Form No. J.H.B./89.

Printed in England.

FROG

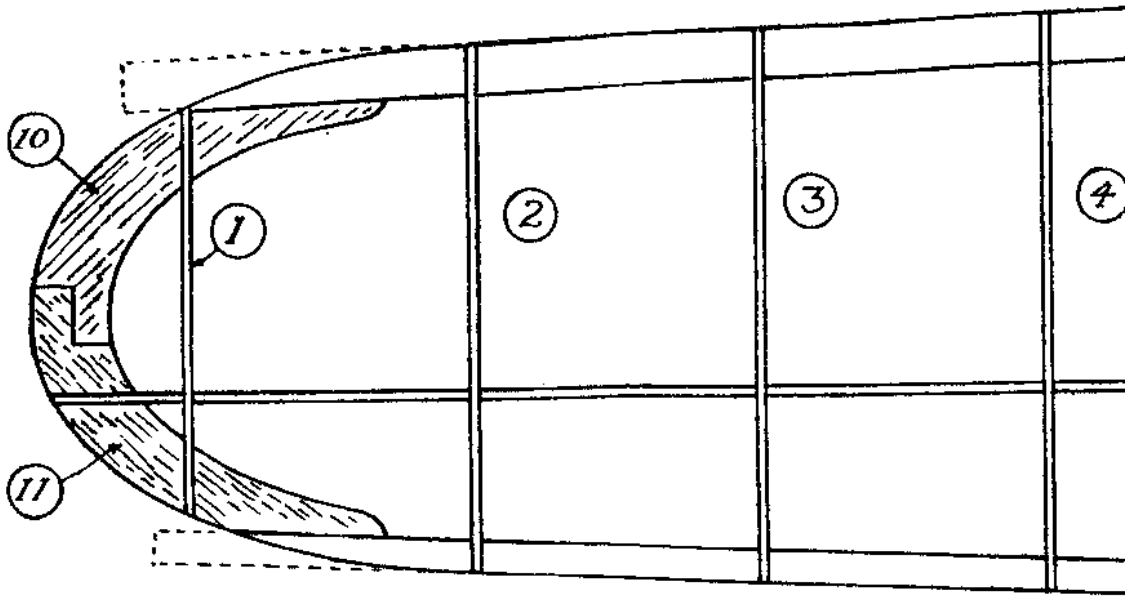
TRADE MARK

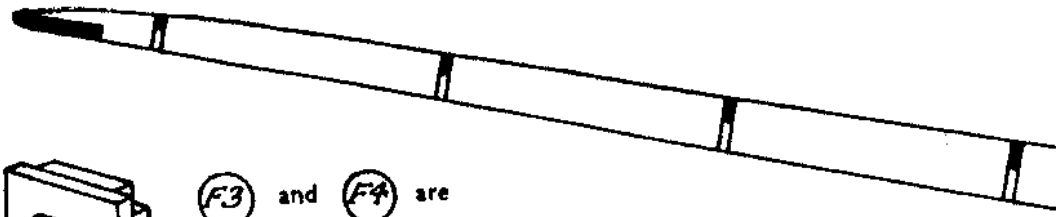
INSTRUCTIONS FOR BUILDING THE "SPRITE"

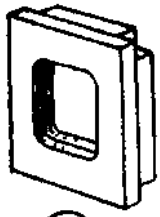
In common with all other 'Frog' products this model has first been designed to give the most el then the constructional methods have been carefully worked out to enable even the beginner to mak

The skeleton of the Sprite is nearly 100% balsa wood, so that the few unshaped parts n mum amount of labour. It is also interesting to note that if due to accidents in building or flying, p jointed together with the cement supplied and it is unlikely that a break will occur again at the joint.

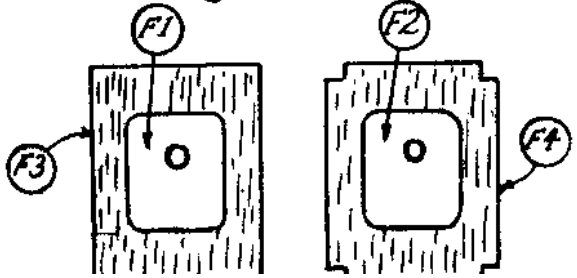
Another feature of the 'Frog' kits is the full scale working drawing, comprehensively numbered with the instructions, so that you can place the drawing on a soft wood board or old table, and build th the drawing by pinning the parts to it, carefully cementing every joint, and leaving for about 30 minutes pins may be pushed right through the pieces of balsa, to keep them in postion, without causing any dama

