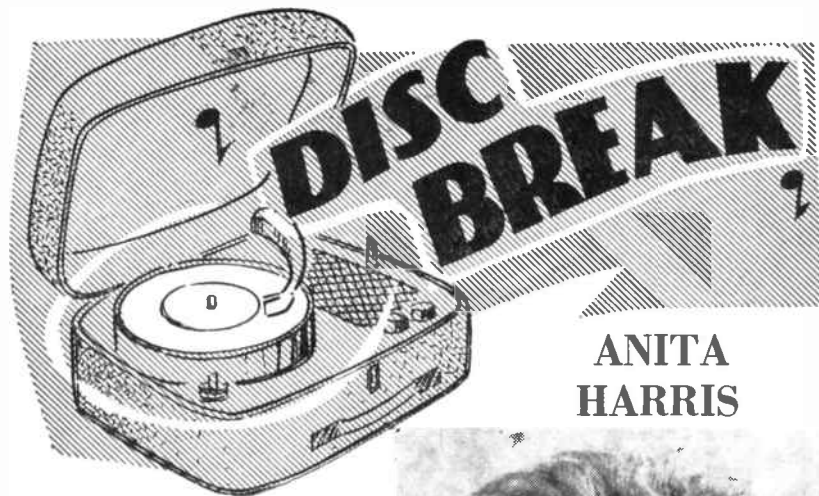
Self polishing leathers. Impregnated chamois leathers for polishing the car can be made by first melting together 6 fluid ounces of oleic acid and 6 ounces of stearic acid. Allow to cool, stir in 9½ fluid ounces of petrol and then 12 ounces of tripoli powder and 6 ounces of rouge (finely powdered ferric oxide). Apply this mixture to the leather, working it well in. Let the petrol evaporate off, and the leathers are ready for use.

Further steps in Pottery

by Harold Powell

THIS is a book dealing with advanced pottery, and follows the author's two earlier books on this subject. Wheel pottery, glazing, coil pottery, tile craft, and wall plaques, are some of the projects described. It is very well illustrated, and the reader is taken by easy stages throughout the different sections.

Published by Blandford Press, 16 West Central Street, London, W.C.1. — Price 10s. 6d.



ANITA HARRIS

MAYBE the longing to entertain was inherited by Anita Harris from great-uncle Gus Harris and great-aunt Ida Barr — well-known singers, both of them. But, inheritance or not, Anita Harris and showbusiness have got on famously together.

As a pianist she won prizes at music festivals. As a championship — and exhibition — ice-skater . . . more prizes. As a singer and dancer she has travelled to such famous centres of entertainment as Las Vegas and has made many television, sound radio and cabaret appearances at home and abroad.

And last October she made her recording debut on EMI's Parlophone label (45-R 4830) singing *I haven't got you*, a Lionel Bart composition, and with the musical backing of the John Barry Orchestra, and *Mr One and Only* as the coupling.

Anita Harris was born at Midsomer Norton, Somerset, on 3rd June, 1942. She was exactly three years old when she first walked on to a stage — at a cinema in Chippenham. The cinema's Saturday morning club for children was running a talent contest and Anita decided to try her luck.

'I'll never forget what I sang — it was *Now is the hour*,' says Anita. 'An uncle of mine was particularly fond of this song and had taught me the words and music. Eventually I was brave enough to go on to the stage and sing it. I can't remember whether I won anything or not.'

Anita moved with her family to Bournemouth when she was seven years old and it was then that she started to learn ice-skating. Two years previously she had started to learn the piano and before long she was winning prizes at the Bournemouth Music Festival.

'At one time I had aspirations to become a classical pianist but then I was



ice-skating, learning the piano, having dancing and singing lessons and I didn't really know what to do. All I did know was that I wanted to go into show-business.'

Anita started competition skating when she was ten, and also took part in exhibition skating. Between the ages of twelve and seventeen she was winning prizes at such well-known rinks as Queen's, in London, Richmond, Streatham, and Wembley. Her exhibition skating took her to Switzerland, amongst other places, and while all this was going on she had found time to sing in Gilbert and Sullivan's *Iolanthe* and *The Pirates of Penzance* at school.

