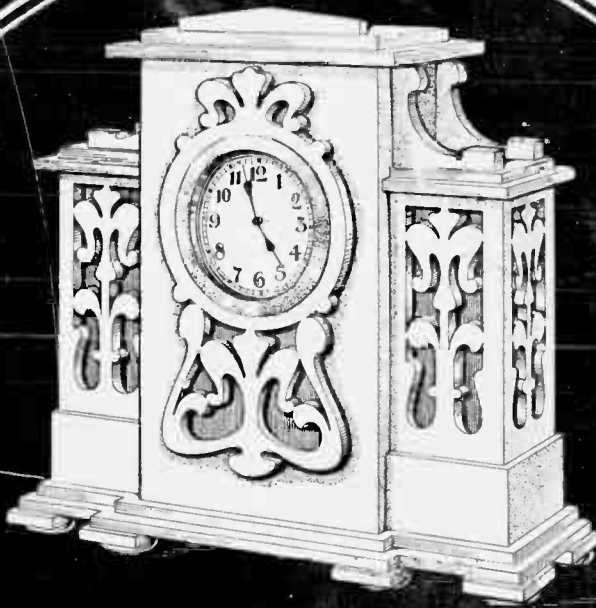


COMPETITION CLOCK DESIGN FREE

Hobbies

**A JOURNAL FOR THE FRETWORKER &
HOME CRAFTSMAN.**



MANTEL CLOCK.

2^d

NOV. 16th. 1929

No. 1778

Special Designs for Christmas

Now is the time to start making for Christmas gifts and here is a selection of simple designs which have a special "Christmassy" appeal. They are decorated with pretty sprays of holly in embossed metal and brightly coloured in green and red. Any of your friends would be pleased with such a gift. **COMMENCE NOW!**

**No. 585.
IRISH HARP
PHOTO FRAME.**

A parcel of sycamore, a piece of clear glass of the correct shape and 12 metal shamrock leaves for 3 - or 3 6 post free.



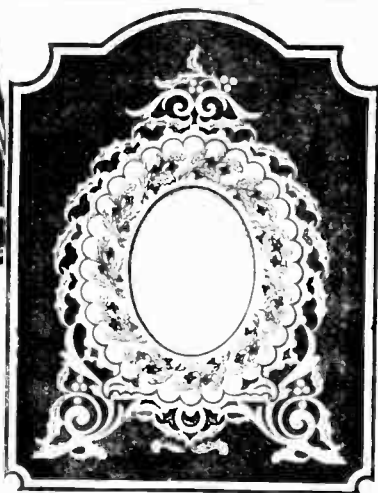
**DESIGNS
4d. EACH.
Post 1/2d.**



**No. 1729.
CHRISTMAS
MIRROR FRAME.**

Parcel containing mahogany, whitewood, mirror, eight ornamental holly sprays and a pair of hangers for 3 5, or post free for 4 -.

No. 1362. YULE-TIDE MOTTO.
A complete parcel of wood, with holly sprays in embossed metal, and a small round mirror for 2 5, or post free 3 -.



**No. 323.
CABINET PHOTO FRAME**

Two varieties of fretwood, a piece of glass and the necessary holly sprays complete for 2 6 or 3 3 post free.

Obtainable from Hobbies Branches or by post from **HOBBIES Ltd. DEPEHAM NORFOLK.**



THE FRETWORKER'S WEEKLY JOURNAL.

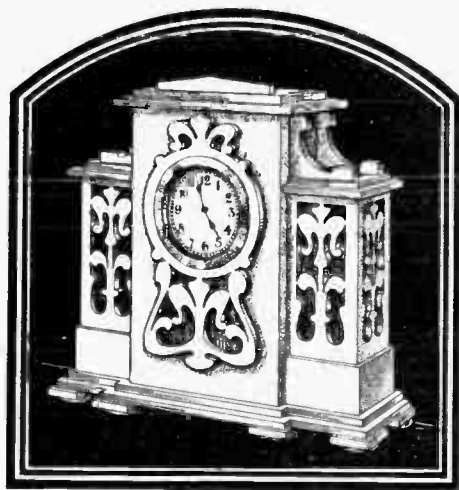
VOL. 69.
No. 1778.

OUR FRETWORK DESIGN. MANTEL CLOCK.

NOVEMBER 16,
1929.

THERE will be more than usual interest in this week's Design because not only is it a pleasing piece of work, but it also forms the entry for a great fretwork competition to be announced in the Christmas Number of *Hobbies* next week. Every reader, therefore, should be sure to keep this week's Design Sheet in order that he may have it ready to cut out and send in as his test piece later on. When the competition was planned it was decided that the piece of work forming the entry should be something which the owner could use when it was returned to him after the judging in the competition. For this reason it had to be serviceable, and in order to give an opportunity to every worker the design had also to be simple. The Mantel Clock, illustrated herewith is the result, and those who have done any fretwork at all will note the comparatively small amount of work involved, and the simplicity with which the clock can be made up. We do not, of course, maintain that a fellow can take up a handframe for the first time and build the clock with any likelihood of getting one of the early prizes; at the same time there is no reason why those with even very little experience should not be able to enter with confidence. There is so little really intricate work either in cutting or building, and if one has a little assistance in the construction of the clock, the parts cut will go

together to form the completed article in quite a simple manner. The details of the parts required are shown on the design, and against each part is the thickness of the wood in which that particular piece is to be cut. In order to simplify and cheapen the cost of the parcel of wood, we have fitted these parts on to three of the standard panels of mahogany supplied by *Hobbies*. These three panels are B, D and E, which are respectively 3/16 in., 3/16 in. and 1/8 in. thick. When the parts are cut out in the paper pattern they are pasted on to the panels as indicated in the three drawings at Fig. 1.



No. 1778.—MANTEL CLOCK.

No Hard Joints.

There is so little in the actual cutting that the worker should need very little instruction here. It will be noted that the whole clock is made without any difficult joining problems. There is no halving joint and there is no mortise and tenon to undertake. All parts are squared up to a butt joint. It will be immediately understood therefore that one of the great points in cutting is to see that the edges are true, straight and square. Only by cutting the edge straight will it form a good butt joint. In fixing these butt joints glue should be quite strong enough, but if additional screws or fret nails are necessary they should be only used when another piece is going to overlap and cover them up.

Mark Positions before Clearing.

The position of certain adjoining parts is shown on the paper pattern by various dotted lines, and it is wise to mark off these before cleaning off the paper pattern. The position of the back, for instance, is shown on the upper base, and the screw holes indicated should be made as soon as a part is cut. The dotted lines on this piece, too, indicate the various upright parts and the position of them can easily be marked out by pricking a hole at each corner.

The Centre Column.

We will assume that the cutting of the actual pieces is understood, and deal merely with the work of actual construction. The work is so planned that the clock can be built in independent parts. There is a centre column forming a solid box frame. On each

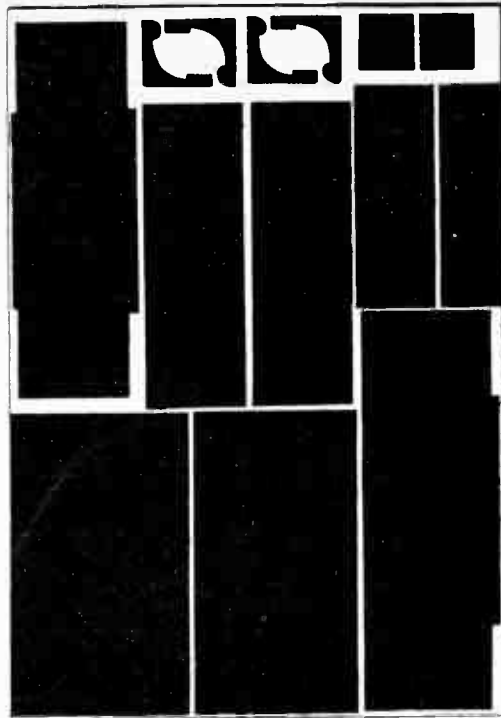


FIG. 1.—B PANEL.

side of it is a shorter and hollow square column which should be fitted up to the centre part separately. This makes the work much simpler. To commence with, therefore, we can get out and make up the centre and main column and fix it to the upper base. The front of the clock is glued over the front edges and the two sides, but the back fits between the latter parts just over $11/16$ in. inwards from the back. See that this back is upright and equally spaced on the two sides and the base. A strengthening strip can be put inside, all round if necessary, as it will not be seen later on. This frame is glued down to the base—the upper base, that is—and if the

whole part is turned over, screws or fret-nails can be driven in to give additional strength.

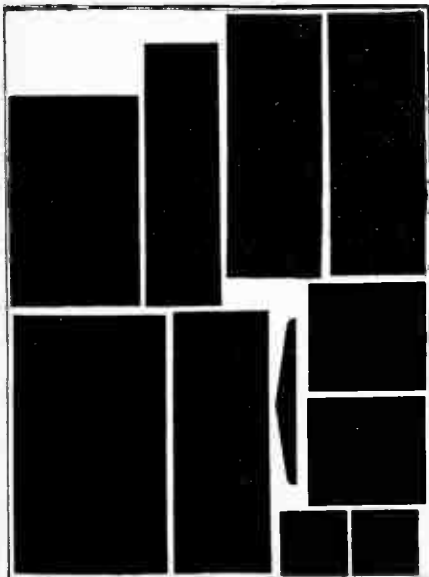


FIG. 1.—D PANEL.

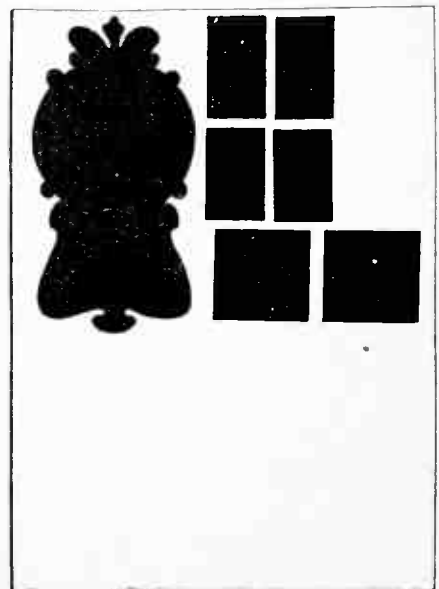


FIG. 1.—E PANEL.