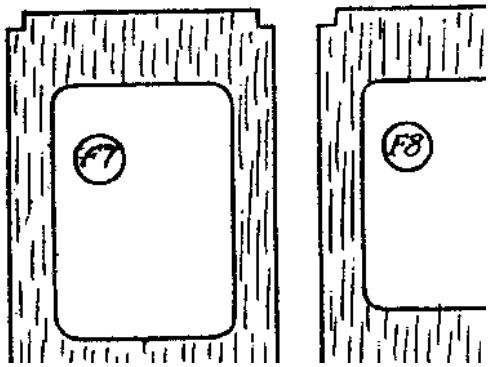






F3 and F4 are cemented together to form a composite nose bulkhead





TH

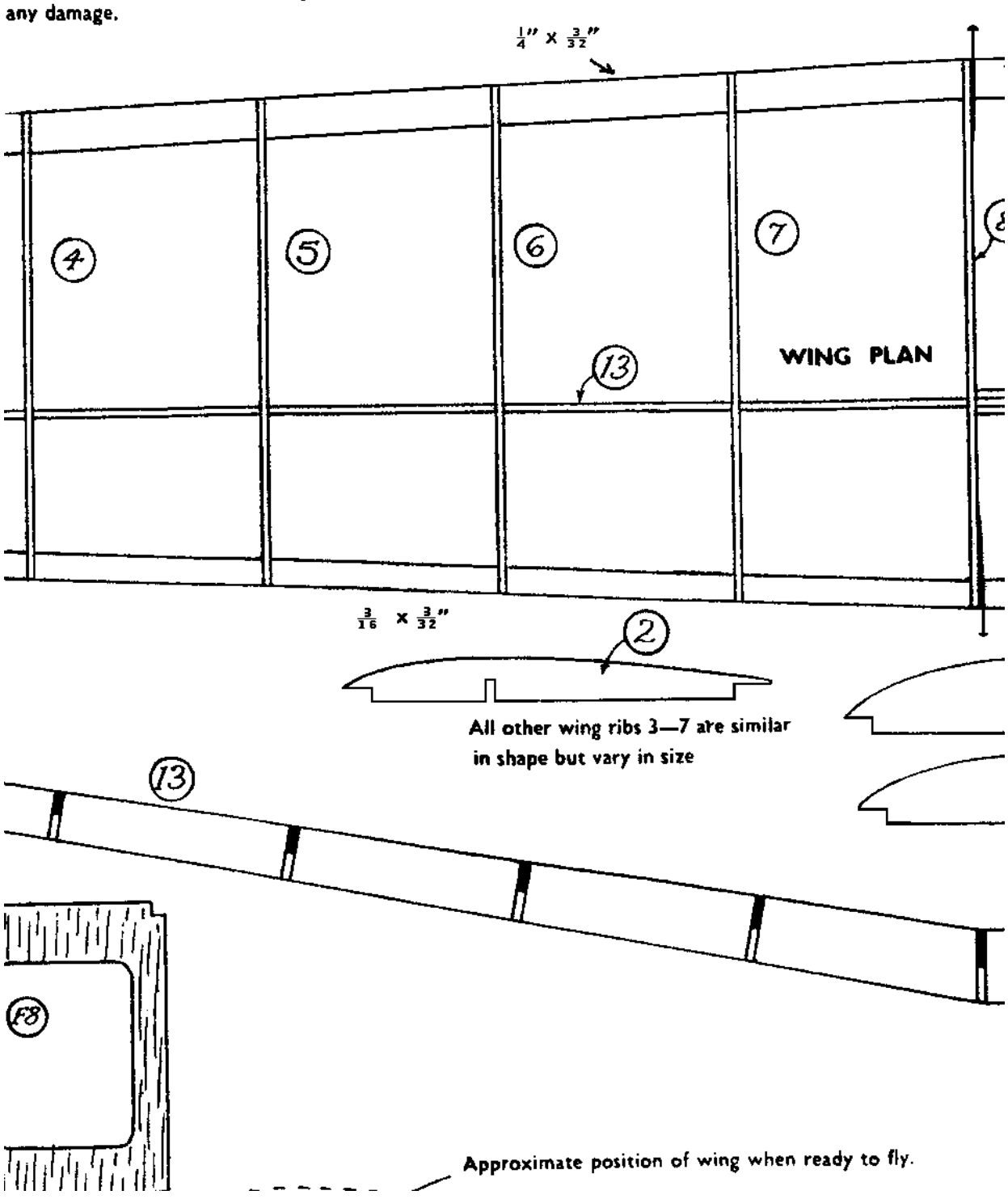
'E"

e most efficient performance in its class.
r to make a simple and satisfactory job.

ed parts may be prepared with the mini-
flying, parts are broken, they may be
joint.

umbered and detailed for easy reference
build the various parts of the model on
0 minutes to set before removing. Small
any damage.