'I left school at the age of fifteen and went to the Hampshire School of Drama in Boscombe for a year. I knew I was

going to go into showbusiness but at this time the accent was still on ice-skating which I loved. The day before my sixteenth birthday I was skating and was spotted by a talent scout who called me off the ice and offered me a job singing and dancing abroad.

'I was auditioned at Drury Lane, passed the audition and was allowed by my parents to join the Charley Ballet in Italy. From there I went on to Brussels where I appeared at the Brussels Exhibition and also on Belgian television.'

Home once again, Anita carried on with her singing, dancing, and ice-skating lessons and then, in January, 1959, she received a telephone call from Paris offering her an engagement in Las Vegas for three months. She appeared at the El Rancho in Vegas with comedian Joe E. Lewis, and the show was such a success that their stay there was extended to six months.

'After Vegas I came home and appeared in cabaret all over the country and then once again I had a lucky break, this time joining the Granadiers, directed by Cliff Adams, in television's *Song Parade*. Later on, I appeared with the Cliff Adam's Singers in several radio and television shows, including several T.V. Spectaculars.'

Anita Harris is a brown-eyed brunette 5 ft. 7½ in., with vital statistics that read '35-23½-37'. In her spare time she likes reading, and (of course) ice-skating. Her favourite artist — Johnny Mathis.

'As far as ambitions are concerned, I suppose I have already realized several by gradually making a mark in show-business. But what I would really like to do is to appear in a musical comedy film.'



A tender rendition of the lovely ballad 'Lollipop and Roses' has brought American chart-success to Jack Jones. He is the twenty-four-year-old baritone-voiced son of a famous father, light-tenor star of musical comedy and Hollywood films Allan Jones. His famous mother is actress Irene Harvey.

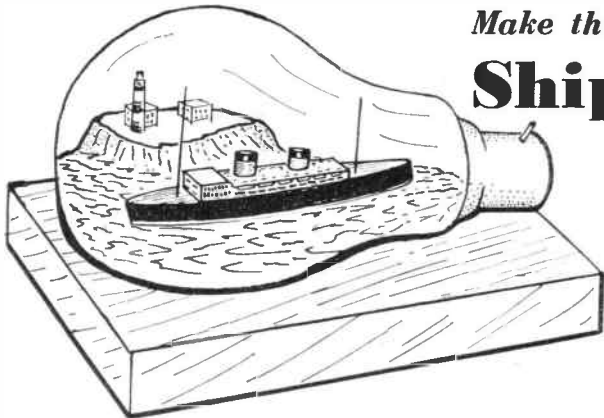
Recently mobbed from the U.S. Army, the Jones boy is intent on following in father's footsteps. He is currently studying dramatics and dancing in addition to undergoing voice training.

Make this novel

Ship-in-a-Light Bulb

By

A. Liston



A REALISTIC seascape, complete with a model ship and a lighthouse set on a cliff, all inside an apparently intact electric light bulb, makes an intriguing novelty.

It is, in fact, very easy to arrange. All that is required is a discarded electric bulb made of clear glass, some putty or Plasticine, and a few scraps of wood.

The brass cap at the end of the bulb can be removed in one of two ways. If it is slightly loose, it can be twisted round until the wires leading to the filament snap and the cap comes away. Alternatively, the thin brass of the cap can be carefully sawn through with a hacksaw (A) while the bulb, wrapped in a duster, is held steady. The internal wires are withdrawn, and the hole in the glass at the end of the bulb can be enlarged slightly, if necessary, with a pair of sharp-nosed pliers.

Filling the bottom

The bottom of the bulb is filled with putty, Plasticine, or plaster filler, put in place with a flat stick, a little at a time, to the level shown at B. A raised section can be built up at one side at the widest part of the bulb. It is not necessary to smooth the surface of the filling material carefully.

Using a small water-colour brush, the surface of the filling is painted, blue being used for the sea and green for the cliff top.

