

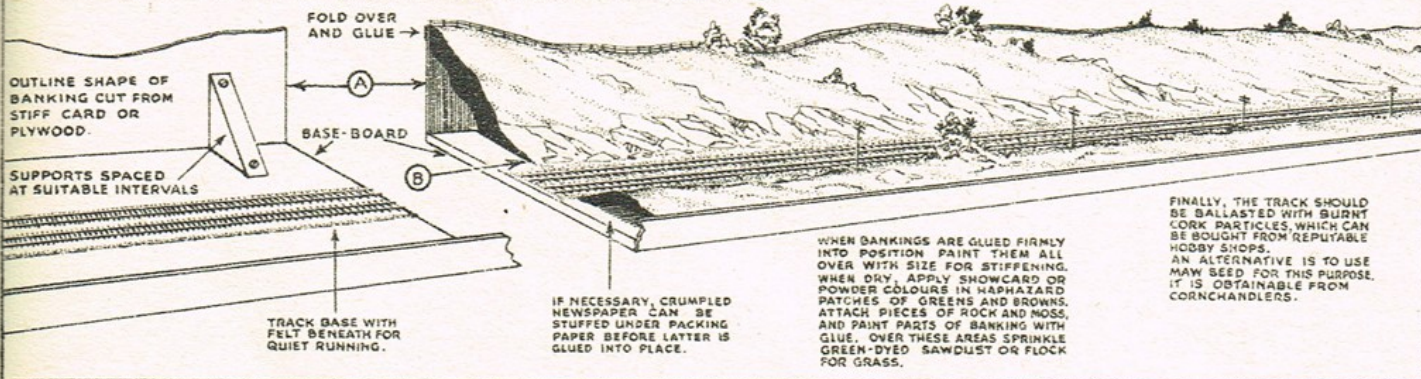
# SCENIC BUILDING *for* MODEL RAILWAYS

Written and illustrated by WALKDEN FISHER

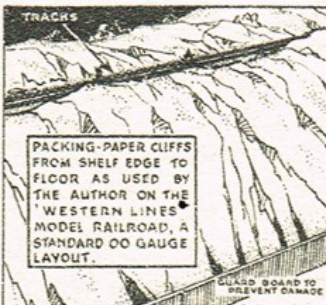
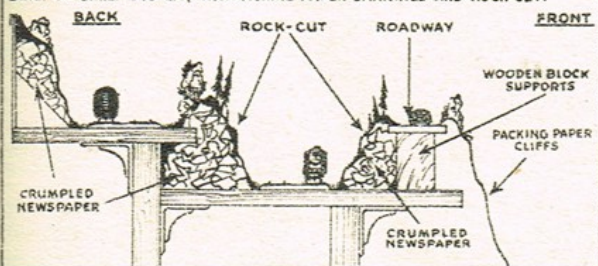
## No. 1 TRACKSIDE EMBANKMENTS

THE DEVELOPMENT OF A SCENIC SCHEME IS AN INTERESTING ASPECT OF THE MODEL RAILWAY HOBBY AS EVEN THE SIMPLEST TYPE OF LAY-OUT CAN BE EASILY TRANSFORMED. THE FEATURES HERE ILLUSTRATED ARE DESIGNED FOR THE SHELF-TYPE OF LAYOUT IN OO GAUGE, BUT WITH A LITTLE INGENUITY SIMILAR IDEAS MAY BE USED IN A TABLE-TOP LAYOUT, AND FOR O GAUGE.

THE PACKING-PAPER METHOD OF FORMING EMBANKMENTS AND ROCK-CUTS IS SIMPLE AND INEXPENSIVE. CRUMPLE A SHEET INTO A BALL, UNCRUMPLE IT AND GLUE INTO POSITION ALONG TOP EDGE OF CUT-OUT BANKING SHAPE (A) AND ALONG BASE BOARD AT POINT (B).



SECTION SHOWING CONSTRUCTION METHODS FOR HIGH AND LOW-LEVEL TRACKS BUILT ON SHELF SYSTEM, WITH PACKING PAPER BANKINGS AND ROCK-CUT.



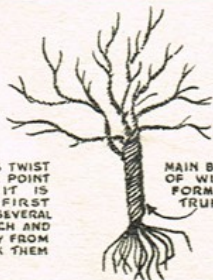
## No. 2 MAKING MODEL TREES

TREES GREATLY INCREASE THE REALISM OF SCENIC LAYOUTS, AND HERE ARE SOME IDEAS AND METHODS WHEREBY AT LITTLE COST, MODEL TREES THAT WILL BE VERY LIFE-LIKE IN APPEARANCE MAY BE MADE IF CARE AND PATIENCE IS USED!

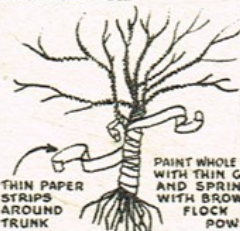
CUT SOME LENGTHS OF SOFT WIRE ABOUT HALF AS LONG AGAIN AS HEIGHT TREE IS TO BE. CLAMP THEM IN A VICE IN A BUNCH ABOUT AN INCH FROM ONE END.



WITH A PAIR OF PLIERS TWIST THEM TOGETHER UNTIL POINT IS REACHED WHERE IT IS DECIDED TO START FIRST BRANCHES. SELECT SEVERAL WIRES FROM MAIN BUNCH AND TWIST AWAY SEPARATELY FROM TRUNK. BEND AND KINK THEM AT THE SAME TIME.



GO ON UNTIL ALL WIRES ARE TWISTED AND BENT TO SHAPE ALL ROUND TRUNK. NEXT WRAP STRIPS OF THIN PAPER AROUND TRUNK, MOULDING IT OVER WIRES AND PASTE WELL.



PAINT WHOLE TREE WITH THIN GLUE AND SPRINKLE WITH BROWN FLOCK POWDER.

TOUCH UP TRUNK AND BRANCHES WITH VARIOUS SHADES OF GREEN, BROWN AND YELLOW POSTER COLOURS. FOR FOLIAGE, FOAMED RUBBER OR SPONGE CAN BE PLUCKED TO SHAPE AND PUSHED ON TO BRANCHES COATED WITH GLUE. WHEN SET, SPRAY FOLIAGE WITH SHELLAC VARNISH USING A MOUTH SPRAY. TOUCH UP WITH MATT OIL COLOURS.



DRILL HOLE IN BASEBOARD. TWIST WIRES AT BASE OF TRUNK AND INSERT. FIX WITH GLUE.

BIND AND PASTE THIN PAPER STRIPS ROUND TRUNK BASE TO MASK HOLE. PAINT TO MATCH TRUNK.

'BURNING BUSH' IS AN IDEAL PLANT FROM WHICH TO FORM MINIATURE TREES. STRIP OFF BRANCHES OF VARYING LENGTHS AND DIP OR SPRAY WITH LEAF GREEN WATER PAINT.



THE BUSH GROWS TO A HEIGHT OF BETWEEN 1 AND 2 FEET.

'TREES' FORMED FROM BRANCHES STRIPPED OFF



SELECTED PRIVET TWIGS MAKE REALISTIC TREES WHEN FINE GRADE STEEL WOOL HAS BEEN FORCED AND GLUED TO THEM.



WHEN DRY DIP INTO TIN OF MATT-GREEN OIL PAINT.



SPRINKLE GREEN-DYED SAWDUST ON STEEL WOOL FOLIAGE WHILE PAINT IS WET.