WING CONSTRUCTION:—As in sketch No. 1 pin down
Note the spars finish at ribs No. 8. Cement in place all th
No. 1. Both port and starboard wings can be made toge
together as in sketch No. 2 and support the tips on 2in
centre section add the two pieces 14, followed by the mi
add rib No. 9. Cement into the four corners shown, rubb
with piece of stout paper provided. Sandpaper wing tips



HE FROG "S

down the leading and trailing edge spars on the drawing, also main spar 12 and 13. ce all the ribs from 2 to 8, followed by the wing tips Nos. 10 and 11, and the tip rib le together. When dry remove from drawing, bring the two main spars 12 and 13 on 2in. blocks to give the correct dihedral angle. On each side of the main spar the missing pieces of leading and trailing edge to complete the centre section. Finally rn, rubber band attachment pins bent up slightly, and cover the whole centre section ng tips and leading and trailing edge spars round and smooth, and clean up all ribs.

COVER

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covering
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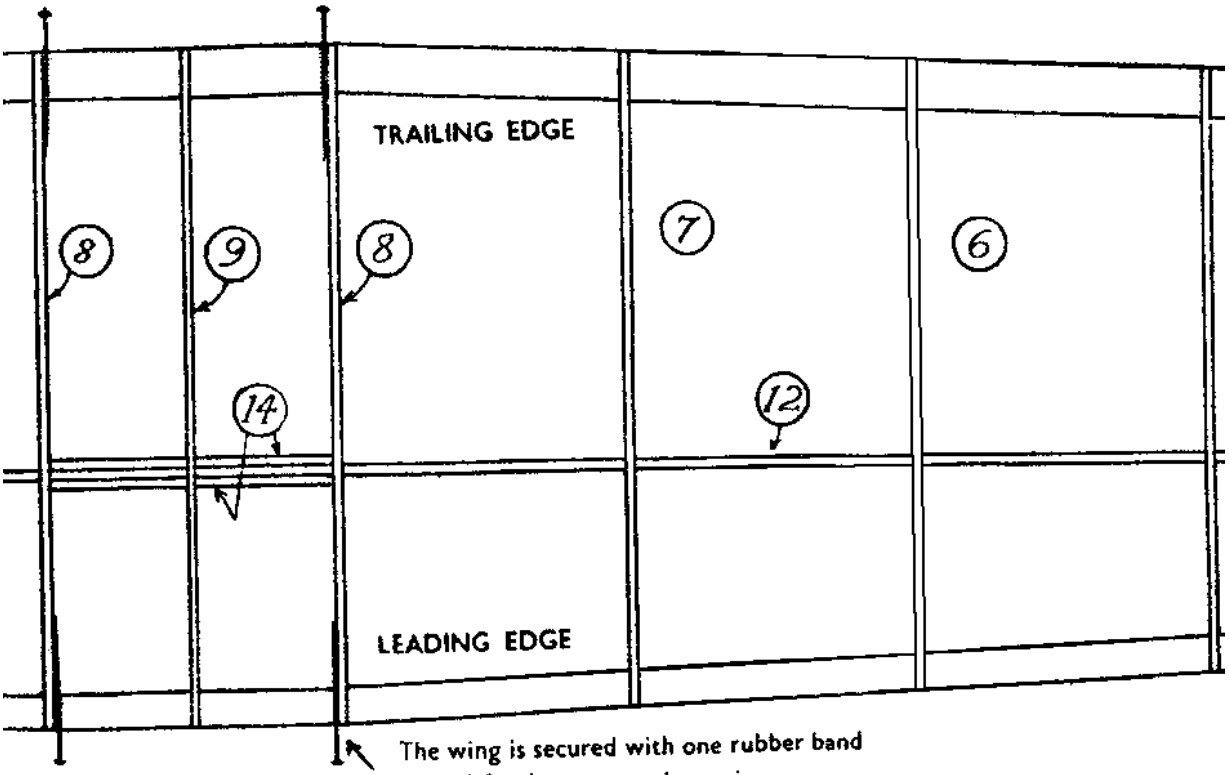
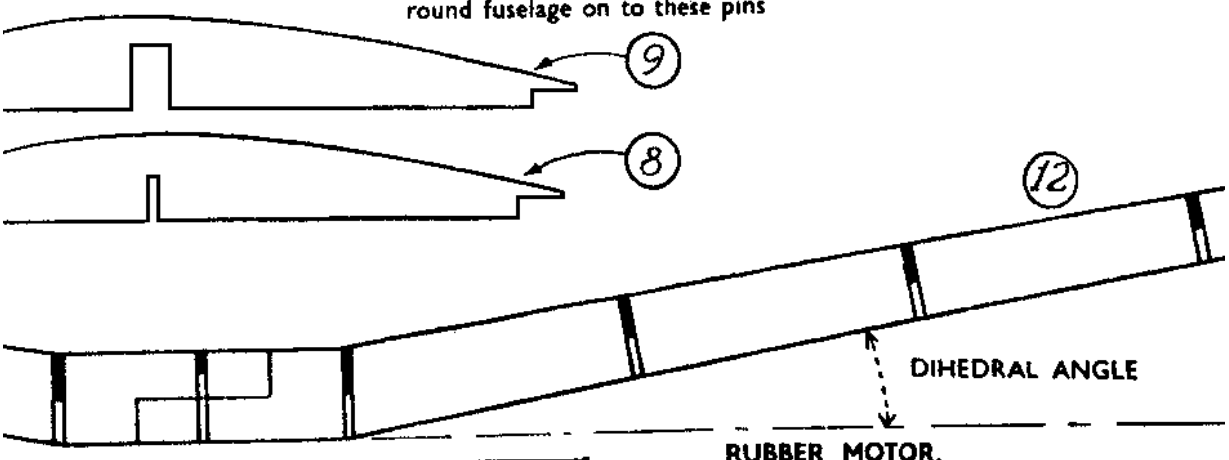
prevent
F