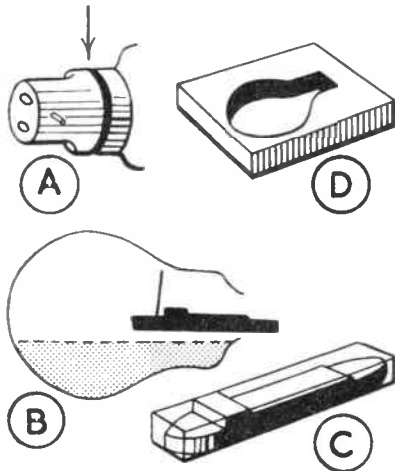
A simple hull shape to fit the bulb C, is made from $\frac{1}{2}$ in. square stripwood. Its dimensions should be such as to just allow it to go through the entrance hole. It is then painted, the sides being black or white, the upperworks white and the decks grey. A hole is made for each of the pin masts, but they are not inserted at this point. Two quarter-inch high funnels of $\frac{1}{4}$ in. diameter dowel rod are painted red and black, but not put in place.

Two $\frac{1}{4}$ in. cubes of wood are painted white, with black windows dabbed on,

using the end of a matchstick, and a $\frac{1}{4}$ in high lighthouse will do for this — is painted with red and white bands.

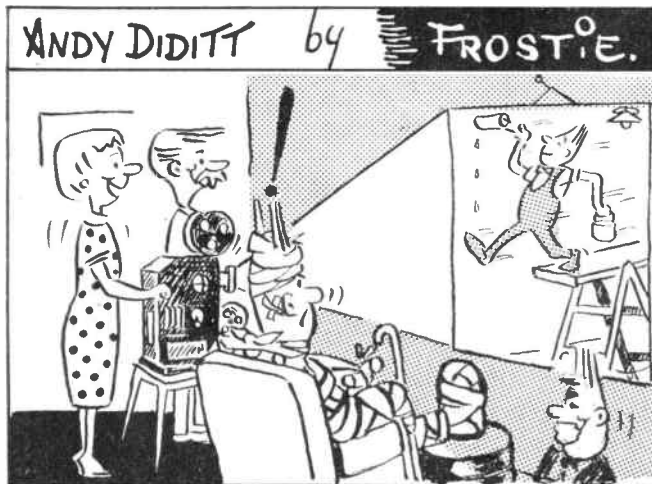
Adding the scenery

The lighthouse buildings and lighthouse are glued in place on the cliff top inserting them into the bulb with the aid of a pair of tweezers. Then the hull is introduced into the bulb to the position shown at B. The forward mast — a pin — is put in place with tweezers, then the funnels are added in the same way. The hull is then pushed into position and glued in place, and the second mast added. The brass cap is now replaced. The complete cap is glued to the end of the bulb, or if it has been sawn through, it is soldered back in place, the joint filed smooth, and a coat of paint applied to



hide the joint.

A simple stand of 1 in. thick wood is made by cutting out the bulb shape as shown at D, so that the unpainted filling of the bulb is hidden below the level of the wood. If care is taken in the assembling of the model, the finished effect raises queries as to how it was done.



"... AND HERE COMES THE FUNNY BIT."

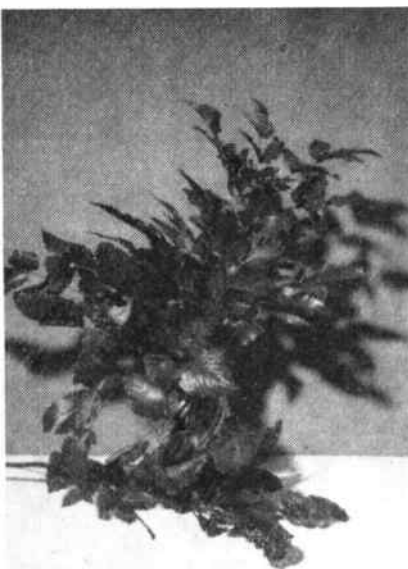
Preserving leaves for Winter Decor

JULY may seem early to start thinking about winter decorations, but this is the time to consider preservation.