No.
1778
16-11-29

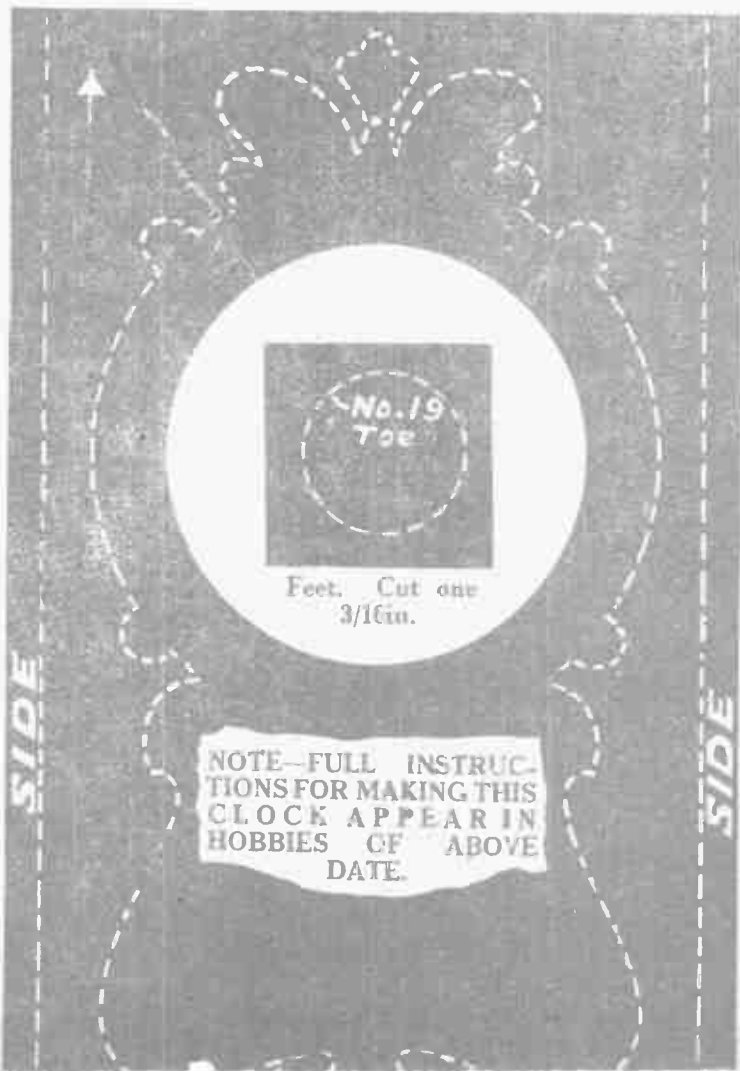


**FRETWORK
DESIGN**

The indicates direction of grain of wood.

MANTEL CLOCK

USED IN CONNECTION WITH OUR 1929 GREAT
FRETWORK COMPETITION.



Feet. Cut one
3/16in.

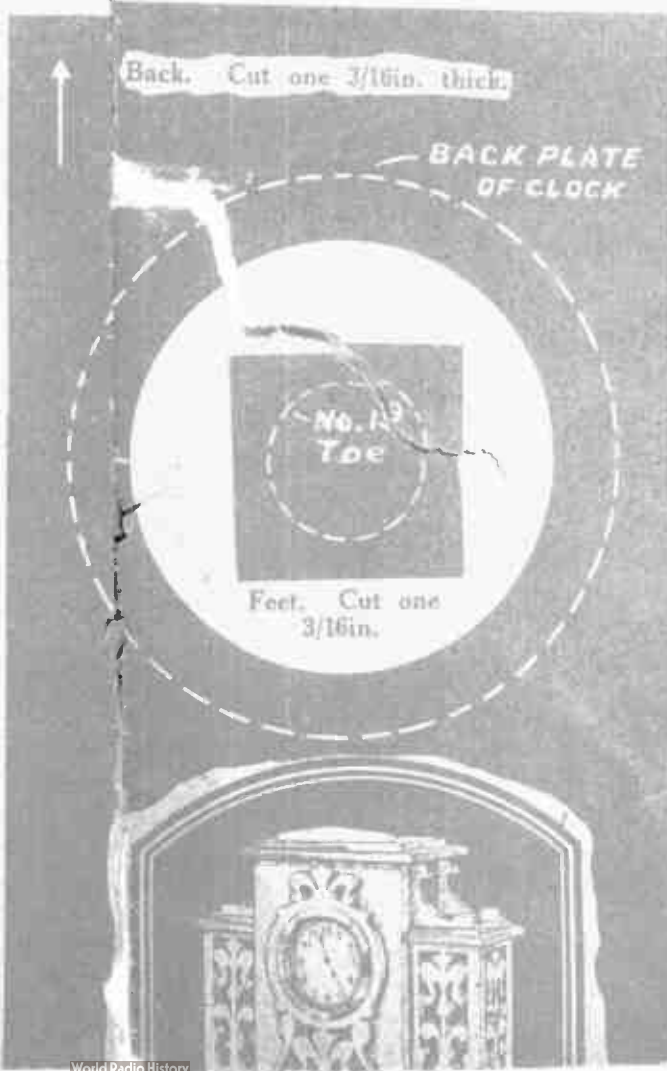
NOTE—FULL INSTRUCTIONS FOR MAKING THIS
CLOCK APPEAR IN
HOBBIES OF ABOVE
DATE.

For Prices of Wood
and Fittings see
current Catalogue,
or on application.

— SIZE —
HEIGHT 8 IN.
WIDTH 8 1/2 IN.
DEPTH 3 IN.



Feet. Cut one of each 3/16in.
thick.



Back. Cut one 3/16in. thick.

BACK PLATE
OF CLOCK



Feet. Cut one
3/16in.



Pediment. Cut one 3/16in. thick.



WOOD & FITTINGS
REQUIRED

WOOD. 1 PANEL

1 "

1 "

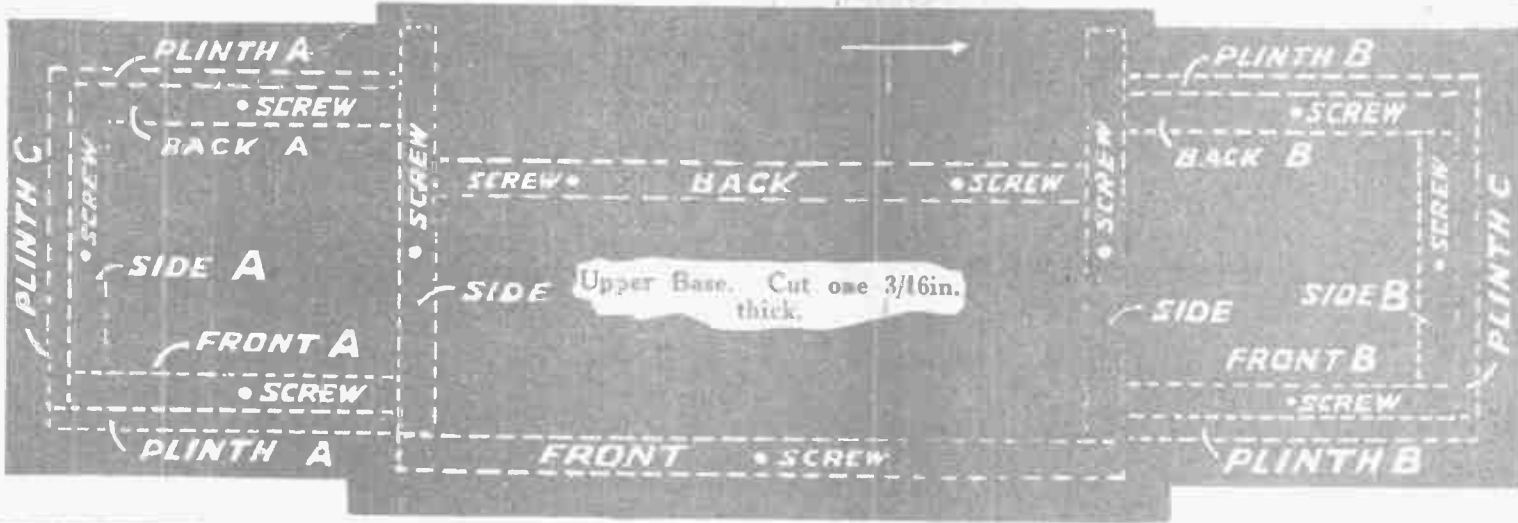
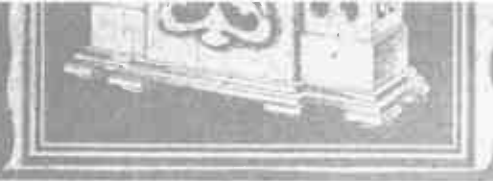
CLOCK No. 550:

6, No. 20 Turned 1





Front. Cut one 3/16in. thick.
Dotted lines show overlay, etc.