TWO TYPES OF ALMOST 'READY MADE' TREES - FORMED FROM SPRIGS OF HEATHER AND SPRIGS OF GORSE. DIP INTO MATT-GREEN OIL PAINT AND SPRINKLE WITH GREEN-DYED SAWDUST.

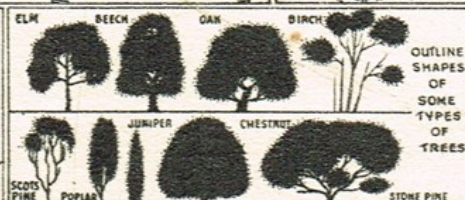


HEATHER SPRIG

GORSE SPRIG



THIS MAKES EXCELLENT 'DWARF PINES' IN 4 M.M. SCALE

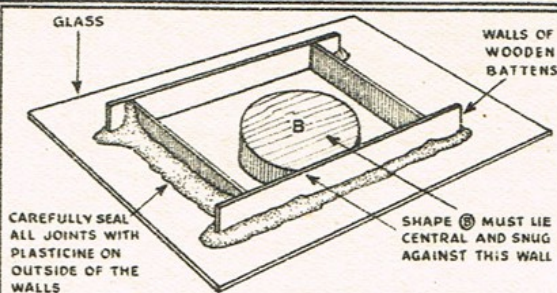
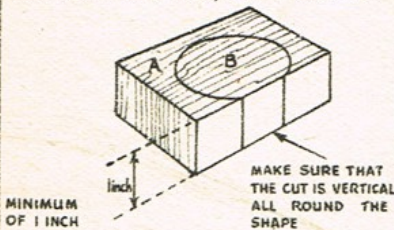


A 'TREE MAKERS KIT' MARKETING BY MODEL CRAFT LTD. CAN BE BOUGHT FROM ANY GOOD HOBBY SHOP

### No. 3 MODELLING A TUNNEL PORTAL

THIS TYPE OF PORTAL IS FOR A SINGLE-TRACK TUNNEL. A DOUBLE-TRACK PORTAL CAN BE MADE IN A SIMILAR MANNER. YOU ARE RECOMMENDED TO STUDY EXAMPLES OF REAL TUNNELS FOR ARCHITECTURAL DETAILS.

FROM A PIECE OF WOOD (A) WITH A MINIMUM THICKNESS OF 1 INCH, CUT OUT THE TUNNEL MOUTH SHAPE (B) DECIDED UPON, WITH A FRET-SAW.



PLACE (B) ON A FLAT, LEVEL SURFACE, SUCH AS A PIECE OF GLASS.

BUILD UP FOUR WALLS WITH PIECES OF WOODEN BATTENING, OR OTHER SUITABLE TIMBER AS SHOWN.

(B) SHOULD LIE CENTRAL AND SNUG AGAINST ONE WALL AS ILLUSTRATED.

THE WALLS CAN BE HIGHER THAN THE THICKNESS OF (B) BUT NOT LOWER.

ALL THE INTERIOR SURFACES OF THE WALLS — THE FLOOR OF THE 'BOX', AND THE VERTICAL FACE OF SHAPE (B) SHOULD BE GIVEN A THIN FILM OF FINE OIL. "3 IN ONE" OIL IS EXCELLENT FOR THIS.

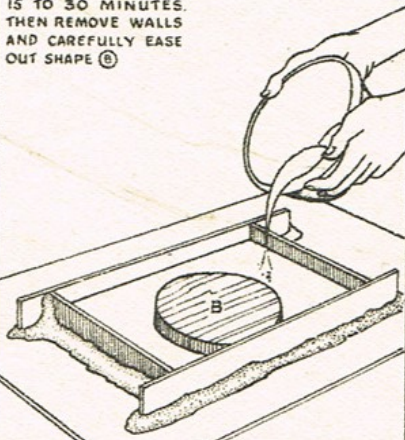
NEXT, IN A BASIN, MAKE A MIX OF PLASTER OF PARIS AND WATER TO A CONSISTENCY OF THICK CREAM.

NOTE: THOROUGHLY CLEANSE THE BASIN IMMEDIATELY AFTER POURING THE MIX AS THE PLASTER SETS RAPIDLY!



POUR MIX INTO 'BOX' UNTIL IT COMES LEVEL WITH THE TOP OF (B).

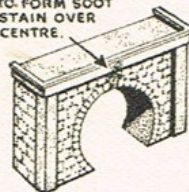
ALLOW TO SET FOR 15 TO 30 MINUTES. THEN REMOVE WALLS AND CAREFULLY EASE OUT SHAPE (B)



WHEN BLOCK IS THOROUGHLY DRIED OUT, BRICKWORK OR MASONRY CAN BE SCRIBED WITH A SHARP POINT ON ITS SURFACE. OTHER ADDITIONS CAN BE CEMENTED ON.

INTERIOR SHOULD BE PAINTED MATT BLACK, AND EXTERIOR WASHED WITH POSTER PAINTS IN VARYING SHADES OF GREY AND BROWN. THE COLOURS WILL SINK INTO THE SCRIBED LINES GIVING A VERY REALISTIC EFFECT.

HOLD LIGHTED MATCH OR CANDLE IN ARCHWAY AND ALLOW SMOKE TO FORM SOOT STAIN OVER CENTRE.

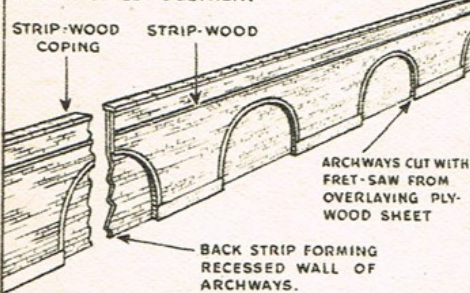


THE TUNNEL PORTAL IN POSITION

### No. 4 BUILDING RETAINING WALLS AND FENCES

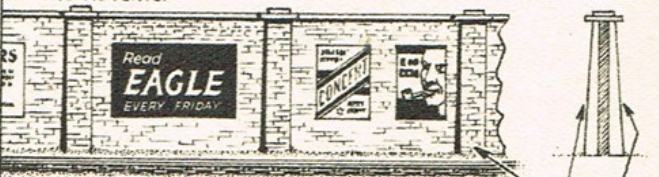
THE FEATURES DEALT WITH HERE ARE SIMPLE TO MAKE. THEY CAN ADD A GREAT DEAL TO THE REALISM OF A MODEL LAYOUT.

A RETAINING WALL MADE FROM TWO PLYWOOD SHEETS GLUED TOGETHER.



COVER WITH BRICK, OR STONE PAPER. ON SALE IN SHEETS FROM MOST MODEL RAILWAY HOBBY SHOPS.

A SIMPLE, STRAIGHTFORWARD VERSION WITH STRIP-WOOD BUTTRESSES. IT CAN BE FINISHED OFF WITH BRICK OR STONE PAPER, OR AS PLAIN CONCRETE. A SEARCH THROUGH THE ADVERTISEMENTS OF ALMOST ANY COLOURED MAGAZINE SHOULD PROVIDE PLENTY OF POSTERS. BEAR IN MIND THE SCALE TO WHICH YOU ARE WORKING AND SELECT SUITABLE PORTIONS OF THE ADVERTS.

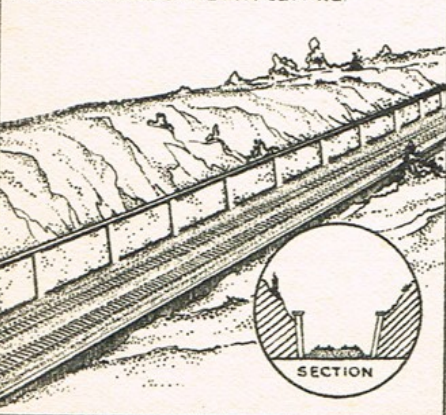


MAKE THIS UP ON THE SITE BY SOLDERING LENGTHS OF WIRE TO UPRIGHT PINS SET IN HOLES.