Copper beech and magnolia sprays should be cut from the trees and collected no later than the third week of July, and carefully washed before standing in a preserving mixture. If the leaves are gathered at this time, you may be sure that the sprays will hold firm to the parent stem. It does not matter if the colour has not changed, since this deepens on drying. You will find it best to swill the leaves in a bath containing cold water, sponging away any dirt or grime, then blot off the surplus moisture with a cloth.

We now prepare a mixture of 1/3 glycerine and 2/3 water, which is stirred well and poured into a 2 lb. jam jar until the liquid is about 4 in. deep. Place the sprays in this mixture, and leave there until all the liquid has been absorbed. The colour will deepen gradually, and as the glycerine mixture is absorbed the leaves will assume a soft silky texture to last all the winter.

The foregoing method is ideal for the varieties mentioned, but others are better subjected to a drying and pressing treatment. Oak, maple, bracken, sweet chestnut, ivy trails, and maidenhair fern



should be dried between thick sheets of newspaper. You may then place them between boards to apply sufficient

pressure, or lay underneath the carpet. The process of drying takes about three weeks at least, and it is advisable to leave as long as possible, since well-pressed leaves do not then curl when arranged.

Evergreens may be smeared with oil. This will block the cells which exude moisture and permit breathing. Wash the surfaces with damp cotton wool swabs, to first remove dirt or grit. When the leaves are dry, smear with a little olive oil or petroleum jelly, using cotton wool swabs, treating both the upper and under surfaces.

Autumn leaves can also be preserved by using silver sand. The sand must be dried in the oven, and a layer placed at the bottom of a suitable box. The leaves are laid on this sand and gently covered with more sand, and the lid replaced. The leaves should be left in the sandbox for at least ten days; the sand will shake away quite easily when they are required for making displays.

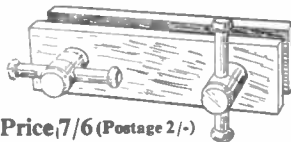
Preserved beech leaves always make handsome decorations either alone or with other sprays, and will be welcomed in the winter time when flowers are scarce; but remember that they must be collected about 22nd July if they are to absorb the glycerine mixture while the sap is still rising. (S.H.L.)

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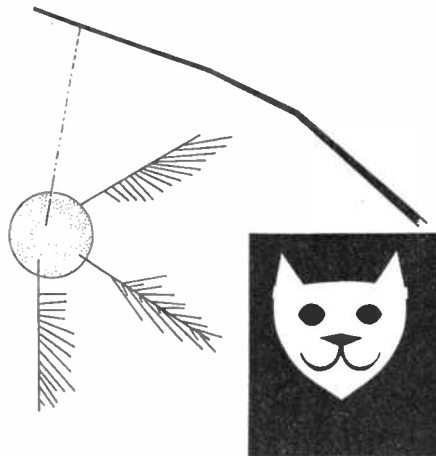
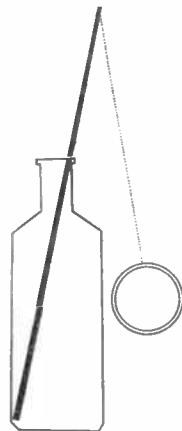
Bird Scarers for the Garden

GARDEN birds often prove troublesome, being especially attracted to seedlings and young plants, so there is usually a need to erect a bird scarer. If you are worried in this way perhaps one of the simple bird frightening devices described here will be of use to you.

By A. E. Ward

The first is in the form of a bottle and tin 'gong' which is activated by a slight wind. Press the bottle well down into the ground and support a 2 ft. long bamboo stick inside it. Bore a hole through the edge of a polish tin lid, using a small nail, and hang the metal disc upon a string tied to the top of the bamboo cane, in such a manner that the tin lid may swing freely and strike against the bottle top. You may paint the lid scarlet or silver. The faintest breeze will be sufficient to evoke an irregular and tinny noise from this apparatus.

It is effective to exploit the natural fears which little birds have of predators. Make a mock hawk with a potato and



three feathers. The feathers will be stuck into the potato to represent wings and a tail, then the whole construction may be suspended by a string from a long stick pressed into the ground, at an angle. The model hawk will 'hover' realistically in a wind.