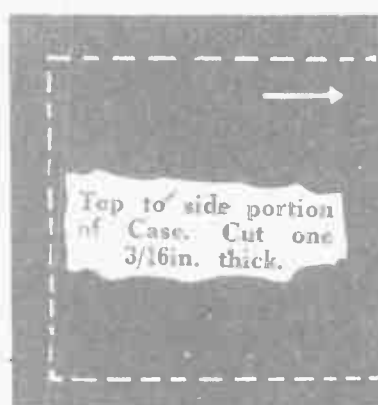
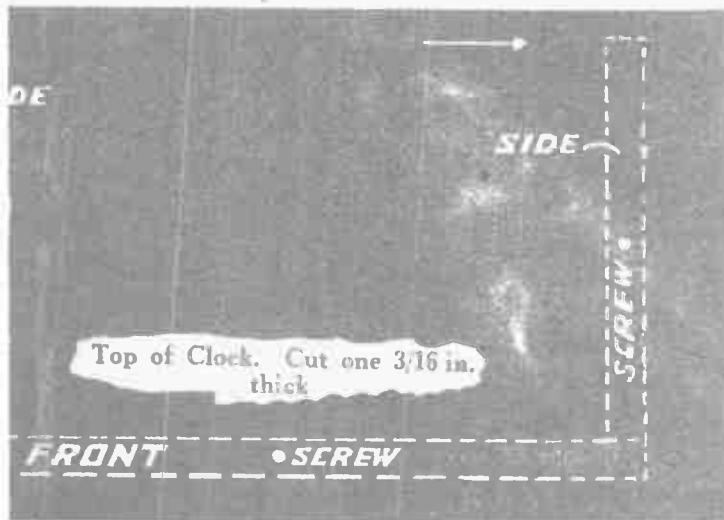
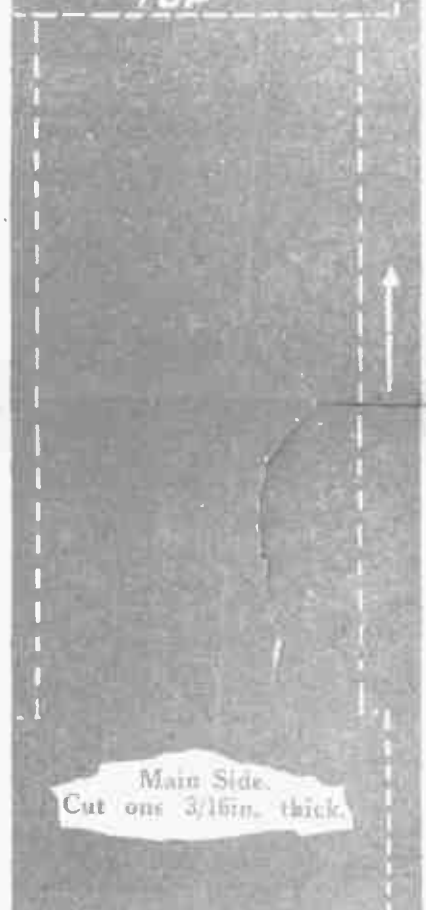
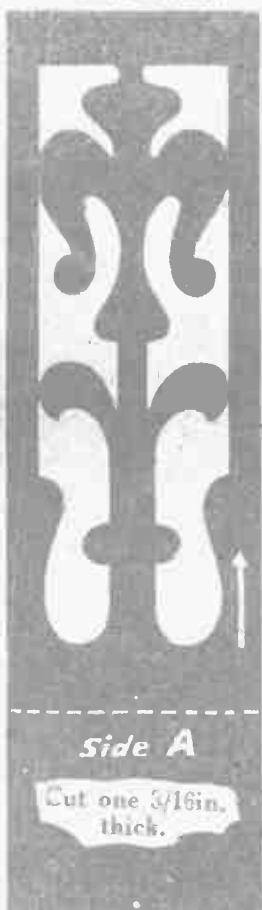
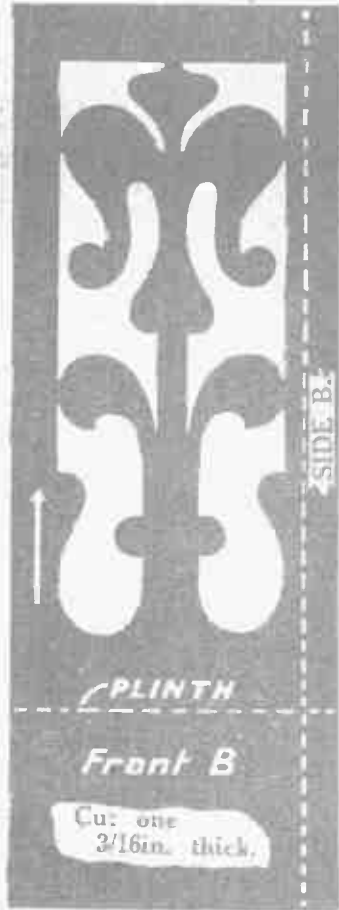
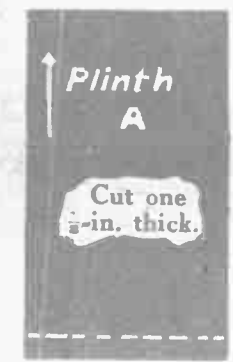
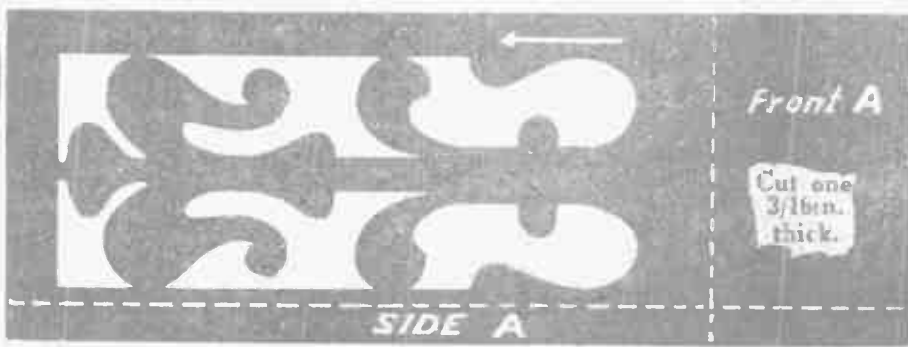
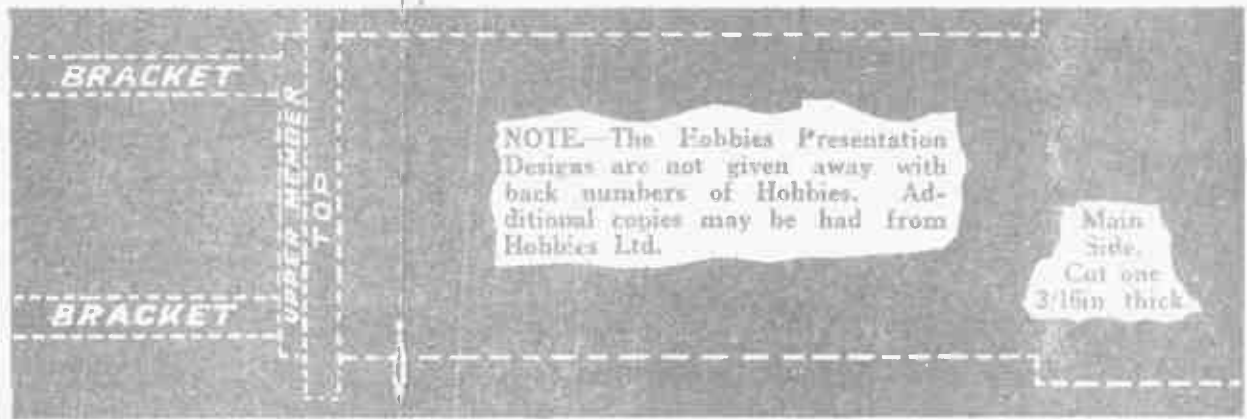
ADDRESSES.

All orders by post should be addressed—Hornes & Larsson, Drezhan, Norfolk.
Customers residing in the neighbourhood may obtain Tools, Wood and Fittings by calling at the Hornes Supply Stores.

LONDON: 85 New Oxford Street, W.C.	LONDON: 10 Queen Victoria Street, Biggles.
" 147 Bishopsgate, E.C.	SCUTHAMPTON: 27 Denfield Street.
" 83 Newington Barns, S.E.1.	BRISTOL: 50 London Road.
GLASGOW: 325 Argyle Street.	SHEFFIELD: 214 West Street.
MANCHESTER: 10a Piccadilly.	
BIRMINGHAM: 54 High Street.	

TORONTO, CANADA: 384 Yonge Street.
And at all Hornes Authorized Agents.

PRINTED IN ENGLAND



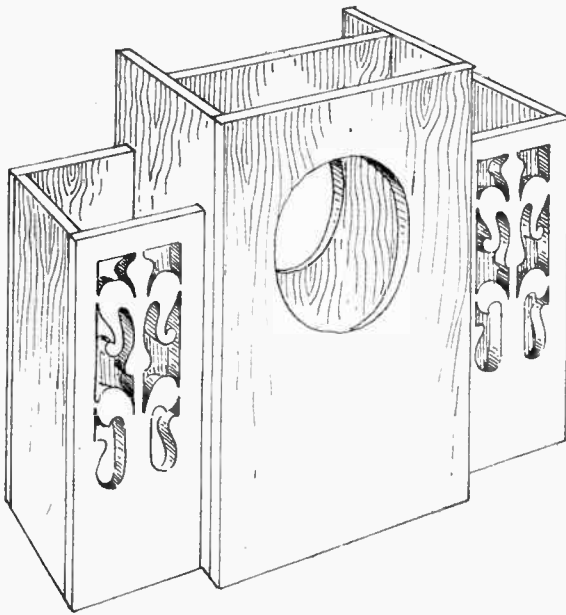


FIG. 2

The Side Columns.

Now we can add the two shorter parts which form the sides. Each of these is composed of a front, side and back, the two former having a fretwork design to cut out in them. A backing of Japanese veneer or a contrasting coloured wood should be added behind these frets to give a better effect. The side (B) is glued between the front and the back, and then this complete piece is glued in turn centrally on to the side of the main part. Glue also holds the part to the base and, as before, we can put in screws from underneath to provide strength. Thus we have a framework as illustrated at Fig. 2. Each of the three hollow parts has a double top, and in the case of the sides an angle bracket is added in the right-angle there found. Round the bottom of these side parts, too, a plinth is formed of $\frac{1}{4}$ -in. wood and these are glued round the solid parts immediately below the fretwork, the end butting between the back and front. Above the top member of the centre part there is a small pediment. This is glued

centrally as can be seen in the illustration of the finished clock.

Feet and Overlay.

There is now a second base to add, and this is one a little larger than that already in place. This base is glued over its whole surface where it is covered by the upper base. Under it again on each corner comes a square foot cut from $\frac{3}{16}$ in. wood. These square feet are the foundation for the six small round toes supplied with the parcel, and a clear drawing of the position of these parts is given in Fig. 3. The overlay on the face of the clock is our final work, and then we can put in the clock movement itself by unscrewing the nuts on the long spindles and taking off the circular plate. The clock itself is then passed through the case from the front, and the back plate put over the projecting spindles and screwed up tightly to the wooden back of the clock.

Finish.

The question of finishing the clock is, of course, one of individual taste. Some may treat the mahogany with oil to darken its grain, whilst others may, in addition to oiling, give it a rubbing of wax polish to bring about a semi-glossy appearance. Others may finish off each individual part before putting it together with Hobbies Lightning Polish, but this should not be undertaken for the first time on a competition piece.

FRETWOOD.—For this design panels of Mahogany Fretwood B, D and E are supplied, with 6 No. 20 Toes, 1/9, post free 2/3.

FITTINGS.—Clock (No. 5502), 5/-, post free 5/3.

Postage on wood and clock, if sent together, 6d.

Canadian prices may be had from Hobbies Limited, 385½ Yonge Street, Toronto.

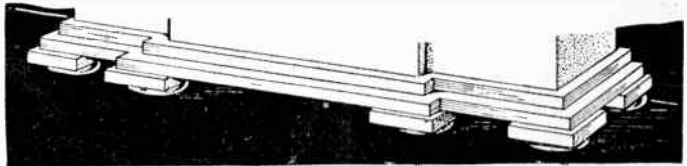


FIG. 3

**Next week we shall publish
Hobbies Christmas Number
with a Special Design (see page 165)**

OUR SUMMER COMPETITION

THE POPULAR VOTE.

IN addition to the many prizes to be won for the best cutting out in wood of the four pictures chosen from the series of photographs of famous cricketers we have published in connection with this competition, there is another set of splendid prizes for the popular vote. The names of the cricketers to be voted upon are—

- BELI, (Glamorgan),
- BOWLEY (Sussex),
- GUNN, GEO. (Notts),
- HEARNE, J. W. (Middlesex),
- HOLMES (Yorks).
- HULME (Middlesex),
- MITCHELL, (Yorks.).
- SUTCLIFFE (Yorks.),
- TYLDESLEY (Lanes.),
- WALDEN (Northants.),
- WRIGHT (Kent).

It will be seen that the names are printed in alphabetical order, and give no clue to any order of placing them so far as popularity is concerned. Competitors must now consider all the names and place them in whatever

order they think will be most popular, using the coupon below, and commencing by writing opposite figure 1 the name they consider should head the list.

The prizes are as follows :—

- 1st Prize. Imperial Fretmachine
- 2nd „ A1. Machine
- 3rd „ Cabinet Fretwork Outfit
- 4th „ "Gem" Machine
- 5th „ "Pioneer" Launch
- 6th „ "Lion" Constructional Set
- 7th „ "Peggy" Launch
- 8th „ "Seagull" Yacht improved rigging
- 9th „ "Hercules" Constructional Set
- 10th „ "No. 1 Carpenter's Outfit
- 11th „ "Demon" Engine
- 12th to 21st One Gross Yellow Label Saws
- 22nd Prize No. 2 Boxed Outfit
- 23rd „ "Insign" Outfit
- 24th & 25th Polishing Outfits
- 26th to 35th Blue Label Saws
- 36th Prize No. 1 Boxed Outfit
- 37th to 40th BottlesHobbies' Lightning Polish

HOBBIES' SUMMER COMPETITION. POPULAR VOTE.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

I am a regular reader of *Hobbies*, my newsagent being.....

If not a regular reader, give name here of newsagent who supplied this copy of *Hobbies*

I agree to accept the decision of Messrs. Hobbies Ltd. as final in this competition.

Name of Competitor.....

Address

The closing date for both the cutting-out of the Cricket Statuettes and the Popular Vote is Nov. 30th.

THE EDITOR'S NOTE BOOK

Getting a Move On.

HOW time carries on. Here we are, well into November, and only six weeks away from Christmas Day. What was that? Haven't started on Christmas presents yet? Nor cut out any Comic Calendar? Come, come, that will never do. There's heaps of things which will crop up just before the Christmas holidays, so if we get something done now—early—we shall not get all hot and bothered later on.

Change a Design for a Motor Bike!