A RETAINING WALL BUILT AROUND A ROCKY LEDGE IN 'ROUGH COUNTRY'.



THIS ILLUSTRATES HOW A RETAINING WALL CAN BE USED TO SAVE SPACE IN A CUTTING.



THERE ARE MANY WAYS OF CONSTRUCTING FENCES, AND MANY TYPES TO CHOOSE FROM. FINE STRIP-WOOD, AS USED BY AERO-MODELLERS CAN BE WORKED WITH GOOD EFFECT.

SPACE UPRIGHTS NOT MORE THAN 6 SCALE FEET APART.



A POST-AND-WIRE TYPE

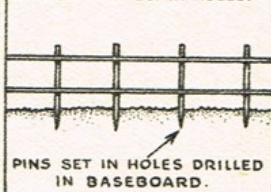


INSERT USED MATCH STICKS INTO HOLES DRILLED IN BASEBOARD. WIND GREY COTTON THREAD BETWEEN THEM

FENCE-AND-WALL. CARD FENCE. SCRIBE PLANKS WITH HARD PENCIL. COLOUR CREOSOTE.



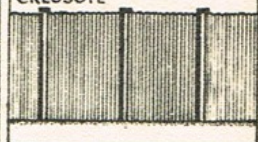
MAKE THIS UP ON THE SITE BY SOLDERING LENGTHS OF WIRE TO UPRIGHT PINS SET IN HOLES.



PINS SET IN HOLES DRILLED IN BASEBOARD.

CORRUGATED IRON, IN FOIL TO 4 M.M. SCALE CAN BE BOUGHT FROM G.N. SLATER & SON OF MANCHESTER

COLOUR WOODEN POSTS CREOSOTE



MODEL-CRAFT LTD. HAVE PRODUCED A CARD MODELLING SHEET OF PLATFORM FENCING IN FULL COLOUR — DESIGNED BY EDWARD BEAL.

IT IS EASILY MADE UP AND VERY EFFECTIVE.

PLATFORM FENCING IN MACHINED CARD-STRIP OR METAL IS NOW AVAILABLE AT MOST MODEL RAILWAY HOBBY SHOPS.

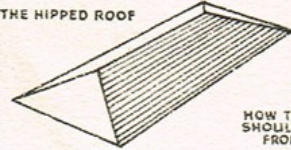
## No. 5 HINTS ON MAKING MODEL BUILDINGS

THESE IDEAS ARE OF A GENERAL NATURE. THE READER WHO WISHES TO GO DEEPER INTO THE SUBJECT IS STRONGLY ADVISED TO READ "MINIATURE BUILDING CONSTRUCTION" BY JOHN H. AHEARN, PUBLISHED BY PERCIVAL MARSHALL. THIS BOOK IS A MINE OF INFORMATION AND IDEAS.

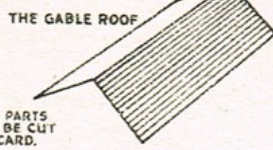
ARTIST'S BRISTOL BOARD IN VARYING THICKNESSES IS AN IDEAL MATERIAL FOR MODEL BUILDINGS. STRAWBOARD SHOULD ONLY BE USED AS A LAST RESOURCE! IF THIS BECOMES NECESSARY, FIRST COAT IT WITH GLUE OR SIZE TO FORM A PRIMING COAT FOR EASIER WORKING. BRICK AND STONE PAPERS FOR O AND OO GAUGE SCALES CAN BE BOUGHT AND WILL HELP GREATLY. A KEEN CUTTING TOOL IS ESSENTIAL, AND ONE OF THE TRIX "X-ACTO" MODELLERS' KNIVES WILL BE FOUND TO BE EXTREMELY USEFUL.

### TYPES OF ROOFS

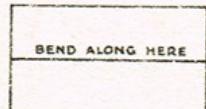
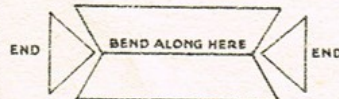
#### THE HIPPED ROOF



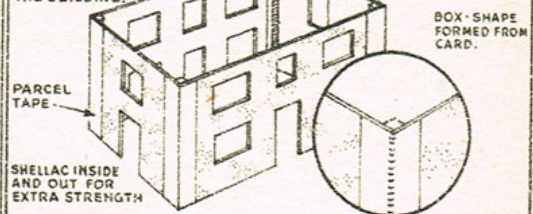
#### THE GABLE ROOF



HOW THE PARTS SHOULD BE CUT FROM CARD.



STRENGTHEN CORNERS OF BUILDINGS WITH STRIP-WOOD AND ADHESIVE PARCEL TAPE AS SHOWN. THE LATTER WILL BE UNNOTICED WHEN BRICK OR STONE PAPER IS PASTED OVER THE BUILDING.



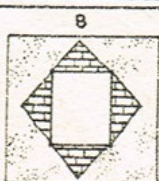
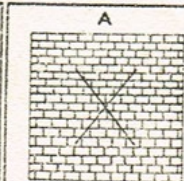
### WINDOW OPENINGS

MARK OUT WITH PENCIL AND PIERCE HOLES WITH PIN AT EACH CORNER BEFORE CUTTING



CUT OUT WITH SHARP BLADE USING METAL STRAIGHT EDGE AS GUIDE.

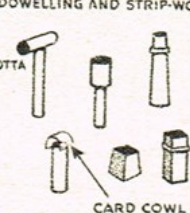
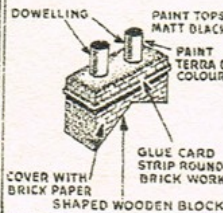
THE PIERCED HOLES WILL MAKE THE JOB EASY AND NEAT.



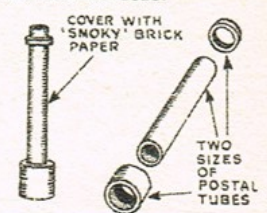
PASTE BRICK PAPER OVER WALLS AND OVER WINDOW OPENINGS. CUT DIAGONAL SLOTS FROM CORNER TO CORNER (A). THEN FOLD IN FLAPS THUS FORMED AND STICK TO INSIDE WALL (B).

### CHIMNEYS

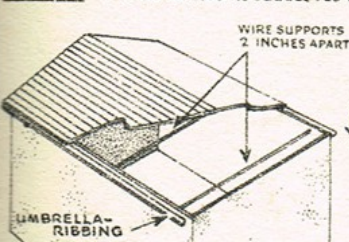
VARIOUS TYPES THAT CAN BE FASHIONED FROM DOWELLING AND STRIP-WOOD



A FACTORY CHIMNEY CAN BE MADE FROM POSTAL TUBES.



### GUTTERS: A NOVEL METHOD AS SUGGESTED BY EDWARD BEAL.



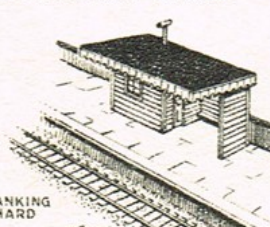
### JOHN H. AHEARN'S METHOD OF MAKING AN EFFECTIVE STATION ROOF VALANCE.