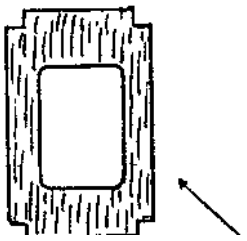


The wing is secured with one rubber band round fuselage on to these pins



RUBBER MOTOR.

Make up motor with a skein of 6 stra round skein Apply a liberal application of Attach one end to hook on propeller shaft through the skein.



Birch Dowel

SPRITE" Junio

COVERING AND DOPING.

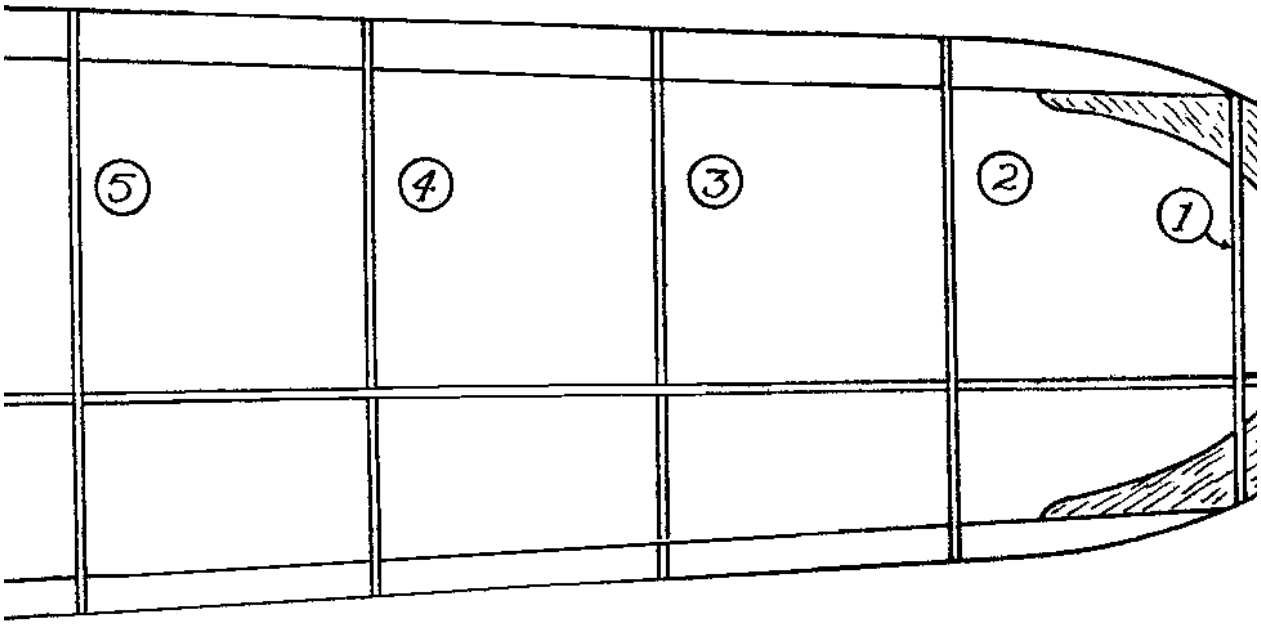
Use a flour and water paste as an adhesive. Do not attempt to pull tissue tight. Water spray and do covering each piece uniformly with no deep wrinkles. The following is a recommended sequence of parts to

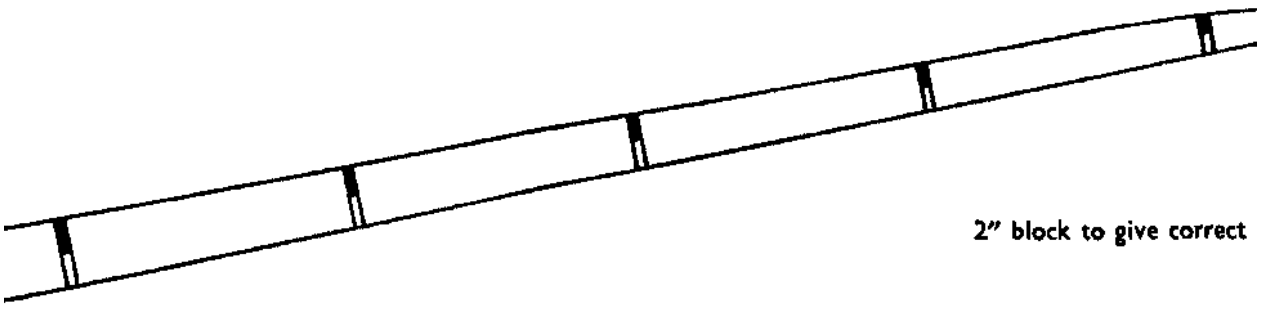
Wing under-surface in two pieces. Wing top surface in two pieces from centre section each way.