As promised last week you have this week the design which is going to bring somebody a motor bike. You've probably seen the clock on the first page—so easy to make, so sensible a thing to keep. Then for the fellows who are not more than 16 years old we have another special lot of prizes. In order that some of our younger readers may not feel out of it there will be a junior section, and the simple little bit of work is illustrated in the centre pages of this issue. Both quite easy and straightforward that we expect a big bunch of entries. This week's designs, however, are only just an opening event. Wait until next week till you see the long list of prizes, and the particulars of the competition. Then you'll open your eyes and get down to it. Hundreds and hundreds of prizes, specially chosen because they will appeal to our readers. Look out, then, for all the details next week.

Lots and Lots.

Next week's issue, too, is the great annual Christmas Number, and those who have seen them before know they may expect a good thing. The illustration herewith is of the good design to be given away, but even if you don't think that makes it worth buying there are heaps of other things which will. There is a new cut-out calendar printed in colours and given with

each copy. Then there is a simple little design for a very pleasing Christmas Photo Frame, which anyone can make. On top of all these there will be double the usual number of pages just packed full of good things for the handyman. Jolly things to make happy things to do, and to learn—lots of frightfully interesting stuff for any and every reader. Make sure to get your Christmas Number next week. Yes, and what is more, tell your pals about it.

Webb's Winning Work.

All this about next week has only left room to just mention our thanks and congratulations to H. Webb, of Little Dunmow, Essex. He has just sent us a picture (unfortunately not suitable for reproduction) of a Tie Box made from Design No. 1706, which won for him first prize at a recent exhibition. He finished it (the work, of course, not the prize) with Hobbies Lightning Polish which, says Mr. Webb, "I think gives a beautiful effect to fret-work." A wise and capable worker, evidently. Congrats, Mr. Webb.

THE EDITOR.



THE SUBJECT OF OUR CHRISTMAS NUMBER SPECIAL DESIGN SHEET NEXT WEEK.

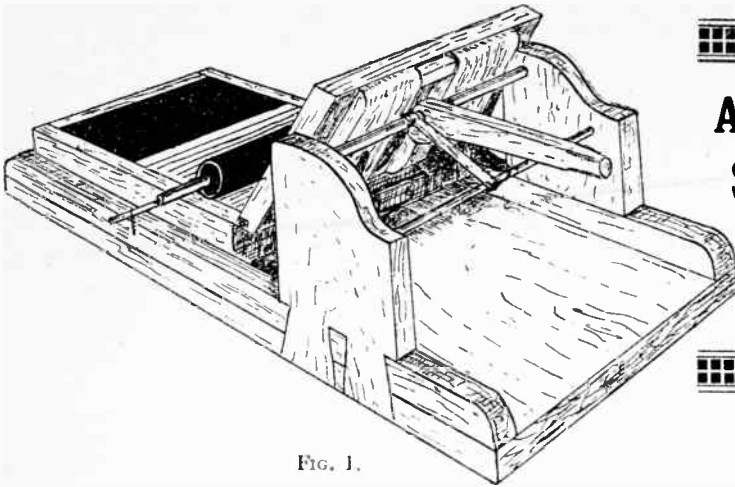


FIG. 1.

AN IMPROVED SELF - INKING PRINTING PRESS.

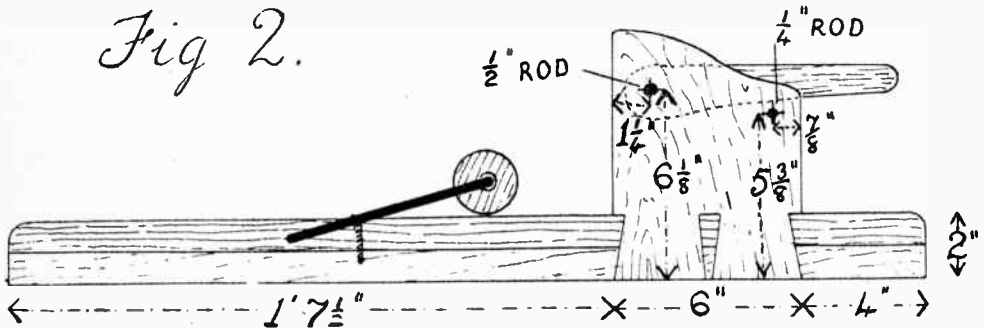


THE printing press about to be described has been designed to embody all possible requirements that a press, for really useful work, should possess.

It is self-inking, speedy in action, has adjustable paper grippers and a self-rising platen. Its actual printing surface is eight by five inches, large enough for all ordinary printing. Hardwood, such as oak, should be used throughout. It will be observed that the body of the press, containing chase, platen, etc., slides on a base between guides. This base also includes the lever and inking roller. When the body is drawn back the roller passes over the type and ink table, the platen comes down and the lever is depressed to make the impression. Push the body forward and the ink table and type pass

trouble about these holes for the moment, nor the lever neither, they must be the correct height above the bottom board, so are best left until the last. The arms that carry the ink roller are 6½ ins. long and ½ in. wide, cut from stout sheet brass. They are bored at each end and screwed to the guides at a distance of 9¼ ins. from the end exactly. They must be free to move easily, and a light spring or piece of elastic is attached to keep them pressed down. The holes into which the roller revolves are cut into slots, so that the roller can be removed when necessary. The roller will be dealt with later. The body of the press can now be taken in hand.

This is shown in Fig. 5. An oblong piece of wood 1 in. thick is cut 1 ins. x 8 ins. On top of



under the roller, at the same time the platen rises, the paper grippers come forward, and the printed sheet can be withdrawn.

The whole operation is rapid and simple. Let us deal with the base first. Study Figs. 2 and 3, which are side and end elevation respectively. Cut a piece of wood to the size of the bottom, cut the side guides and screw them to it. For the uprights cut two pieces, 8 by 6 ins., and shape the top. These pieces are dovetailed into the sides. It will be noted that there are two holes for rods; these holes are not bored right through but only half way so that the rods cannot slip out. Do not

this are screwed two strips, 1 in. square section, 15 ins. long, joined as shown by two cross strips. The other end of the long strips are connected by a piece 1 in. x 2 ins., the ends of which are cut to admit them. The bottom and middle strips are rebated on their opposite inside edges ¼ in. each way. Into these rebates fits a piece of plate glass, kept from working out by two small pieces of tin, hinged by a screw and just projecting over the glass. This is the ink table. Two strips of brass or iron are cut 6 ins. x 9 ins. respectively, these are for the inside of the chase. Holes are drilled, two in the short one and three in the long one; these holes are tapped to take

IMPROVED SELF-INKING PRINTING PRESS.

Hobbies

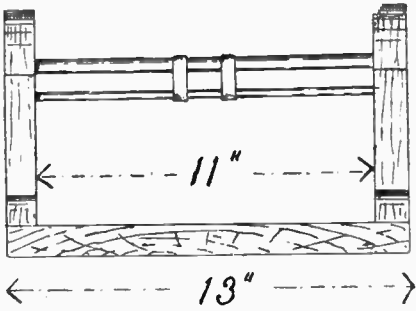


Fig. 3

rin. screws. Smaller holes are also drilled and countersunk to screw them to the sides of the chase. One is fastened to the right side and the other to the inside edge facing you. Before screwing in place, drill $\frac{1}{2}$ -in. holes right through the wood in line with the adjusting screws. Fig. 6, a section through the chase and bed, will make it clear.

A piece of $\frac{1}{4}$ -in. plate glass is dropped in the bed for the type to rest upon. The wooden surface must be planed true; if this is done the glass will not crack under pressure. The platen, Fig. 7, is a piece of rin. wood 9ins. \times 8ins. It is strengthened by screwing two battens across on top, 3ins. wide, leaving a space between of 2ins. These are connected together at the front by a piece of rin. square section, for the lever to press upon.

The back edge of the platen should be rebated $\frac{3}{4}$ -in. deep and $\frac{3}{8}$ -in. down, into this rebate the bar to which the paper grippers are attached, fits. The platen in Fig. 7 is shown reversed, to explain this. Take care to plane the surface of the platen quite true.

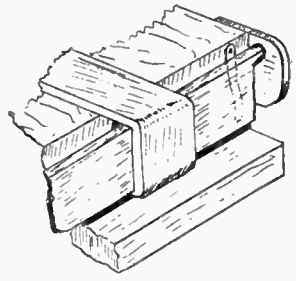


Fig. 4

At each end of the rebate a small shaped piece of brass extends $\frac{3}{4}$ -in., with a hole bored near the top.

The bar, of stiff brass, fits easily between and has a short projection each end at the top, which goes through the holes and is free enough to move easily backwards and forwards.

Between this bar and the edge of the platen are fixed two small springs (pieces of watch spring would do) one at each end. These force the lower edge of the bar outwards and cause the grippers to press on the platen.

The grippers are $\frac{3}{8}$ -in. wide and 8ins. long, cut from stiff brass sheet. They are bent right round the bar and should be tight enough not to shift, and free enough to be moved

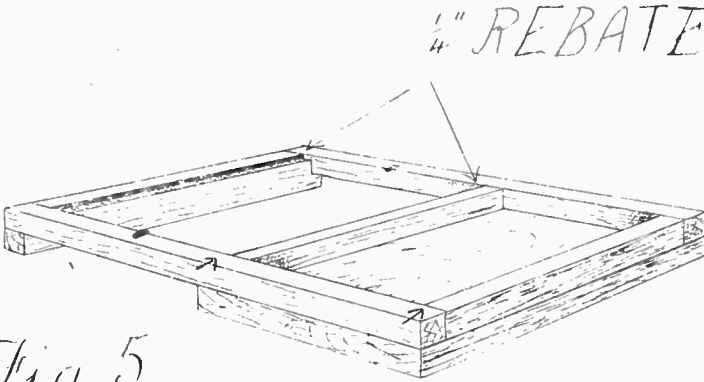


Fig. 5

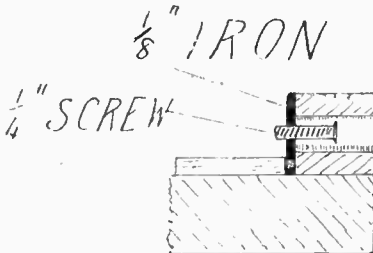


Fig. 6

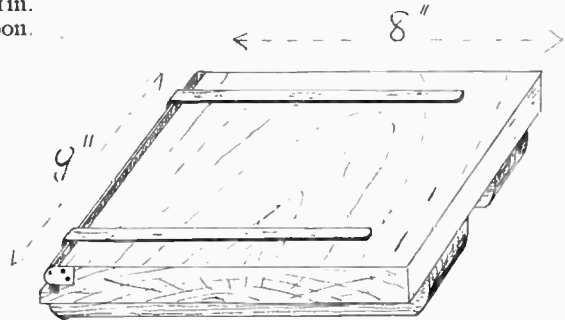


Fig. 7

along the bar as required. Adjust them, so that they press lightly but firmly on the platen. Fig. 4 is a detail sketch to make this clearer. The completed platen can now be hinged to the body.

Strap linges are used. 6ins. long; they must be bent over as shown in Fig. 8. To ensure the platen being fixed at the correct height, set up a few lines of type in the chase, say two lines top and bottom, and two in the middle. Fold a piece of paper into six thicknesses and cut to the size of the platen, cover by a piece of paper large enough to fold over the edge of the platen, and fasten it with drawing pins, the folded paper underneath. This will make a suitable surface for printing. Lay the platen on the type in the position it is intended to occupy and tie round tightly with string. Now bore the necessary holes for the hinges and screw tight.