CUT STRIP OF CARD TWICE WIDTH OF VALANCE REQUIRED. RULE PENCIL LINE DOWN CENTRE. WITH SMALL LEATHER PUNCH MAKE ROW OF HOLES ALONG THIS LINE A HOLE'S DIAMETER APART. CAREFULLY CUT ALONG PENCIL LINE TO FORM TWO STRIPS OF VALANCING WHICH WILL IMPROVE YOUR STATION ROOF!



SHELLAC BOTH SIDES OF VALANCE TO STIFFEN AND STRENGTHEN. SCRIBE VERTICAL PLANKING AS SHOWN WITH A HARD PENCIL.



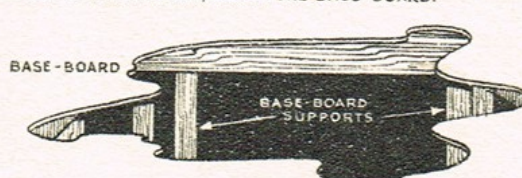
AN EXCELLENT SERIES OF CARD CONSTRUCTIONAL SHEETS ("BILTEEZI SERIES") FOR VARIOUS TYPES OF BUILDINGS IN 4 M.M. SCALE IS AVAILABLE FROM HANBLINS, 10 CECIL COURT, CHARING CROSS ROAD, LONDON, W.C. 2. THE CARDS ARE PRINTED IN FULL COLOUR.

## No. 6 MAKING A REALISTIC LAKE (PART ONE)

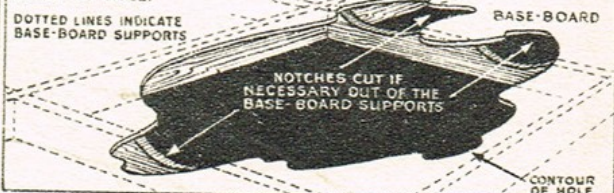
THE FEATURE DESCRIBED IN THIS AND THE NEXT SECTION IS INTENDED FOR A PERMANENT LAYOUT. IT CAN PROVE TO BE SKILL IS NEEDED IN THE BUILDING.

TO MAKE A MODEL LAKE USING REAL WATER IS IMPRACTICAL BECAUSE OF THE DAMPNESS, SMELL OR STAGNATION IT WOULD CAUSE. ALSO IT WOULD HAVE A VERY UNNATURAL RIPPLE-FREE SURFACE UPON WHICH A FILM OF DUST WOULD EVENTUALLY FORM. HAMMERED GLASS IS THE BEST MATERIAL FOR SUCH A FEATURE.

DECIDE UPON SITE AND SIZE OF LAKE, THEN CUT A HOLE, HAVING AN IRREGULAR CONTOUR, OUT OF THE BASE-BOARD.



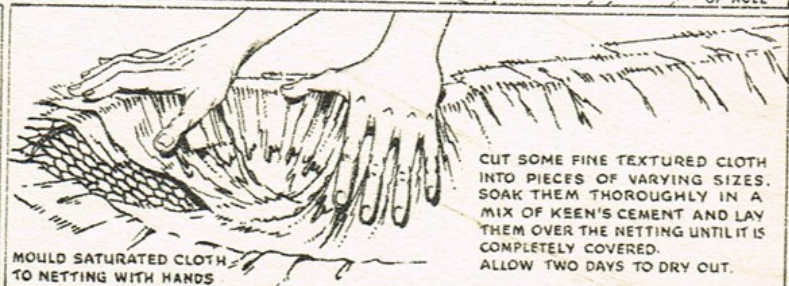
TRY TO PLAN HOLE SO THAT IT LIES BETWEEN SOME OF THE BASE-BOARD SUPPORTS. IF YOU CAN'T, EXTRA SUPPORTS SHOULD BE FIXED TO ENSURE RIGIDITY OF EDGES OF HOLE.



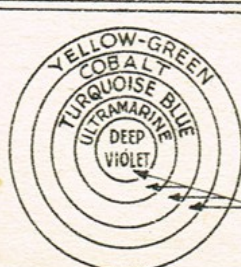
NEXT, MAKE A 'HANGING BAG' OF FINE CHICKEN NETTING. STAPLE NETTING AROUND OUTLINE AND PRESS AND FASHION IT WITH THE FINGERS INTO HUMPS AND RIDGES TO FORM THE UNEVEN SLOPING CONTOURS OF THE LAKE-BED.



NOTE: IT IS ADVISABLE TO WEAR A PAIR OF THICK OLD GLOVES IN ORDER TO AVOID NASTY CUTS AND SCRATCHES!

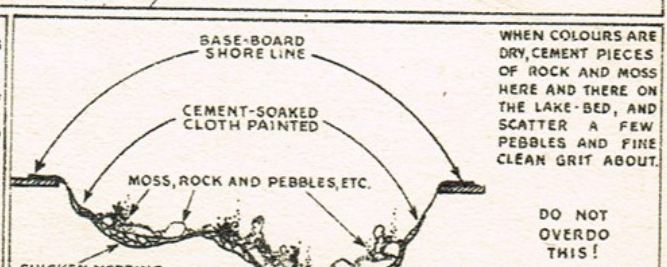


WHEN CEMENT-SOAKED CLOTH HAS ALMOST DRIED OUT IT IS READY FOR PAINTING. THE FINISHED EFFECT OF THE LAKE DEPENDS A GREAT DEAL ON THIS 'UNDER WATER' PAINTING. APPLY THE COLOURS IN THE ORDER SHOWN IN THE NEXT DIAGRAM. COMMENCING WITH THE DEEPEST PORTIONS OF THE LAKE AND WORKING UP TO THE SHORE LINE. PAINT THE SHADES ON ROUGHLY WITH A RAG. DO NOT MAKE DEFINITE LINES OF COLOURS BUT MERGE ONE INTO THE OTHER WHILE THEY ARE STILL WET. IT DOESN'T MATTER IF SOME RUN DOWN INTO OTHERS. IT ALL ADDS TO THE FINISHED EFFECT!



THIS CHART SHOWS THE ORDER IN WHICH COLOURS SHOULD BE APPLIED. THE CENTRE REPRESENTS DEEPEST PORTIONS OF LAKE. WORK UP AND AROUND FROM THIS TO TOP (SHORE LINE)

USE POSTER PAINTS. MERGE EACH SHADE INTO NEXT.

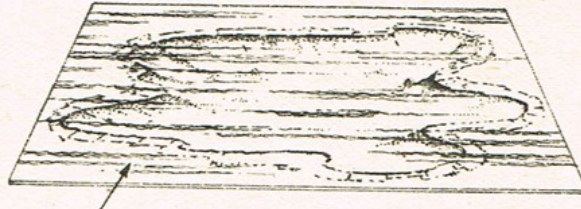


## No. 7 MAKING A REALISTIC LAKE (PART TWO)

IN THE PRECEDING DIAGRAMS, INSTRUCTIONS FOR CONSTRUCTING AND PAINTING THE BED OF THE MODEL LAKE WERE GIVEN. DETAILS OF HOW TO PUT THE FINISHING TOUCHES TO THE LAKE AND ITS SURROUNDINGS ARE EXPLAINED.