Another idea is to make an imitation head of a cat by cutting a simple shape

out of plywood, using a fretsaw. Paint the flat face jet black and decorate both sides of the object with fearsome bright eyes cut out of aluminium foil and glued into position. Suspend the arrangement from a pole, by means of a string, and see the terrible eyes glint as they catch the sunlight.

Clothes-peg Cross-bow and Target

WILLIAM TELL, the legendary hero of Switzerland, was renowned for his skill with the cross-bow. Stamp collectors will have noticed the portraits of William Tell on certain Swiss stamps. The cross-bow was usually of all-metal construction. Steel bolts or arrows were fitted into a groove in a rifle-like stock, and

the powerful bow was bent by turning a crank. A splendid specimen of a cross-bow may be seen hanging upon the wall of the public restaurant at Longleat House, near Bath.

A pleasant pastime, which will be enjoyed by schoolboys, is to manufacture a miniature cross-bow out of two clothes pegs, an ice-lolly stick, and a rubber band, and to employ the device to project match-stick missiles across a room. Cut notches in the ends of the lolly stick, and loop a strong rubber band tightly between the slots. Grip this stick 'bow' between the prongs of a clothes peg. Snap a second peg upon the rear of the 'upper' prong of the first peg.

To load, fit a match against the rubber band, and draw the match back (under tension) before gripping it beneath the upper prong of the rear

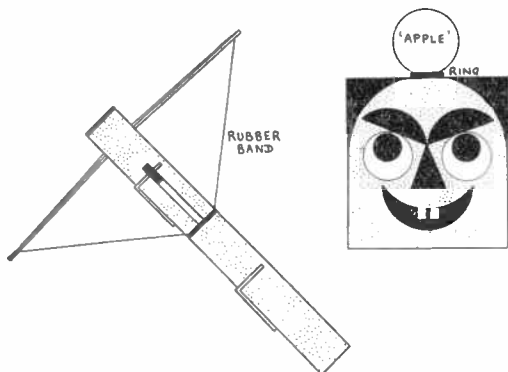
peg. The little missile will lie along the flat 'top' of the front peg. Hold the rear peg in your hand, take aim, and fire the weapon by merely pressing the prong ends together. The effective range of the toy will be at least 10 ft. Do not aim at anybody's face. But you will need a target.

William Tell

Remember the story of how the tyrant Gessler punished Tell, by commanding him to shoot an apple off the head of his own small son. Paint a face upon a block of wood, and rest a ping pong ball 'apple' upon a curtain ring placed upon the wooden 'head'. Try shooting off the apple at a range of 5 ft.