Tailplane top surface, followed by under surface. Fin one side, followed by other side. Fuselage in fo each side.

Spray water lightly over all the tissue. Handle carefully while wet. Pin down wings, tailplane and f prevent warping while water dries.

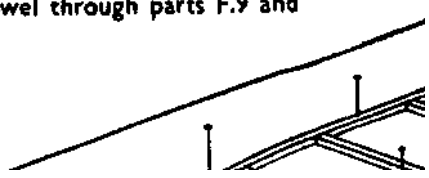
Finally give one coat of clear dope and again pin down.





2" block to give correct

of 6 strands, 16" long of $\frac{3}{16}$" × $\frac{1}{30}$" rubber. Keep each end secure with small rubber bands bound tion of castor oil to preserve rubber, and make it capable of taking more turns without breaking. er shaft. Lower through fuselage and secure at rear end with birch dowel through parts F.9 and

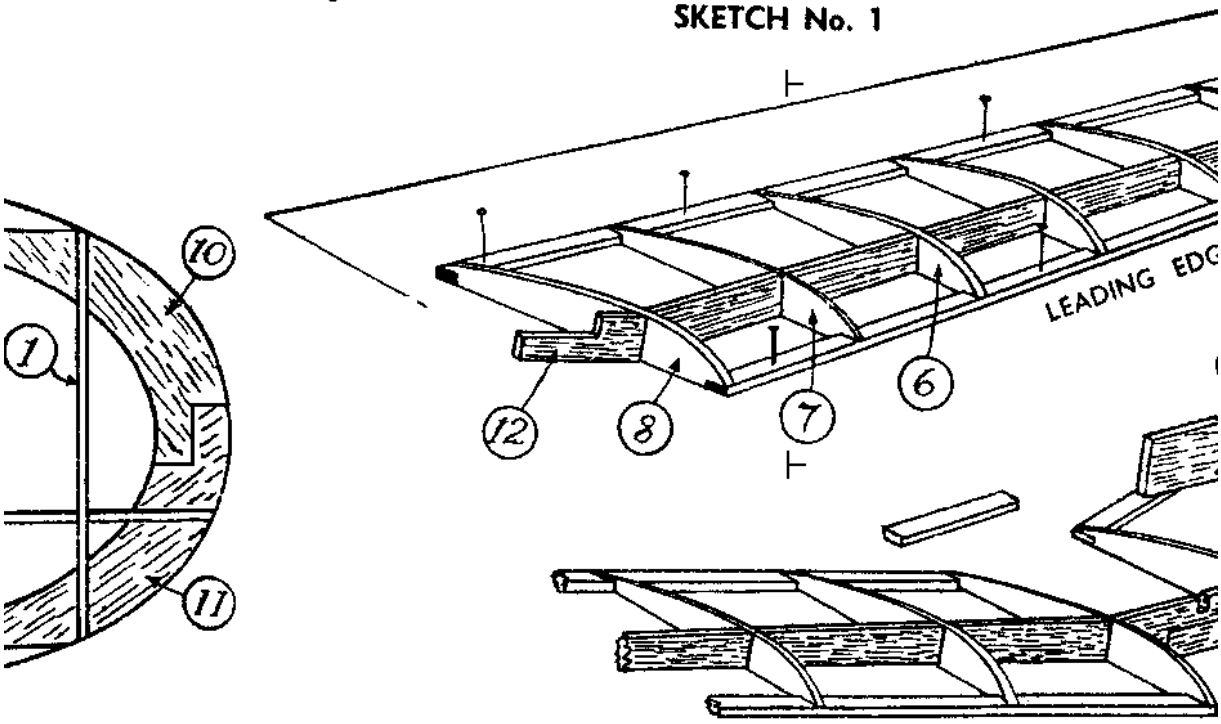


ior Duration Model.