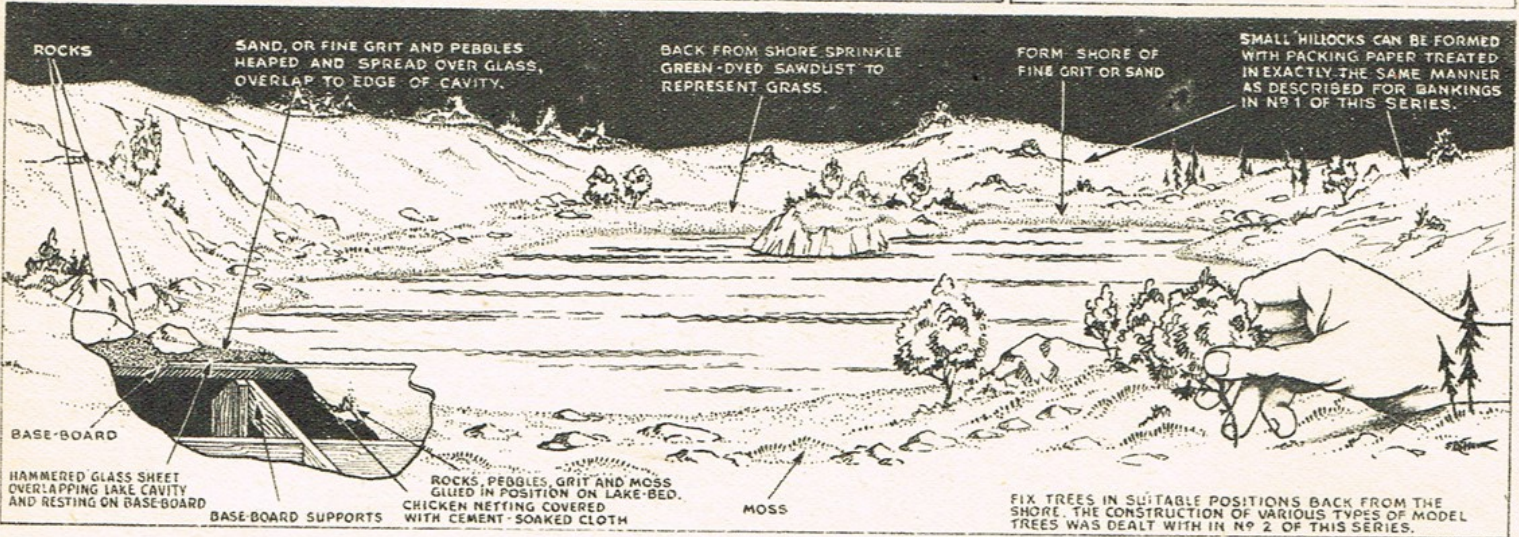
HAVING PAINTED AND ARRANGED ALL THE UNDER-WATER DETAILS, NEXT OBTAIN A SHEET OF "HAMMERED GLASS". THERE ARE VARIOUS TYPES. CHOOSE ONE WITH AN UNEVEN RIPPLE-LIKE SURFACE. ANY GLAZIER SHOULD BE ABLE TO SUPPLY IT, AND THE COST FOR A SHEET 2 OR 3 FEET SQUARE WILL ONLY BE A FEW SHILLINGS. THE GLASS SHOULD BE LARGE ENOUGH TO OVERLAP THE LAKE CAVITY BY A GOOD MARGIN ALL ROUND.

THE MANNER IN WHICH THIS TYPE OF GLASS BREAKS UP AND MERGES THE UNDER-WATER DETAILS, GIVES A MOST REALISTIC EFFECT.



ALLOW A GOOD OVERLAP ALL ROUND THE LAKE CAVITY.

NOW IS THE TIME TO CHECK ALL THE UNDER-WATER DETAILS. MAKE SURE THAT EVERYTHING IS IN PLACE BEFORE LAYING THE GLASS OVER THE CAVITY. NEXT, WITH THE GLASS IN POSITION, ITS OVERLAP IS COVERED BY HEAVING SAND OR FINE GRIT AND SMALL PEBBLES UPON IT TO THE EDGE OF THE CAVITY BENEATH. THIS IS CARRIED OUT ALL ROUND THE LAKE.



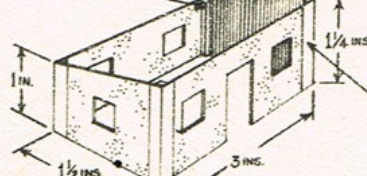
## No. 8 A MODEL LOG CABIN IN 4 M.M. SCALE (00 GAUGE)

THIS MODEL CAN MAKE AN ATTRACTIVE FEATURE WHEN PLACED IN THE VICINITY OF THE MODEL LAKE DESCRIBED IN THE TWO PREVIOUS SECTIONS. GENERAL DIMENSIONS ARE GIVEN. HOWEVER, THE MODELLER CAN LET HIS IMAGINATION GO FREE AND USE HIS OWN INGENUITY OVER DESIGN. IT IS SELDOM THAT TWO CABINS ARE IDENTICAL, AND THEREFORE ONLY THE MAIN CONSTRUCTIONAL METHODS FOR SUCH A MODEL ARE EXPLAINED HERE.

START BY COLLECTING A SUPPLY OF USED MATCH STICKS. THESE SHOULD ALL BE OF THE SAME TYPE. MATCHES VARY; OTHER MATERIALS REQUIRED ARE SOME PIECES OF CARD OF SUITABLE THICKNESS, SOME LENGTHS OF STRIPWOOD, PARCEL TAPE, MODEL CEMENT - SECCOTINE OR CROID GLUE. FOR TOOLS SCISSORS AND A SHARP KNIFE SHOULD BE SUFFICIENT. COMMENCE BY MAKING THE FOUR WALLS FROM CARD AND IN THEM CUT DOORS AND WINDOWS TO SUIT YOUR OWN INDIVIDUAL TASTE!

NOTE: DIMENSIONS GIVEN IN FIRST DIAGRAM ARE ONLY INTENDED AS GUIDE. CABIN CAN BE MADE LONGER, WIDER & SLIGHTLY HIGHER IF DESIRED.

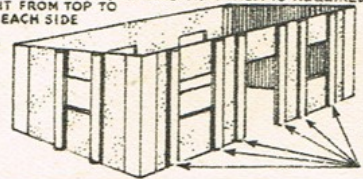
STRIPWOOD IN CORNERS



COAT INSIDE AND OUT WITH SHELLAC VARNISH

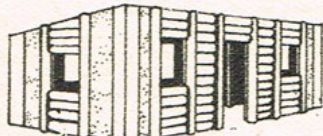
STRENGTHEN CORNERS WITH STRIPWOOD AND ADHESIVE PARCEL TAPE.

WHEN SHELLAC HAS DRIED AND HARDENED, THE WALLS ARE READY FOR THE 'LOGS' TO BE GLUED ON. SELECT SOME MATCH STICKS, CUT AND TRIM THEM TO REQUIRED LENGTHS AND GLUE UPRIGHT FROM TOP TO BOTTOM ON EACH SIDE OF EVERY WINDOW AND DOOR.



UPRIGHT 'LOGS' GLUED TO CARD WALLS EACH SIDE OF DOOR AND WINDOWS

NEXT, CAREFULLY CUT SOME MATCH-STICKS TO FIT HORIZONTALLY BETWEEN THESE UPRIGHTS, AS SUGGESTED IN THE ILLUSTRATION. DO NOT FIX ANY FROM OUTER UPRIGHTS TO CORNERS YET.

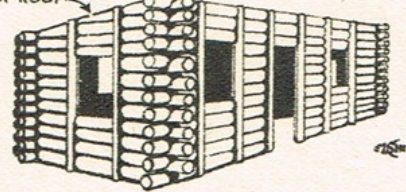


HORIZONTAL 'LOGS'

FOR THE CORNERS EXTRA CARE IS NECESSARY IN CUTTING THE MATCH-STICKS TO FIT. NOTE HOW EACH IS NOTCHED IN ORDER FOR THEM TO FIT ONE ABOVE THE OTHER.