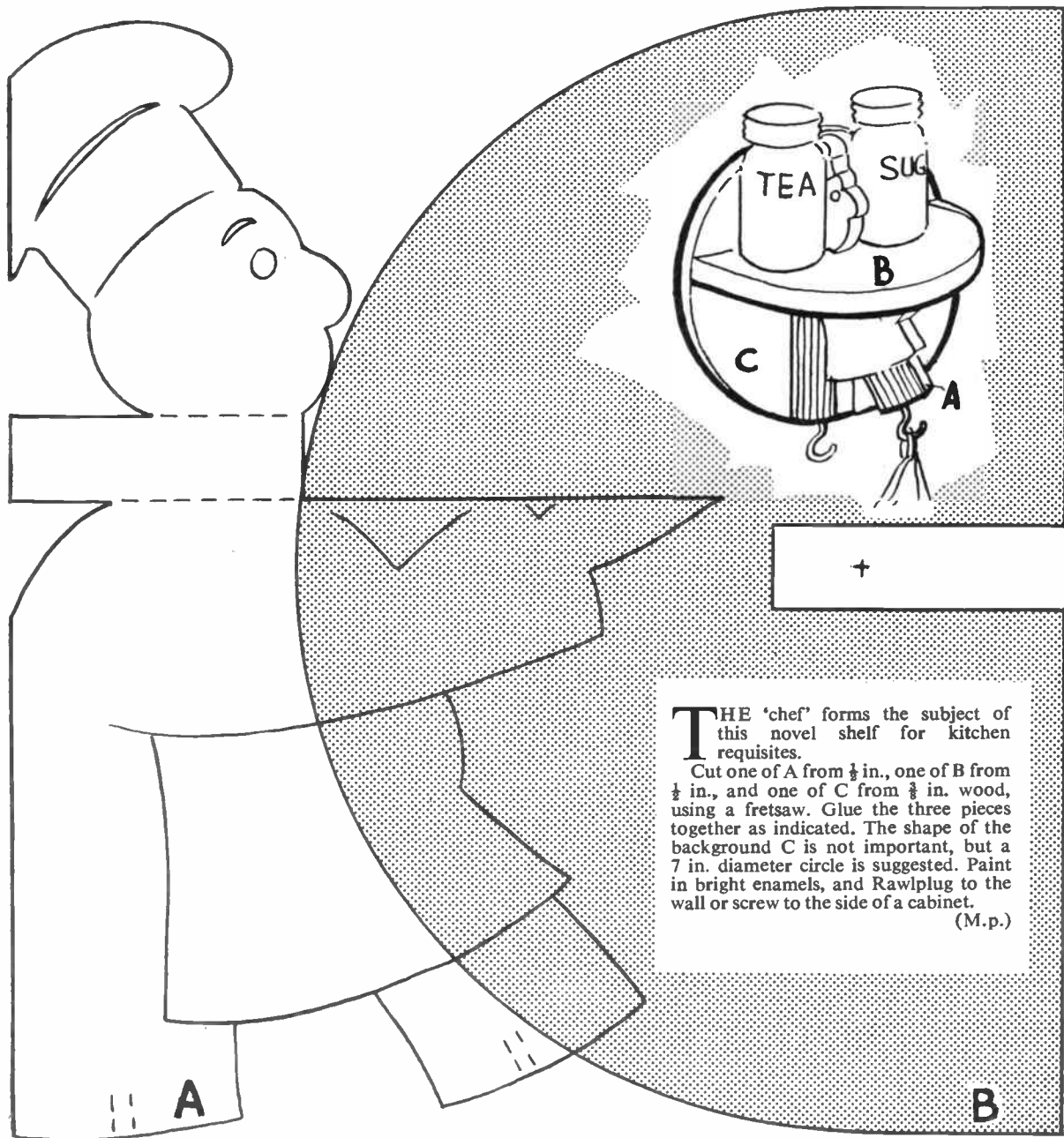
Actually cross-bows were never very popular in England, because an English long-bowman could easily fire a whole salvo of arrows in the time it took a cross-bowman to load and discharge once his more elaborate weapon.

(A.E.W.)



Use your fretsaw

A NOVEL KITCHEN SHELF



THE 'chef' forms the subject of this novel shelf for kitchen requisites.

Cut one of A from $\frac{1}{2}$ in., one of B from $\frac{1}{2}$ in., and one of C from $\frac{3}{8}$ in. wood, using a fretsaw. Glue the three pieces together as indicated. The shape of the background C is not important, but a 7 in. diameter circle is suggested. Paint in bright enamels, and Rawlplug to the wall or screw to the side of a cabinet.

(M.p.)

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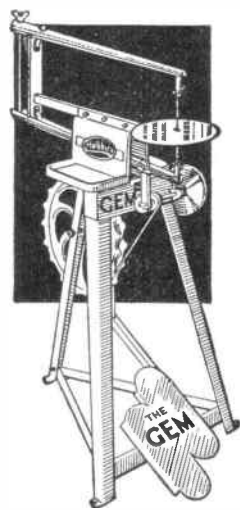
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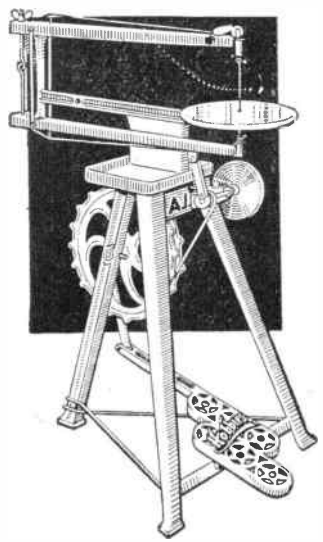
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