Study Fig. 8 carefully, which is a back view of the platen and bed hinged together. Against the lower half of the hinges will be seen two metal brackets projecting. The top edge of these is cut at an upward angle. Their purpose is to prevent the platen being drawn back too far by the springs which I am about to mention. They also press against the grippers' bar and, forcing it back, raise the grippers from the paper and release it when the platen rises. At the side of each hinge a hook can be seen; these are to fasten the springs to. Exactly underneath will be seen two channels. These channels are $\frac{1}{2}$ -in. wide and $\frac{3}{4}$ -in. deep, and extend to the other end of the bed. Into these is nailed at the far end a length of steel spiral spring fitted with a hook. These springs are stretched and attached to the hooks at the back of the platen already mentioned. A length of steel spring

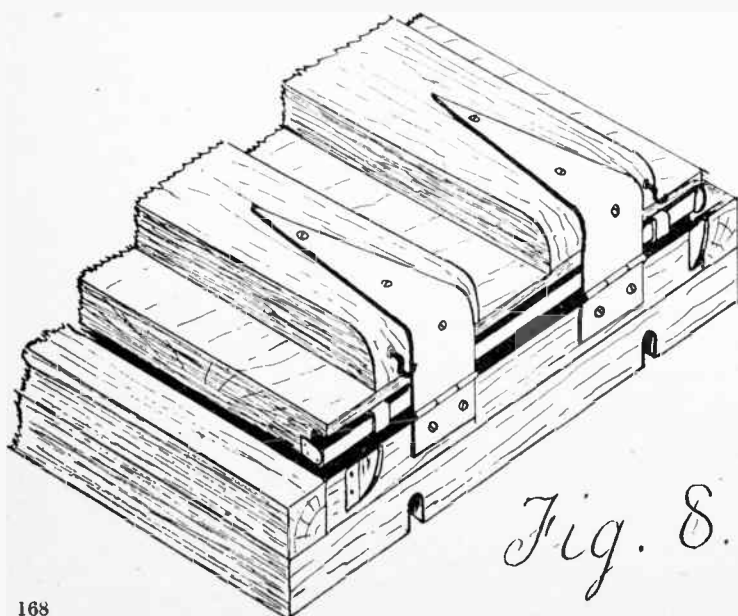
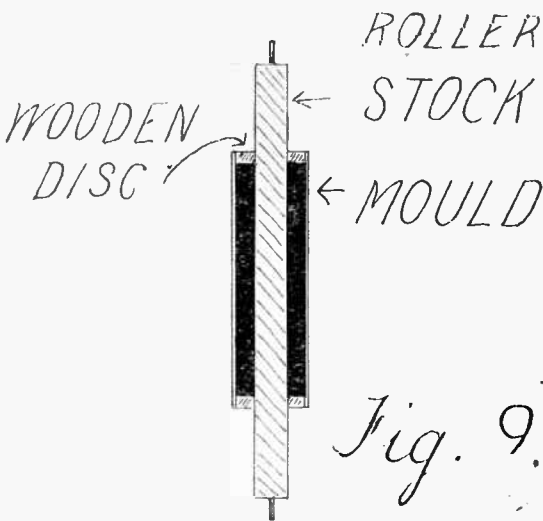


Fig. 8.



curtain rod will answer for this purpose, and will be quite powerful enough to pull the platen back on to the metal brackets. The lever, Fig. 10, should be cut from a piece of wood about $1\frac{1}{2}$ ins. in thickness. It is 2 ins. broad tapering to 1 in.; the handle portion should be rounded. The semi-circular part conforms to the curve of a 2 in. circle, and the hole for the rod should be just above and to the left of the centre as shown.

Turning back to the uprights of the base, the holes for the rods should now be drilled. Place the bed and platen in position, and the lever on top, the height of the rod can then be measured. A length of $\frac{1}{2}$ -in. iron gas pipe could be used. It is essential that the lever, when horizontal, should just clear the top of the platen, a firm pressure downwards will then make a clear impression. The smaller rod is placed about $\frac{1}{2}$ in. above the platen, so that when the platen is pushed forward the lever will rest upon it.

To facilitate moving the press backwards and forwards during printing a convenient handle can be attached to the rear, just under the hinges.

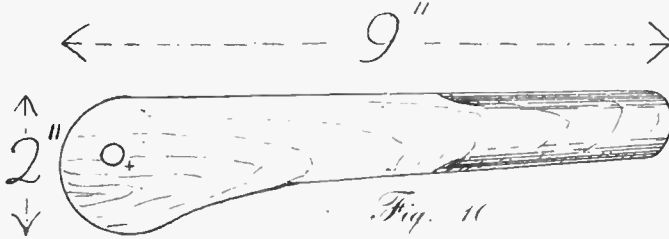
All that is needed now to complete is the ink roller. A length of 1 in. broom handle is cut 1 3/4 ins. long and a 2 in. nail driven into the centre of each end leaving about $\frac{3}{4}$ -in. projecting. Wind some twine round the central portion for a few inches, to hold the composition firmly to the stock.

IMPROVED SELF-INKING PRINTING PRESS.

Hobbies

For the roller mould procure a 6-in. length of zin. brass tube. Cut two round discs of $\frac{1}{2}$ -in. wood to fit each end. In the centre of these discs bore holes for the wooden stock of the roller to enter, fairly tightly. In one disc only, cut two semi-circular pieces out; these are to enable you to pour the composition in and also to let the air out. Procure a tin of roller composition and melt, then holding the roller and mould in an upright position pour the composition in and leave upright until set. The wooden discs can then be removed and the roller forced out. By the way, be careful to oil the inside of the brass mould before pouring the composition in.

One final point. Going back to Fig. 3 it will be seen that the two bars are joined together near the centre by two bands. These are cut from sheet brass and are $\frac{1}{2}$ -in. wide, the



ends are bent tightly round so that the bands will not easily slip. They are fixed after the lever has been placed in position in the centre and their object is to keep it central.

One final point. At Fig. 5, two arrows will be noticed. Between these points on both sides should be glued a strip of wood. Its thickness will be found by actual measurement. The roller stock will move over

these strips and their purpose is to raise the roller after it leaves the ink plate, from the wooden chase until it comes in contact with the type. With the roller and type in position pack a few pieces of cardboard under the roller stock until it is clear of the wood and yet just below the type level. Then plane the wooden strips to the correct thickness and glue on. This completes the press, which will be found capable of first class work.—W.J.B.

SIAMESE CATS FOR PROFIT.

A VISIT to Mrs. Duncan Hindley at her beautiful home at Prestwick in Surrey, will show the visitor what can be done in the way of making money out of Siamese cats. Mrs. Hindley's cats have already won her a great name in the cat world and innumerable prizes, and what she says about them is well worth listening to.

The cats are kept in "catteries," that is shelters in the open air, though at times they are allowed to run about freely when weather and other things permit and at the present time there are more than a dozen of the adult animals on the place.

"Is there a ready sale for them?" she was asked.

"Yes, I have found no difficulty in disposing of them," she replied. "There seems to be a steady and growing demand for them, for they are lovable, affectionate creatures, remarkably intelligent; and unlike most cats they become attached to their owner and not to the place."

"Where do these cats come from in the first place?"

"That is not known, though they are called 'Siamese,' and sometimes 'Temple cats,' from the fact that they are kept in temples in Siam and other eastern countries, and possibly have been regarded as sacred. There is, too, a variety in China known as 'Wongs,' with no tails, and I have one such, but these cannot be shown in this country as the breeders insist upon long tails; still, I can always dispose of

the kittens as pets though not for breeding or show purposes."

"What are the points being bred to now?"

"These, of course, vary at times, but just now you should try for long whip tails, very light coats with dark points to make a sharp contrast; very bright blue eyes of a certain peculiar shade and long slender bodies, not cobby as are some species of cats. There are several peculiarities of this species; for instance, their eyes tend to cross, at times almost amounting to a squint and their long thin tails often have a kink in them; personally I do not object to these points, but many breeders do."

"Have you a special cat club for Siamese cats?"

"Yes, and a most energetic secretary. I also exhibit at the National Cat Club's Show, and as you see I have many cards and certificates won at these shows."

"How many litters do they have a year?"

"I never allow mine to have more than two a year, the litters consisting of five or six kittens; at first they are white, but tend to darken as they grow older. Just at first they are slightly delicate and require to be kept in one temperature, but after a few weeks they are all right and can be hardened off."

"How much do you expect for a kitten?"

"I usually get three to four guineas for my kittens according to sex, shape, etc.; but for my prize litters, that is from a cat such as my

(Continued on page 177).

HOCKEY



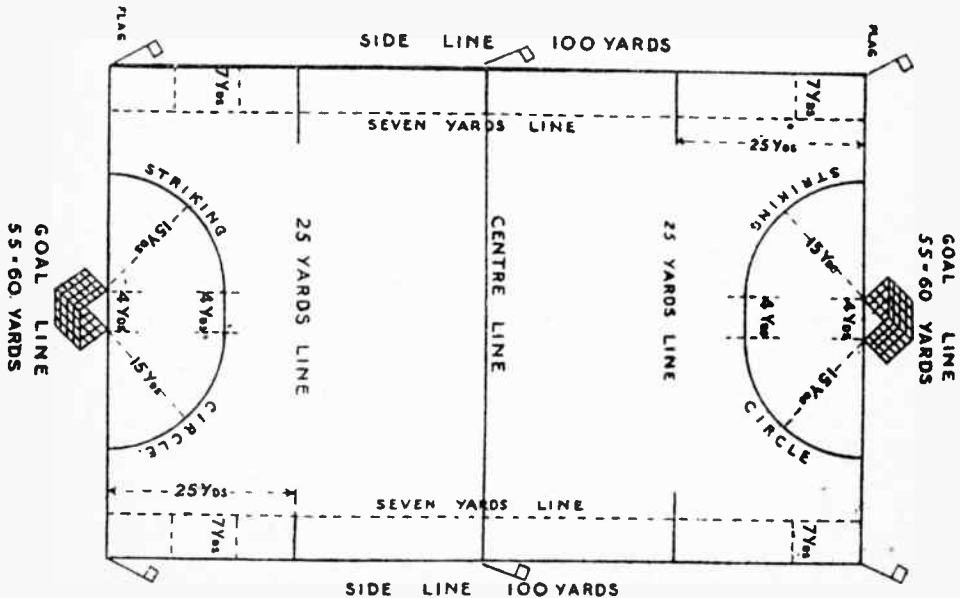
THE SEASON'S PROSPECTS.

WITH the summer gone, outdoor lawn tennis has returned into the silence, excepting, perhaps, matches here and there on hard courts, and Hockey has once again come into the light of day to interest, thrill and excite both players and spectators alike, whether in friendly, county, or international games. Profiting by the huge success of lawn tennis in the season just concluded, a number of lessons have been taught, and these, I hope, will be borne in mind by hockey players in general.

probably the greatest argument of all. It is almost impossible to have too good a playing field, and in making the selection there are many points to be considered.

Situation and Suitability.

The first appeal to me is a satisfactory situation—a field handy to the majority of the players, and not too far from a railway station. This is a big consideration for the convenience of the home club's own players, and the visiting teams must be also thought of. Very often



I am looking forward to a good hockey season, and it will be my pleasure, once more, to be as informative as possible, particularly so to the young beginners rather than the more experienced exponents of the popular game.

The Ground and its Lay-out.