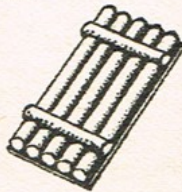


TRIM MATCHES TO FIT SLOPE OF ROOF

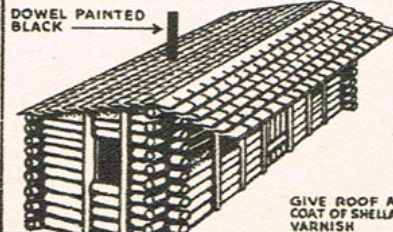


THE REAR WALL IS FINISHED OFF IN A SIMILAR MANNER.

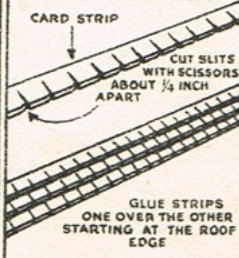
PASTE TRACING PAPER OVER WINDOWS ON INSIDE. A DOOR IS MADE BY GLUEING MATCH-STICKS ON A PIECE OF CARD AS SHOWN. MAKE IT A GOOD FIT AND GLUE INTO POSITION ON THE INSIDE OF THE DOOR OPENING.



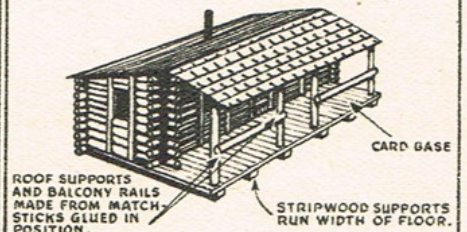
FIT SHINGLE ROOF AS ILLUSTRATED, ALLOWING A GOOD OVERHANG BACK AND SIDES. THE CONSIDERABLE OVERHANG AT THE FRONT FORMS ROOF OF BALCONY.



ROOF SHINGLES MADE FROM CARD STRIPS CUT AND LAID AS SHOWN



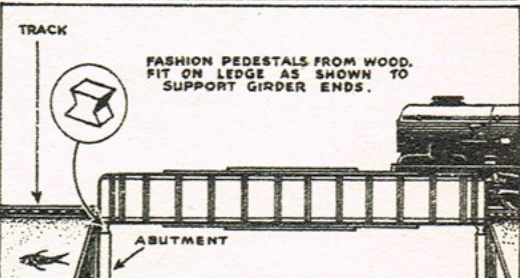
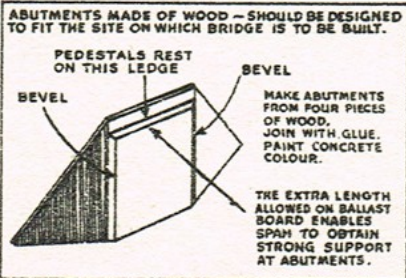
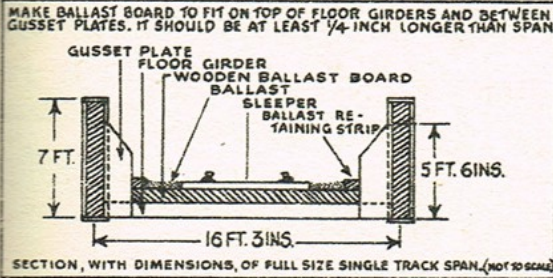
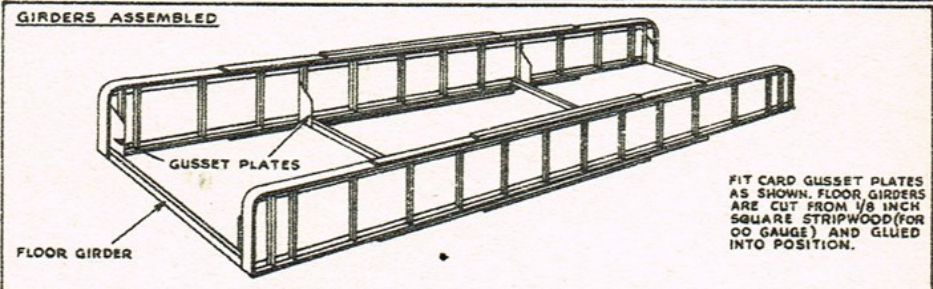
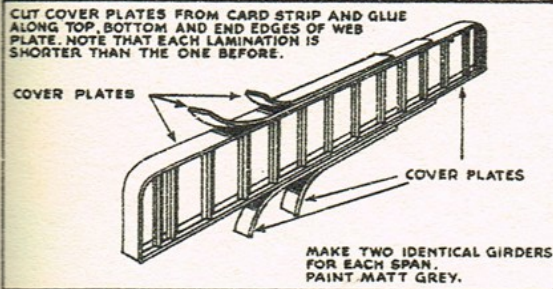
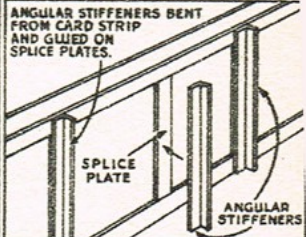
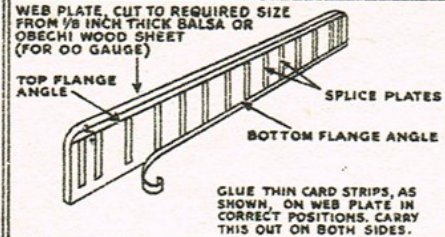
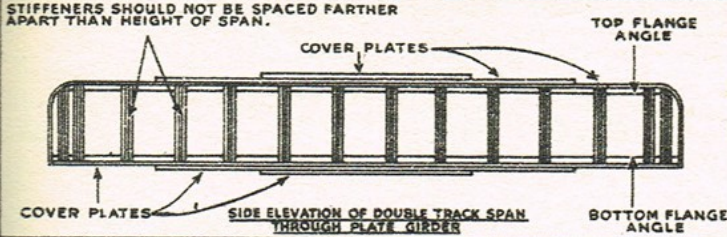
FINAL DETAILS: GLUE CABIN ON CARD BASE WHICH SHOULD EXTEND TO FORM FRONT BALCONY FLOOR. RULE PLANKING ON THIS PORTION WITH A HARD PENCIL.



## No. 9 A THROUGH PLATE GIRDER BRIDGE

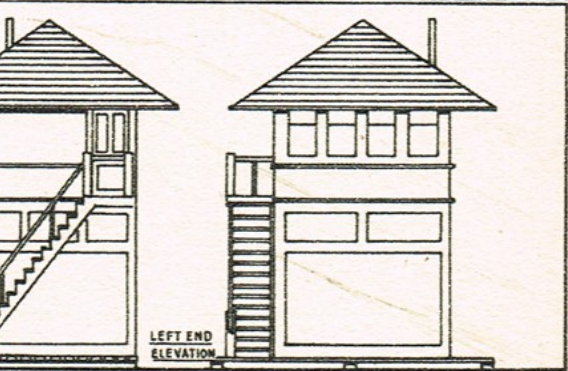
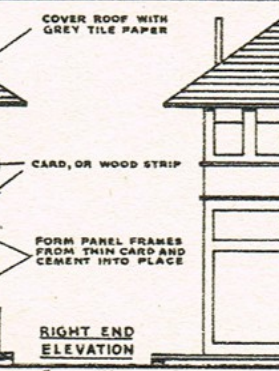
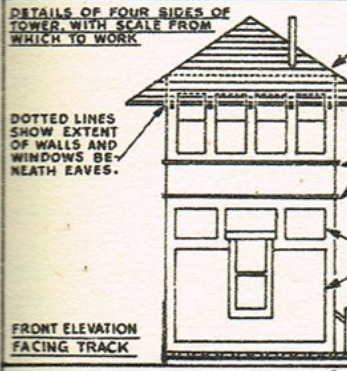
THIS MODEL CAN BE BUILT ENTIRELY OF WOOD AND CARD. DESIGN YOURS TO FIT THE SITE YOU HAVE IN MIND ON YOUR LAYOUT. THE PLATE GIRDER TYPE OF BRIDGE IS USED FOR SPANS UP TO 100 FT. AS A GUIDE TO PROPORTIONS, USE A 10 TO 1 LENGTH-TO-HEIGHT RATIO FOR A SINGLE TRACK SPAN, AND 8 TO 1 FOR A DOUBLE TRACK SPAN.