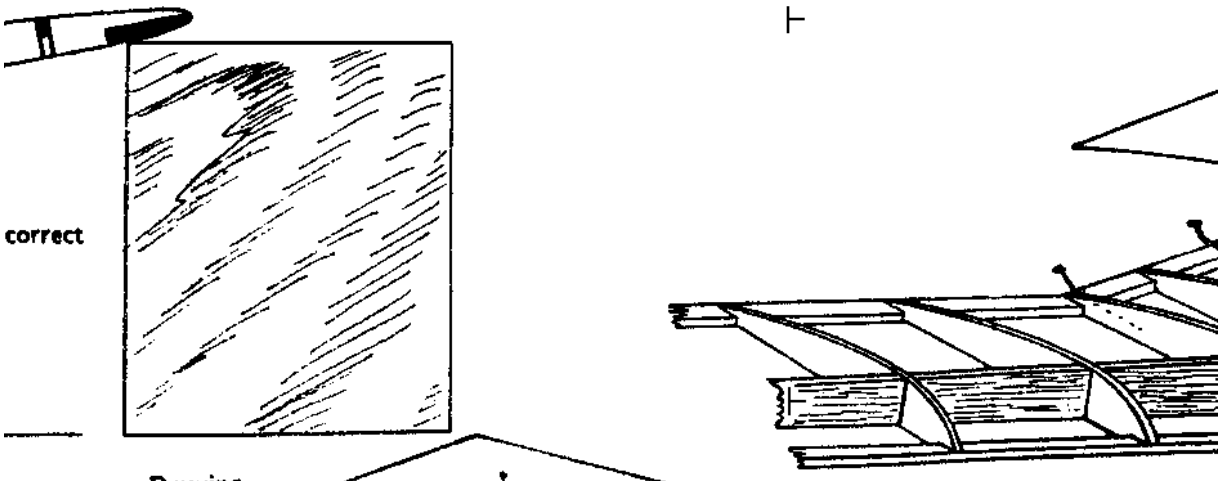
y and dope will do this. Aim at
parts to cover.
way.
ıge in four sections, one piece for

ne and fin, as for assembling, to

SKETCH No. 1

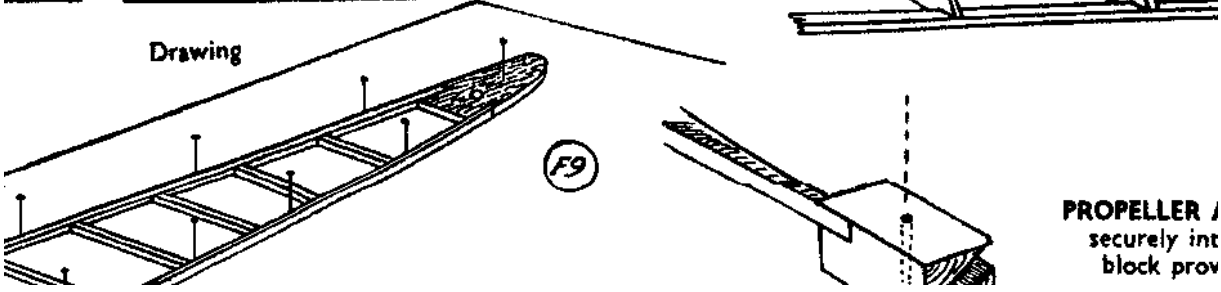


SKETCH No. 2



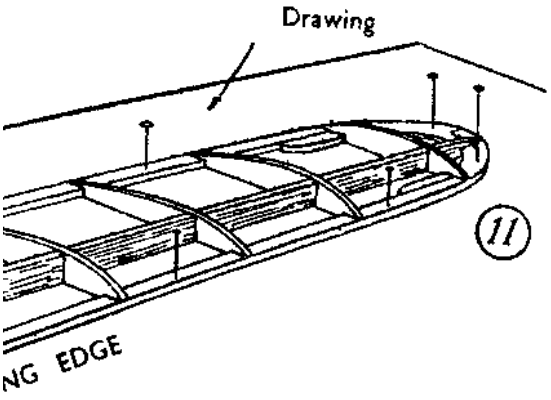
correct

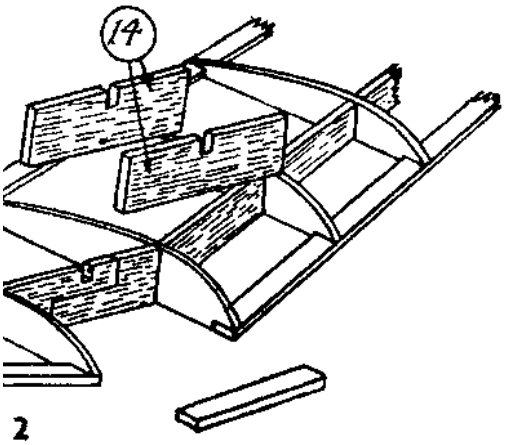
Drawing

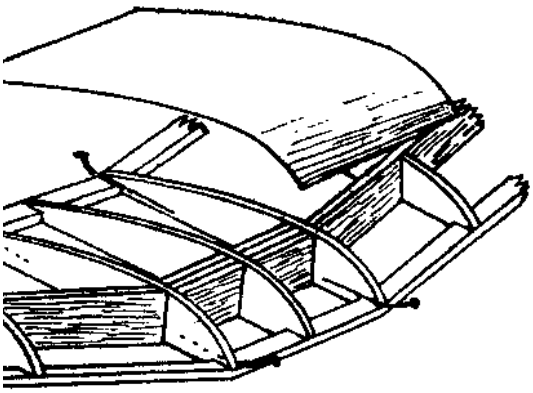


PROPELLER
securely int
block prov

CAT. No. 639 K.