As no hockey club can play without a ground, I propose starting at this point, for, having acquired a ground, its upkeep, condition and situation form a very important item—

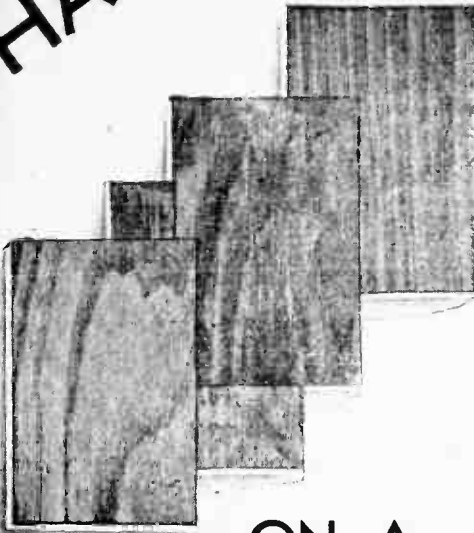
one, or more, leading players are unable to play in a match for which they have been selected, owing to the distance and preventive circumstances over which they have no control.

The next important point of consideration is the suitability of the field for the hockey game. By no means should a decision on this matter be arrived at hurriedly; if so, the season's play will be marred, a bad field not yielding its assistance to the players, thereby

(Continued on Page 175).

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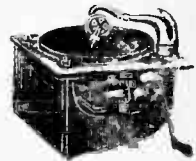
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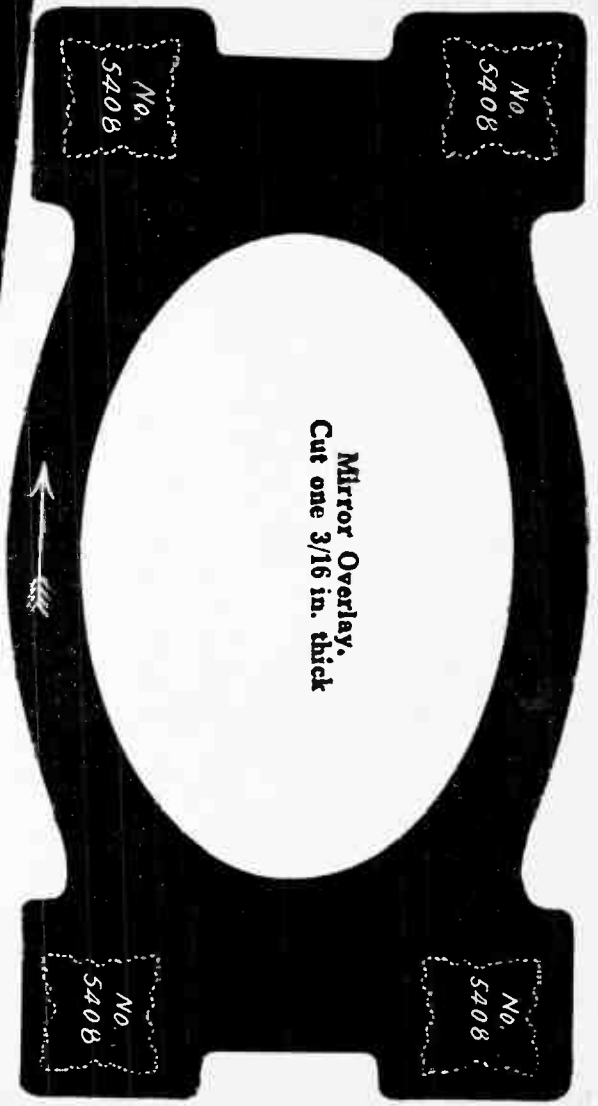
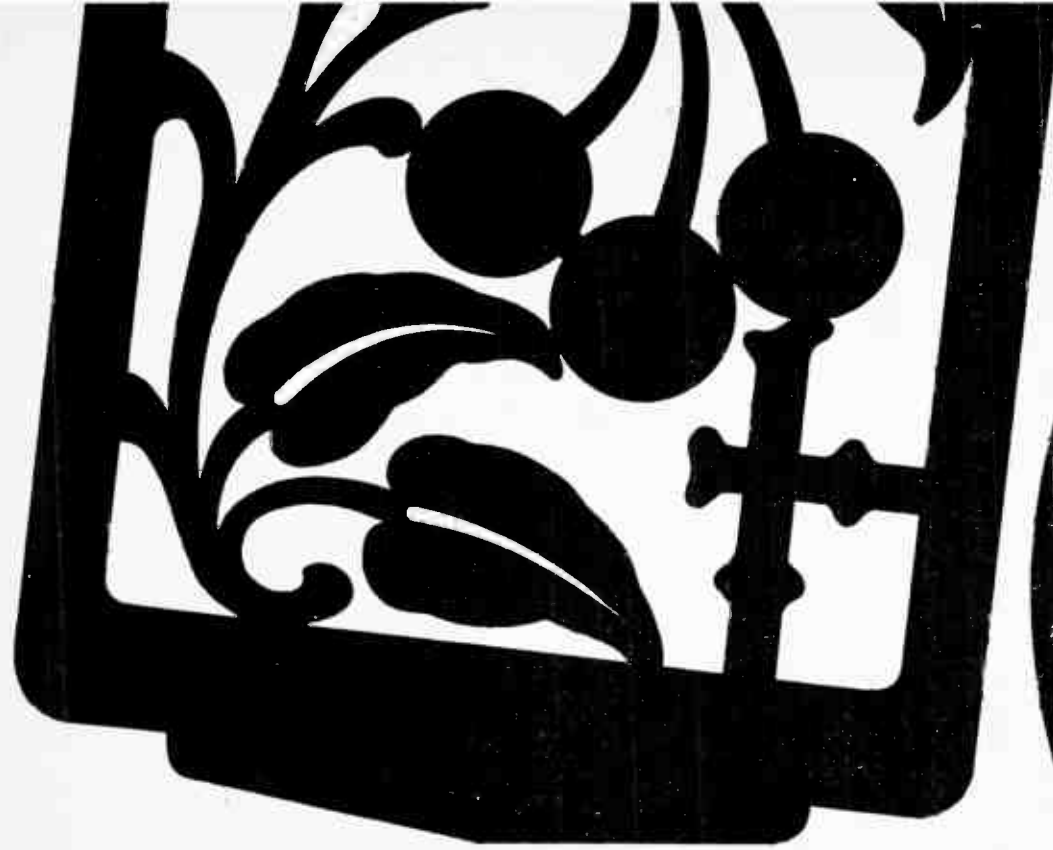
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THE question of a satisfactory source of high tension voltage for the wireless receiver is a problem which confronts every set owner, and there are many points which have to be studied carefully before making up one's mind as to the type best suited to individual requirements.

There are roughly four main classes which need consideration, namely, dry batteries, wet batteries, accumulators and battery eliminators, that is, electrical devices whereby the house electrical supply is converted into suitable power for operating the valves, but this article will be confined to the first three. Judging from the triple standpoint of convenience, first cost and cleanliness, the dry batteries might be thought to have prior claim. As long as a reliable make is purchased, the length of service given by each battery will depend mainly upon the number of valves used in the receiver and consequently the total plate current demanded.

Of course, all dry batteries must be treated with due care, and any trace of leakage removed by effectively isolating the H.T. battery from the set through the medium of a switch when the programmes are finished for the night, while the top of the battery must be kept quite free from dust.

When looked at from the point of view of

annual costs, the advantages of relatively cheap first costs for the dry battery are offset by the total renewal costs, and it is on this score that many turn their attention to one of the remaining types, this being quite apart from other drawbacks, such as crackling noises, which often develop when using dry batteries not of reliable make.

The wet H.T. battery is a special form of Leclanche cell with a highly concentrated Sac element. For the past eighteen months I have been making tests and the results have been really remarkable.

With high tension accumulators, of course, we have the distinct advantage that once the initial first cost has been met, this being generally somewhat high, the only running costs over a long period are due to occasional charging. When based over a period of time this system of supply often works out much cheaper than dry batteries, but, of course, the question of a renewal has to be borne in mind after three or four years' use unless meticulous care is taken of the accumulator plates. Generally, they can be relied upon to give yeoman service if properly looked after and the charging placed in capable hands, and thus they find many adherents amongst the wireless public.—H.J.B.C.

HOCKEY—Continued.

militating against the men showing their true form.

A field usually used for cricket makes an ideal hockey ground, for a club cannot have a field too level or too smooth to give the best results. Then, there is the care of the ground. Every true hockey player is fully alive to the fact that it is up to him to use his share of care of the ground, for is he not one of the moving figures in the playing part of the hockey panorama? To simplify matters, and to help young beginners in the game, we give an illustration of a correctly-laid-out field, for which we are indebted to the Hockey Association.

Regarding Rules.

To know any game is to overcome and master it. Having succeeded in this laudable and much-desired object, the player's attention must be focussed upon the rules governing the games, in this case, the rules as arranged and scheduled by the Hockey Association. Without true governance and allegiance to the rules, there can be no correct discipline. A book, costing but a few pence, can be purchased in any town, and

will be found under the title of Hockey Rules and Regulations; this will give all information in detail, and a copy should be in every hockey club member's hands.

The Weight of the Hockey Stick.

The weight of the hockey stick, within reasonable limits, is a matter of the player's discretion. It is advisable not to use a stick either too heavy or too light. A well-balanced stick of about twenty-three ounces (or regulation weight, according to the rules) will be ample weight for a forward, and for the defence a stick an ounce or so heavier will suffice.

It is a big question whether there is anything more important in the game than having a stick which can be wielded easily and which attunes to the play of the individual. Nothing hampers a man more, either in dribbling or giving passes, than using a stick which is too long. Success in the hockey game is greatly induced by quickness of action, and the stick is a very important item in this respect; therefore, it behoves the beginner to make a careful selection, and thus start right.—T.H.L.



MAGNESIUM RIBBON AND HOW TO USE IT.

As most amateur photographers know, it is possible to take photographs at night by the help of magnesium light. Many beginners, however, seem to be a little afraid of using magnesium, they believing it

often uses ribbon from a large coil he bought twenty years ago.

Burning the Ribbon.

The ribbon is lighted with a match or taper, or from a candle, and although a metal it burns slowly, exactly like a piece of sewing cotton or thread would burn.

The lighted ribbon gives off a large quantity of white but harmless smoke, and the light is bluish and very brilliant, strong enough to make exposures.

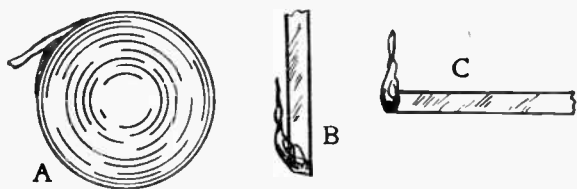
To burn the ribbon break a piece from the coil and hold it in a pair of pincers or tongs. Never hold lighted ribbon in the fingers as the heat from the flame is very great, and there is a danger of burning the fingers.

Short pieces of ribbon are best burnt hanging vertically as B, but when a long piece of ribbon is to be lighted it is better to make a simple holder and burn it in a horizontal position as C; it burns steadier this way and is under better control.

Simple Holder.

The best and safest way to burn pieces of ribbon over six inches in length is to use a tube. Obtain a piece of tubing, brass or other metal (as D), from six to twelve inches long and not more than half an inch in diameter. The wire from the coil (E) is then pushed through the tube and the end (F) lighted.

The tube may be held safely in the hand, and as the ribbon burns (at F) more is pushed through until the required amount has been burnt.



to be a little dangerous; maybe they have read accounts of accidental flashlight exposures, and so fear to use magnesium.

Several Varieties.