STIFFENERS SHOULD NOT BE SPACED FARTHER APART THAN HEIGHT OF SPAN.

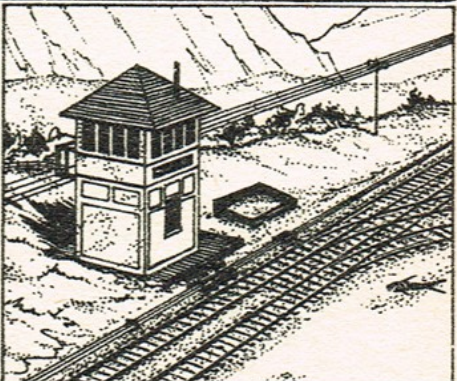
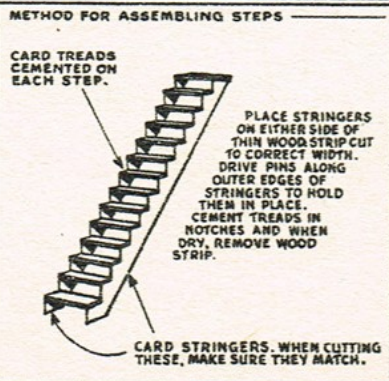
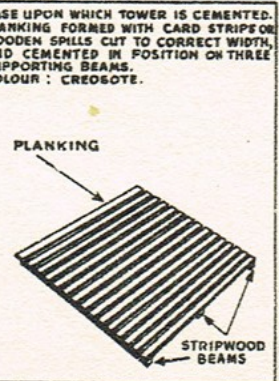
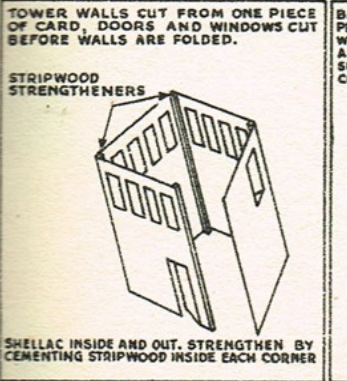


## No. 10 AN AMERICAN CONTROL TOWER (SIGNAL CABIN)

THIS MODEL WILL MAKE AN ATTRACTIVE ADDITION TO ANY BRITISH TYPE LAY-OUT. THESE TOWERS ARE POSITIONED AT JUNCTIONS, CROSSINGS AND AT THE ENTRANCE TO YARDS ON PROTOTYPIC AMERICAN RAILROADS. BUILD MODEL OF CARD AND STRIPWOOD, USING GENERAL METHODS OF CONSTRUCTION ALREADY DESCRIBED IN THIS SERIES. THE SCALE WILL ENABLE YOU TO MEASURE UP ALL DETAILS. GLAZE WINDOWS BY CEMENTING CELLOPHANE ON INSIDE, BEFORE FIXING WOODEN STRENGTHENING STRIPS FOR CORNERS IN PLACE.



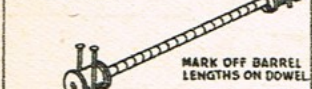
USE THIS SCALE TO MEASURE OFF ALL THE DETAILS. SCALE IN FEET. USE POSTER OR SHOWCARD COLOURS FOR PAINTING. CHOOSE YOUR OWN COLOUR SCHEME. HERE ARE SOME SUGGESTIONS: WHITE OR CREAM WITH BROWN TRIM. APPLE GREEN WITH DARK GREEN. CHROME YELLOW WITH INDIAN RED. TWO SHADES OF GREY.



**No. 11 MINIATURE BARRELS. WAGON LOADS OF COAL AND TELEGRAPH POLES** EACH OF THE THREE ITEMS DESCRIBED HERE CAN BE MADE IN A FEW MINUTES. ALL THE MATERIALS ARE EASILY OBTAINABLE, AND WILL COST VERY LITTLE.

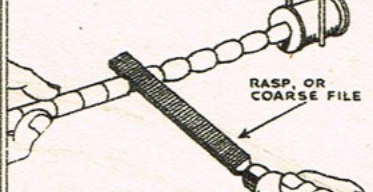
**MAKING BARRELS, BASED UPON A METHOD DESCRIBED IN 'THE MODEL RAILROADER'**

A BARREL IS ABOUT 3 FT. HIGH, 26 INS. IN DIAMETER AT ITS MIDDLE AND 21 INS. AT THE ENDS. CHOOSE DOWEL OF PROPER SIZE FOR YOUR GAUGE AND "CHUCK" IT IN TWO COTTON BOBBINS FIXED AS SHOWN HERE.



MARK OFF BARREL LENGTHS ON DOWEL. NAILS FIXED IN BOARD AND ARRANGED TO ALLOW BOBBINS AND DOWEL TO BE REVOLVED.

REVOLVE DOWEL BY HAND AND RASP IT TO CORRECT BARREL SIZE AND CONTOUR.



AFTERWARDS CUT BARRELS APART WITH A COPING SAW.

SCRIBE STAVE LINES WITH A POINTED INSTRUMENT.

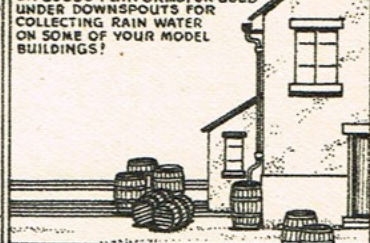


HOOP BARRELS WITH THIN STRIPS OF PAPER. GLUE THEM IN PLACE. ALLOW ENDS HOOPS TO EXTEND OVER BARREL EDGE.

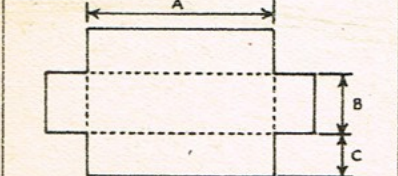


TREAT WITH WALNUT STAIN OR LEAVE NATURAL WOOD COLOUR.

THEY CAN BE USED AS LOADS FOR OPEN WAGONS - SET IN GROUPS ON GODD'S PLATFORMS, OR USED UNDER DOWNPOUTS FOR COLLECTING RAIN WATER ON SOME OF YOUR MODEL BUILDINGS!

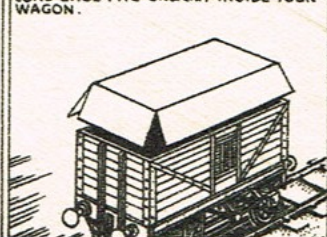


**LOADS OF COAL**



CUT A PIECE OF CARD TO THE SHAPE SHOWN ABOVE. DIMENSION @ IS YOUR WAGON'S INSIDE LENGTH, @ ITS INSIDE WIDTH, AND @ 1/8 INCH LESS THAN ITS DEPTH. FOLD ALONG DOTTED LINES.

CHECK SIZE AND SHAPE SO THAT THE LOAD BASE FITS SNUGLY INSIDE YOUR WAGON.



COAT SURFACE OF LOAD BASE WITH GUM. POUND SOME COAL WITH HAMMER UNTIL REDUCED TO PIECES OF FAIRLY UNIFORM SIZE. SPRINKLE THESE OVER GUM - AND ALLOW TO DRY.



WHEN DRY, SHAKE OFF PARTICLES THAT HAVE NOT STUCK.

COAT COAL WITH GUM AND REPEAT PROCEDURE UNTIL DESIRED PROPORTIONS ARE OBTAINED. EACH LAYER SHOULD COVER A SMALLER AREA, PYRAMIDING TOWARDS THE CENTRE.

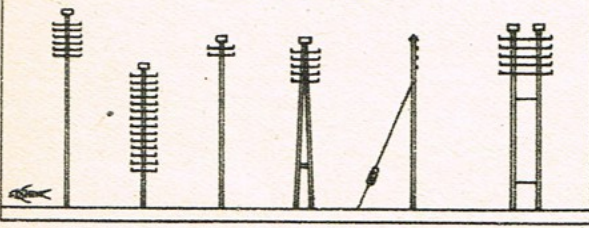


THE LOADS CAN BE MADE DETACHABLE. ALTERNATIVE LOADS CAN BE MADE UP IN A SIMILAR MANNER, USING FINE GRIT, GRAVEL OR SAND.

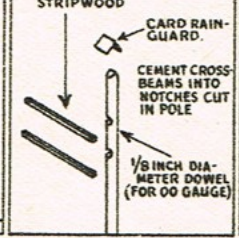


**TELEGRAPH POLES**

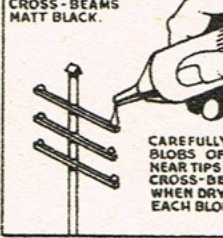
VARIOUS TYPES.



1/8 INCH SECTION STRIPWOOD

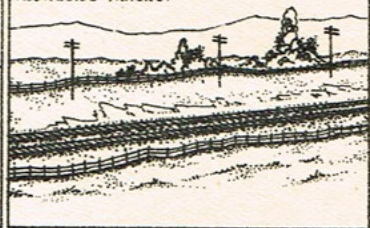


CARD RAIN-GUARD. CEMENT CROSS-BEAMS INTO NOTCHES CUT IN POLE. 1/8 INCH DIA-METER DOWEL (FOR OO GAUGE)



PAINT POLE AND CROSS-BEAMS MATT BLACK.

SPACE POLES ABOUT 25 SCALE YARDS APART ALONGSIDE TRACKS.



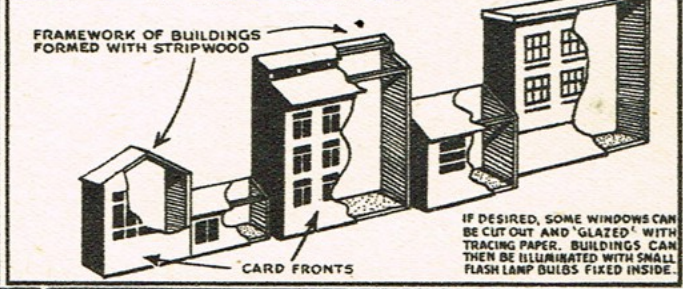
**No. 12 MODELLING BUILDINGS IN LOW-RELIEF**

IN THIS TYPE OF MODELLING IT IS ONLY NECESSARY TO MAKE THE FRONTAGES OF BUILDINGS, CITIES AND SMALL TOWNS CAN BE REALISTICALLY SUGGESTED IN THIS MANNER. THE SKY AND DISTANT BUILDINGS ARE PAINTED ON THE BACKGROUND. A ROW OF 'DOMESTIC BACKS' WILL ADD GREATLY TO THE RAILWAY-LIKE ATMOSPHERE OF YOUR LAYOUT IF POSITIONED ALONGSIDE THE TRACKS APPROACHING A TOWN OR CITY STATION.

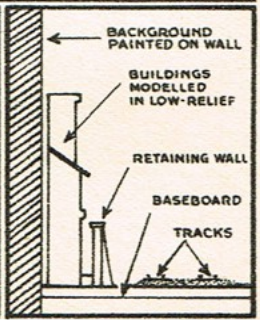


USE VARIOUS TYPES OF BRICK PAPERS TO COVER DIFFERENT BUILDINGS, AND PASTE MINIATURE POSTERS ON RETAINING WALL.

**DETAIL SHOWING METHOD OF CONSTRUCTION.**

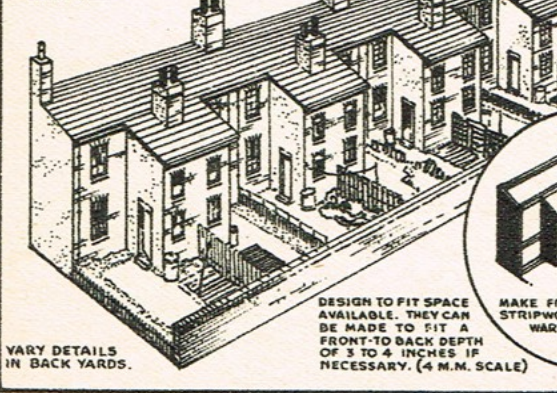


IF DESIRED, SOME WINDOWS CAN BE CUT OUT AND 'GLAZED' WITH TRACING PAPER. BUILDINGS CAN THEN BE ILLUMINATED WITH SMALL FLASH LAMP BULBS FIXED INSIDE.

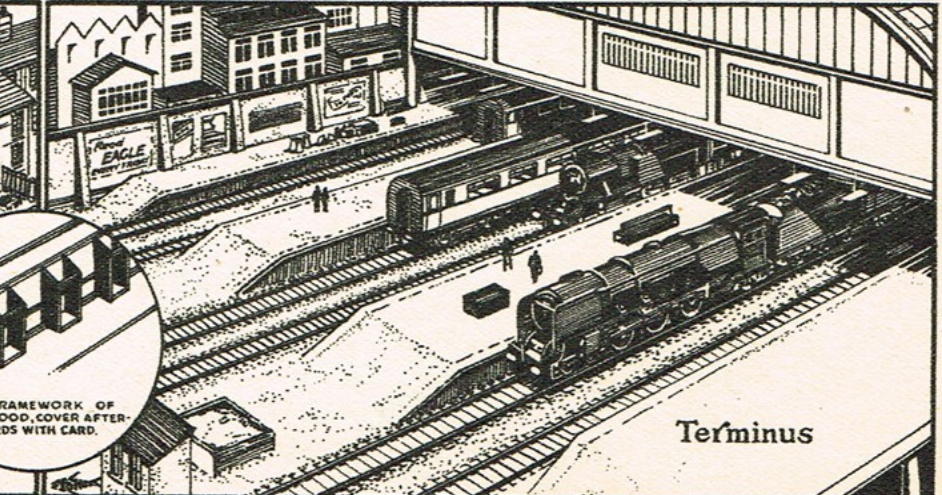


**TYPICAL 'DOMESTIC BACKS' MODELLED IN LOW-RELIEF.**

VARY DETAILS OF EACH HOUSE, SUCH AS PAINT ON DOORS AND WINDOW FRAMES - SHAPE OF CHIMNEY POTS ETC.



VARY DETAILS IN BACK YARDS. DESIGN TO FIT SPACE AVAILABLE. THEY CAN BE MADE TO FIT A FRONT-TO-BACK DEPTH OF 3 TO 4 INCHES IF NECESSARY. (4 M.M. SCALE)



Terminus