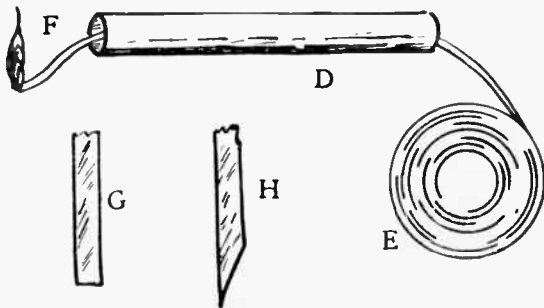
There are several kinds of magnesium for use in photography, and some certainly are a little dangerous when carelessly used, but some are perfectly safe.

Magnesium ribbon is the oldest and safest variety, and this we will describe in detail this week. There is also magnesium powder, once largely used, but now rarely employed; then there is the very popular flashlight powder, which is magnesium powder mixed with certain chemicals to make it burn quickly and give a very brilliant light. Flashlight powders act and explode like gunpowder, and call for care, also a little experience to secure the best results.

Ribbon.

Magnesium ribbon is sometimes called magnesium wire, as it is really a metallic wire flattened out like a very narrow ribbon, and it is not at all dangerous to use. It is sold in coils (as A) something like the steel spring of a watch, and it is very light in weight. The average price of the ribbon is fifteen pence per ounce, but quarter-ounce coils may be obtained for fourpence, and a quarter of an ounce will be enough to make many pictures. Some dealers sell the ribbon in metal holders ready for burning (cost nine-pence) and these are very useful.

The ribbon is not in the least troublesome; it may be carried in the pocket, and will keep good for many years. The writer



OUR PHOTO STUDENTS' CIRCLE.

Hobbies

The flame cannot enter the tube and the light at the end goes out when no more ribbon is pushed through. Magnesium ribbon when well alight cannot be blown out.

Lighting the Ribbon.

Sometimes the ribbon is very slow to catch alight and many matches may be struck before the ribbon burns. This difficulty of lighting may be due to the ribbon being oxidized and dirty, and when this happens the ribbon should be cleaned with a piece of emery paper, or scraped clean with a penknife.

Another and a very useful method of making ribbon catch fire very quickly is to cut the ribbon end to a point with a pair of scissors. When ribbon is broken off the end is square (as G). The thing to do is to sharpen the end like H. A sharp-ended end will catch alight almost instantaneously, but a square end may be a little troublesome to light.

Exposures.

The light given off from magnesium ribbon is not strong enough for snapshots. Time exposures are necessary—the exposure time

being the time the ribbon is burning.

The length of ribbon to burn (time of exposure) depends upon the subject, speed of lens, etc., and some experiments may be necessary. On

an average it takes about three feet of ribbon to make an exposure at night.

The camera is set on a rest, the shutter opened to "time," the ribbon lighted, and when the required amount of ribbon has been burned the lens is closed. When a portrait is taken the sitter must, of course, keep quite still while the ribbon burns and the shutter remains open.

Daylight and Magnesium.

Magnesium ribbon can be used as a help in daylight work. When taking portraits indoors on a dull day a piece of lighted ribbon will help and lighten the shadows. Lighted ribbon is

also useful when taking flower studies, interiors, etc., on a dull day.

The accompanying portrait was taken indoors on a dull day. The main light was dull daylight from a window, but the shadow side of the face was helped by burning about a foot of ribbon a few feet away.



A DAYLIGHT-RIBBON EXPOSURE.

SIAMESE CATS FOR PROFIT—Continued

Champion Perak I get four and five guineas; then, too, I get a nice sum annually from stud fees and as you see I have several queens belonging to other people at this moment."

"Are many people breeding these cats in England at the present time?"

"The number is certainly increasing, but on the other hand the demand for the kittens seems to be increasing too, at any rate, as you see I have only one litter of small kittens on hand at this moment, and they are not old enough to offer for sale yet; so you see they are not hanging on hand."

"Are they easy to manage?"

"Yes, for they are gentle and affectionate, and will readily stay with you, far more than ordinary cats do. Of course they will stray at times, and if a male happens to cross with some common cat he may reproduce mongrel kittens of Siamese appearance, but a female

Siamese cat if crossed has never yet been known to reproduce any but ordinary cats which resemble the father, but never herself; this is a most curious point I consider in the breed."

"And no-one knows their origin?"

"No it can only be guessed at for there is no known wild species which resembles them, but they seem a fixed type at the present time."

"Then you consider they can be made to pay well?"

"Yes; for as I say, they are easy to rear and easy to dispose of; there is a steady and growing demand for them, and in addition they are most interesting loving animals and do not cost much to keep; of course, there is the initial outlay; but taking all things into consideration they can be made to yield a nice addition to one's income with no very great trouble or cost."—W.L.P.

FOOTBALL

AND HOW TO PLAY THE GAME.

GREAT CENTRE FORWARDS

WHAT a variance of opinion you get as to the merits of the players in a great game. Coming away from a game I knocked up against two well-known writer experts. One was of opinion that it was the worst game he had ever seen, whilst the other said he would never want to see a better. And it is as well so. We view life itself from different angles, if we did not it would not be hardly worth living. Take cricket; the great demand of the times is to quicken the game, quite contrary to those players whose chief feature is defence, and in their way help to give the necessary variety in the struggles.

"Who do you think is our great centre-forward?" I am often asked, and when I answer "I don't know," the questioner looks at me as if in grave doubts as to my willingness to express an opinion. It is all a question of opinion. I might say Hacking, of Oldham Athletic, is our best goalie, but I should soon be told by Bolton enthusiasts that I had forgotten Dick Pym, or Aston Villa supporters would say that Olney ought to be classed in that category. As long as we agree to differ on opinions we are fairly sure of our ground in social circles.

Now I am not as much concerned about who is our greatest star in that position, David Jack

(of the Arsenal), George Brown (of the Villa), Tommy Jennings (of Leeds United), or Dixie Dean (of Everton), as I am in what makes a centre forward. None of the great players mentioned can do anything at all if their outside men do not feed them; and here lies the secret of a centre-forward success.

I never was a great believer in shadowing in football—neither in Rugby or Soccer—for the simple reason I have seen so many games lost with concentrating on one player, and whilst the play has been diverted say to one player the other players have usually taken the opportunity to score.

"Watch....." shouted the spectators at a certain match, and the effect of the barrack was that that player simply played for it and the watching lost the match. My ideal of a centre-forward is that he should be a commanding, strong-built personality, blessed with a resolution to get through the defence, not at any cost, i.e., brute force, but with an adaptability to



DAVID JACK (ARSENAL) AT HOME. HIS TRANSFER FROM BOLTON WANDERERS CREATED A GREAT SENSATION.

seize chances, and he should be very ambidextrous with both feet, and on the hottest of days be as cool as a cucumber.

Also, the centre-forward makes, if his personality is strong enough, the best captain and leader, for he is in a position to see the changes of activity as the game goes along. It is not an absolute necessity that the centre-



TOMMY JENNINGS, THE LEEDS UNITED PIVOT—A DETERMINED CENTRE-FORWARD.

forward should be a great sprinter, though speed is a great help, but with speed he can often overrun the ball.

If you have aspirations to become a pivot, watch our great centres of to-day and note their different styles of play.

I happen to be the head of a Photo Press Agency, and have hundreds of footer pictures pass through my hands, and if I only see the legs of certain centres I can tell which one it is. There are a number of "shock" centres, who as soon as the game commences, try by shocks to knock the opposing side off their guard, and sometime this comes off, but in the long-run it does not pay. The centre who makes good is the plodder; he who sticks it right to the end; the player who does not get ruffled in whatever way the attack is coming. Of a certain centre I once heard a player say at half-time "If we could only upset him (not roughly) we could win the match; but you will never ruffle he takes things as if he were sitting at the breakfast table having ham and eggs and

reading a newspaper" That's the kind of player to win matches.

Then there is the non-finishing centre, who, maybe, comes down the field in brilliant fashion, and for lack of coolness kicks the ball well over the cross-bar. I well remember how, in one season, times without number, I saw this occur—want of steadying power.

I once asked an International centre what were the chief points to watch in the centre, and how he prepared himself. "There are no great points," he replied, "the chief thing is to be ready, or in other words be prepared; you never know if your own players are going to make a mistake. I may make a mistake, for however good a player is he is bound to make a mistake some time and it usually comes at a vital match due to the tension we go through."

He also said that centre-forwards are made. I know a Midland First Division club who simply presents their centre with his goals, and all he has to do is to tap the ball into the net. It is merely the finishing touch in the attack. The failing of centre-forward play is due many a time to selfishness—sticking to the ball when even just a short pass would ensure a goal safely.—J.W.O.



DENT (HUDDERSFIELD TOWN) IN A LIVELY ATTITUDE AT CENTRE-FORWARD.

READ "HOBBIES" EVERY WEEK

DO YOU KNOW THESE FISH?

Popular Names for Familiar Denizens of the River.

IT may not be generally known among the young anglers who read this journal that many of the fish they catch bear more or less interesting nicknames. Locally, a species of fish may be familiarly known by quite a different name to what the same fish is called in another part of the country. It would be rather interesting to learn how these nicknames or local appellations originated. In some cases a distinctive habit or some marked feature of the appearance and colouration of a fish has led local folk to dub the same with some name which struck them as appropriate; or out of a popular regard for some sporting fish an old angler has given it a name which has clung to it and become widespread.

Do you know the "strut"? This is the name by which the minnow is known on the Trent. And the local anglers have cause to remember it, for there are millions of "struts" in that river; so numerous are they that fishing for bigger fish is sadly interfered with, for the voracious little "struts" will not give a bait a chance; no sooner is the bait in the water than it is being torn to shreds by a horde of minnows. But if you travel in Scotland, and refer to a "strut" you would have local Scots guessing. In Scotland the popular name for the minnow remains "minnin," the same as it was centuries ago. This popular quarry of the schoolboy, who goes forth with net and jam-jar, can boast of a large number of other names, as for instance, "pink," "baggie," "baggit," "Jack Barrel," "Jack Sharp," "weaker," "mennot," "peer" and "shadbrid."

The Chub and its Aliases.

Perhaps, at some time or other, you have caught a hefty chub, a grand sporting fish found in many rivers. Walton, the famous old angling writer, added the adjective "logger-headed" to its name; but the wary chub is no "loggerhead" in one sense, for he is cute enough when you try to catch him. Well, the chub has many aliases, and is variously known as the "chevin," "chavendar," "skelly" (in the north-country), "poll," "pollard," "bottling," and "lob." Most of these pseudonyms would appear to have originated from the big, chocky head of the fish.

Chub, whatever name you call them by, are splendid sporting fish for the river angler, and as they are found in most streams, usually under willows or overhanging trees where the water is deepish, they are popular among anglers.

"The White Fellow."

There is a river fish of the migratory kind that

is known as the "white fellow" in some parts. This is the sea-trout or salmon-trout, a beautiful member of the game fish family. This fish is recognised by a large number of names, and is known locally as "white-fellow" or white trout, grey trout, salmon-trout, peal, and brith-dail. In Devon it is referred to as the salmon-peal, and in Wales as the "sewin." In one stage of its growth before it reaches adult age, it is known by such names as "herling," "whitling," "finnock," "mort" and "Lammastman," the latter because this species run up the rivers in good numbers round about Lammastide. When it is quite small, and in what is known as the smolt stage of growth it is labelled by many pretty names, such as "yellow-fin," "orange-fin," "black-fin" and "silver-white." In Ireland it is generally the "white" trout to distinguish it from the yellow or brown trout, which is not migratory.

The sea-trout is a remarkable fish in some ways, for it lives both in fresh water and in salt, like the salmon, and its life history is full of romance and mystery. It is a very fine sporting fish, and may be caught with fly, bait, or artificial spinner.

Do You Know the "Miller's Thumb"?

There is a small fish that inhabits our brooks and lesser streams rejoicing in the peculiar name of "miller's thumb." It is said to have derived this name from a more or less fanciful resemblance to the peculiar shape supposed to be imparted to the thumb of a miller by its constant use in testing the evenness of the flour as it falls from the mill-spout. Personally, I have never noticed a miller's thumb to be particularly broad and flattened, but it may be so. Certainly the head of this fish is flat and broad.

The fish itself grows to a length of from three to five inches, and is conspicuous by its broad, flattened head and gills, which in breadth is about equal to one fourth of the whole length of its body. It hides under stones and lurks close on the head of the stream. It is an ugly looking creature, and will readily take a worm on a small hook. Besides its name of "miller's thumb," it is also known as the "bullhead," a popular name, and also as "Tommy Logge," "Tom Cull" and "cully."

The Popular Pike and its Names.

The pike is well known, and every adult angler lives in the hope of some day catching a big one, something over 20lb. It is first and foremost a predatory fish, and has earned such sub-titles as the "river tiger," the "tyrant of

(Continued on page 182).

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Here's a novel constructional set any lad will delight to use. Not just a mere toy, but something to teach the joys of flying as well as the function of wings and rudder. The steel tower is built from the parts supplied and the aeroplane hung by a cord on the arm. When wound up and released the plane whizzes round in realistic flight for quite a long time before settling gracefully and gradually on the ground. Endless experiments can be undertaken by bending the elevating planes and the rudder, especially if the tower is stood on a small table in the centre of the room so that the plane has a good circuit and comes to earth realistically on the floor. The erection of the tower, the regulation and control of speed and flight offer scope and interest to any up-to-date lad.

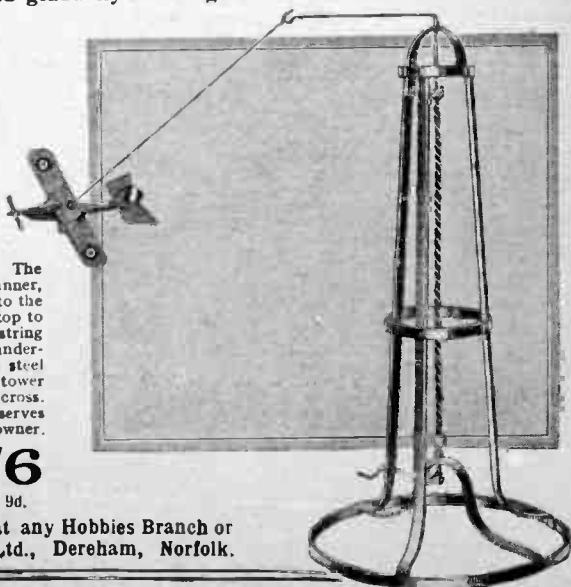
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The parts of the Flyer are contained in a strong flat box. The building of the tower is done quite simply with a small spanner, and full instructions are included. Strong elastic is fitted to the swivel movement and the winding handle has a release stop to prevent it turning when the mechanism is wound up. Both string and aeroplane are provided so that the joy of flying can be undertaken immediately. The tower is of light but strong steel brightly enamelled in green and red. The completed tower stands 2ft. 4ins. high and rests on a circular base 14ins. across. The whole thing is compact and tidy when not in use, but serves to provide endless joy and interest for its delighted owner.

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THE GARDEN.



THE best time for planting Raspberry Canes is at the end of October and during November, but good results have been obtained from plantations made as late as March. The raspberry cane is easily grown and the fruit is greatly appreciated for both cooking and dessert, and also for preserving purposes. Canes for planting should, if possible, be obtained from a young plantation, for those from old beds lose their vigour quickly and are slow in producing root action. The stems or "canes" attain a height of from 5 to 7ft. when fully grown, according to the variety. During the first growing season after planting, "colts" or young growths shoot up from the creeping root stock, but bear neither flowers nor fruit unless they belong to the autumnal fruiting class.

A neat effect with good results may be obtained by straining wires to posts placed at the ends of the rows allowing the canes to climb over them. A distance of about 4ft should separate one row from another, and canes should be spaced at a distance of from 18 to 24 inches apart in the rows.

The pruning of recently planted canes should be deferred till spring, when all growths should be cut down to within 3 or 4in. of the ground in the case of weak growing varieties, and 1 to 1½ft. with strong growing kinds such as Lloyd George and Pyne's Royal.

A top mulching of dead leaves or litter

applied soon after planting operations have been completed will protect the canes from frosts and also work as a fertiliser for the soil.

The raspberry cane lasts two years, but as quickly as old growths are pruned away new ones spring up to take their place, and fruit may be obtained for several years from the same plot. For this reason soil should be well manured every year, so as to encourage the development of vigorous shoots for the production of fruit during the following season.

The Autumnal Raspberry Lloyd George has in recent years become widely cultivated, for two crops of fruit may be harvested during one season. This raspberry bears its fruit on the canes of current year's growth, as well as on the over-year wood as in the case of the ordinary summer-fruiting varieties. Wood of current year's growth which has borne fruit should not be cut back, but will probably require to be thinned out. In the case of the summer fruiting varieties of raspberries, however, all growths which have produced fruit during the summer should be pruned to the ground, leaving only young or current year's canes for the production of next season's crop.

Autumnal raspberries may receive more liberal dressings of manure than summer-fruiting canes in order to receive good crops from September to November.

Raspberries show signs of exhaustion after six years and new sites must be secured.

DO YOU KNOW THESE FISH?—Continued.

the watery plains," and the "freshwater shark," or "freshwater wolf." It is also known as the "luce" when it attains a large size, whilst small pike are referred to as "jack." In Scotland it is sometimes called the "gedd." "Pickerel" is another name for it. The popular and familiar name "pike" owes its origin to the stiff sharp form of the fish, which resembles the old-fashioned pike or spear with which the old-time pikemen were armed.

One of the best baits for pike is the dace, a fish also known as the "dart," from its darting ways. Then the bleak is also in request for pike bait, and this little fish is sometimes called the "whitling." On the Trent anglers refer to it as the "willow-blade." Izaak Walton referred to the bleak as the "freshwater sprat," and also as the "river swallow," the latter name doubtless being derived from its habits of skimming just below the surface of the water.

Other Nicknames for Familiar Fish.

Many other fish have nicknames. For instance, the perch is called the "barse" in East Anglia. The roach is also known as the "red fin." The rudd is the "finscale" or the

"shallow." The lampren is severally called "nine-eyes," "seven-eyes," "stone-grig," and "June-ba." The white bream is termed the "breamflat," and also the "tinplate." The true bream is sometimes referred to as the "bellows-bream" on account of its shape, resembling a pair of bellows.

In different parts of the country the loach—a pretty little fish inhabiting brook and rivulets—is known as the "stone-loach" (probably on account of its habit of lurking beneath stones), and as "beardie," a name no doubt suggested by the little barbules that hang from its upper lip. It is also known as "colley."

Many of these nicknames given to our freshwater fish are singularly appropriate, as for instance, "redfin" for the roach, which has such conspicuously coloured fins. Others, however, make one wonder how they received their pseudonyms; why, we wonder, do Trent anglers call the minnow the "strut," as a case in point. It is, however, useful for youthful anglers to know these various nicknames, then they are not at a loss when visiting different waters where fish are locally recognised by different names.—A.S.

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A strong and well made tool for the fretworker. Made of polished steel with knurled handle to provide a strong grip. For cleaning drill holes or ordinary burnishing purposes.

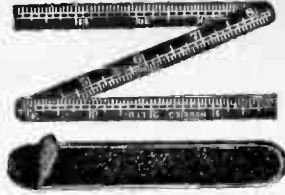


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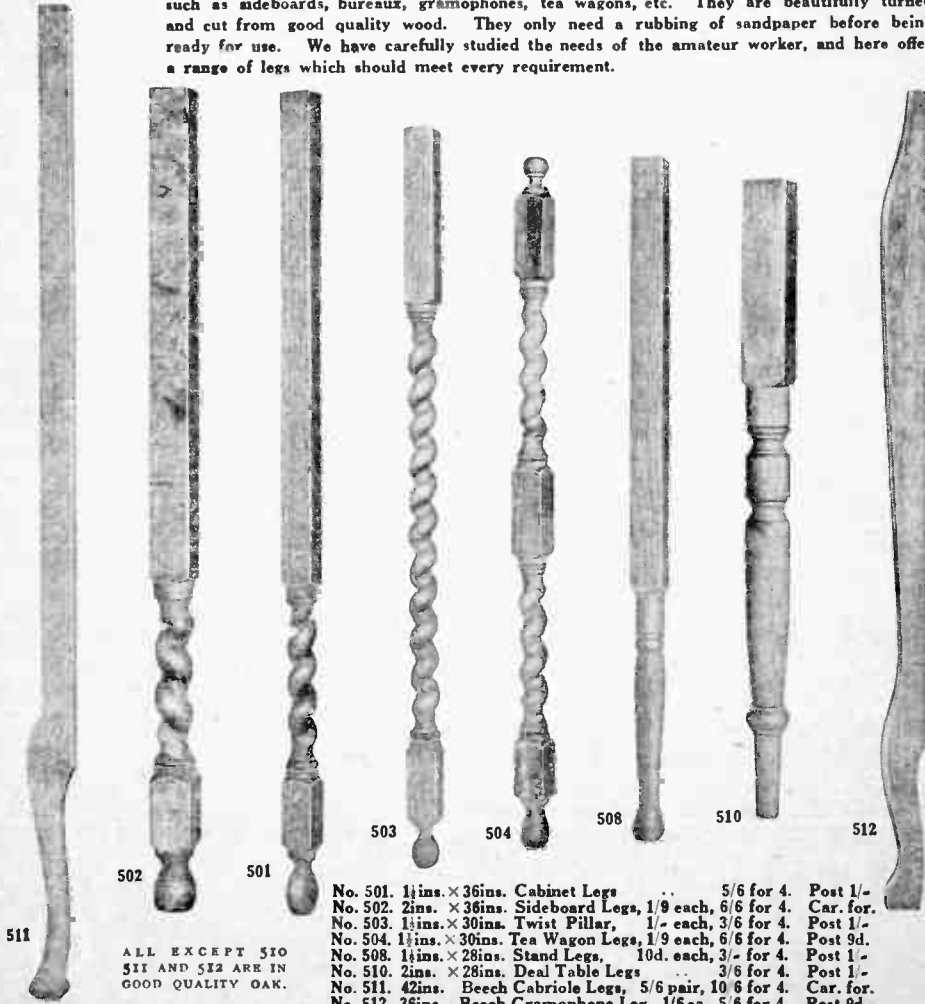
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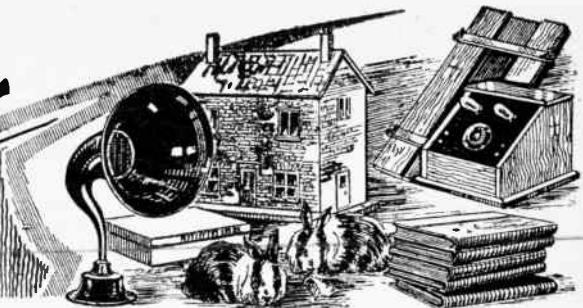
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