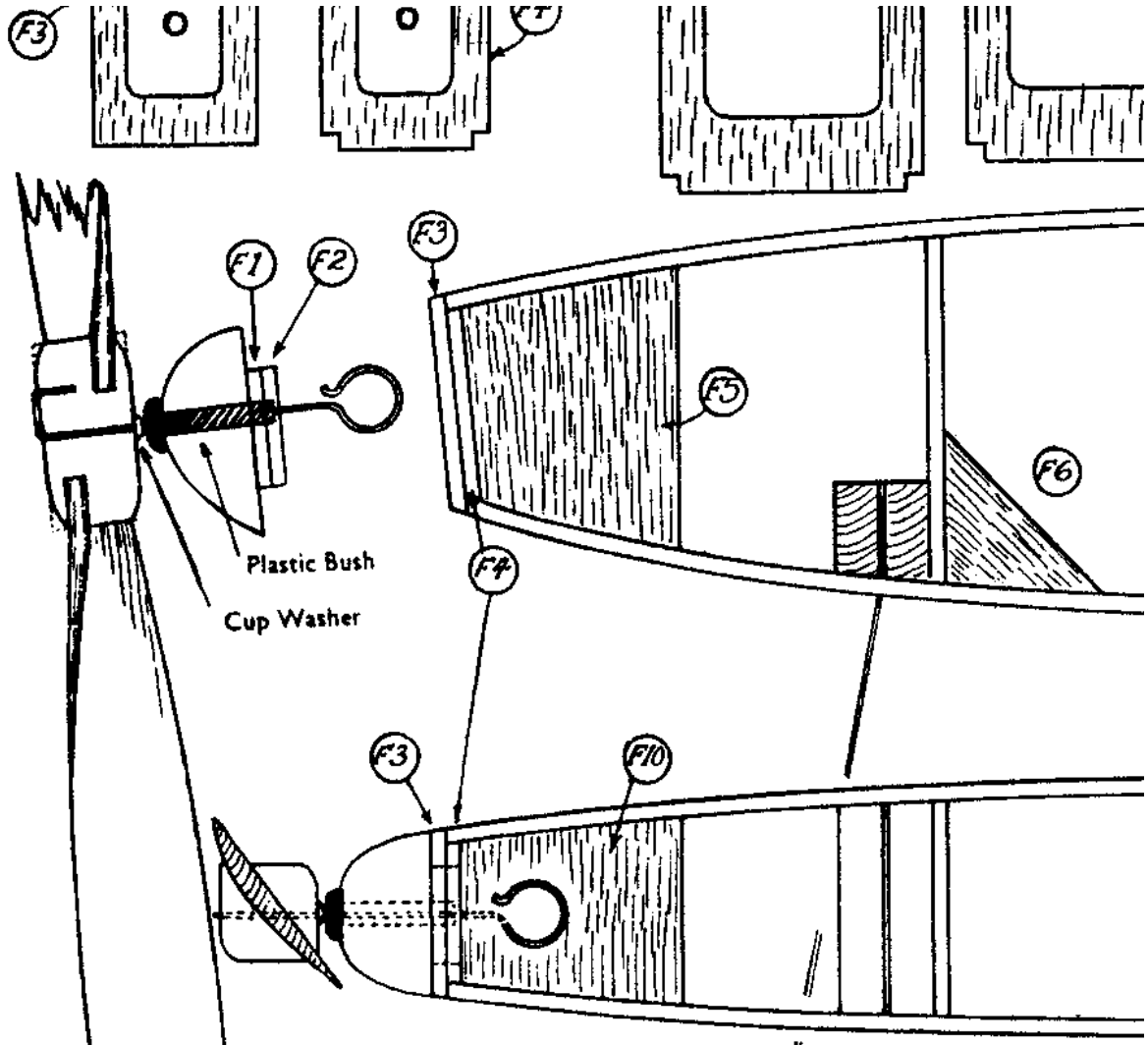




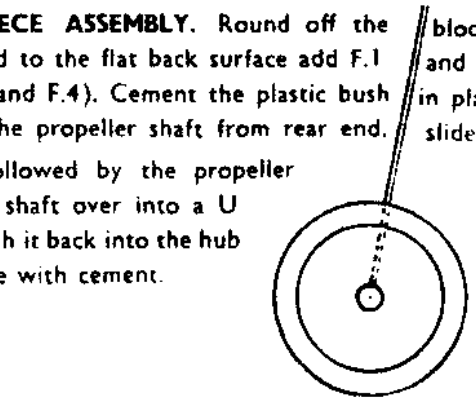


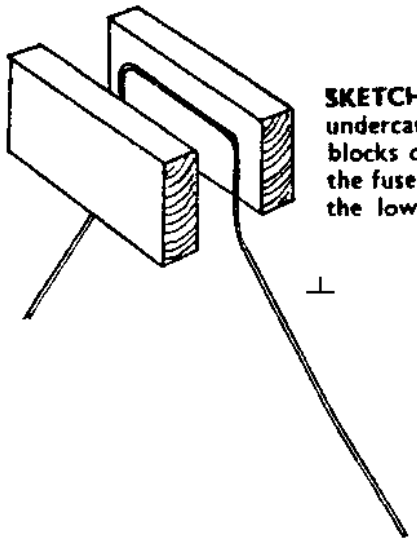
SKETCH No. 3

PELLER ASSEMBLY:—Cement the two blades
:urely into the diagonal slots in the balsa hub
lock provided. When set sandpaper the blades
to a convex surface on the sides facing

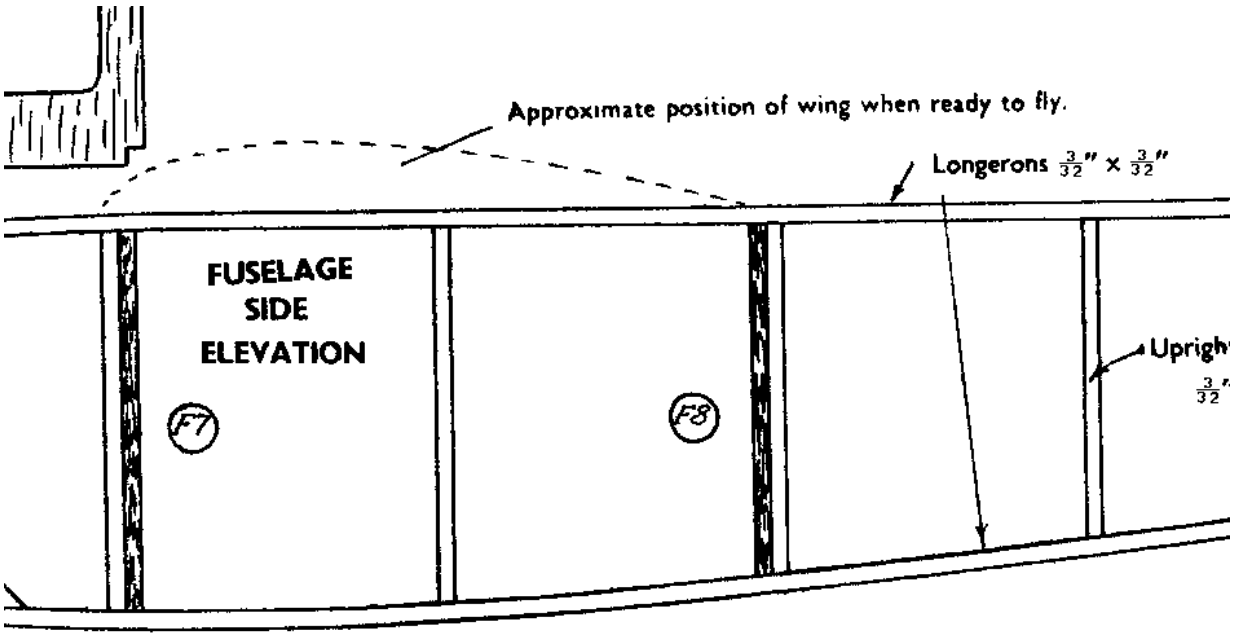


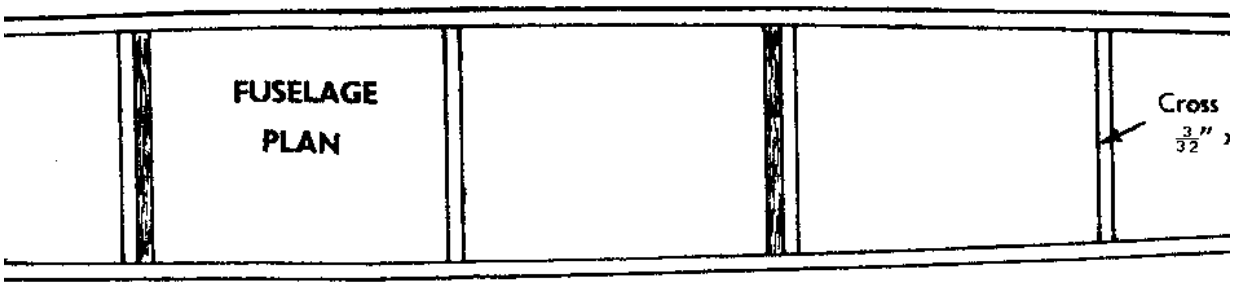
NOSE PIECE ASSEMBLY. Round off the block provided as shown and to the flat back surface add F.1 and F.2 (the centres from F.3 and F.4). Cement the plastic bush in place and thread through the propeller shaft from rear end, slide on one cup washer followed by the propeller Bend the shaft over into a U shape, push it back into the hub and secure with cement.





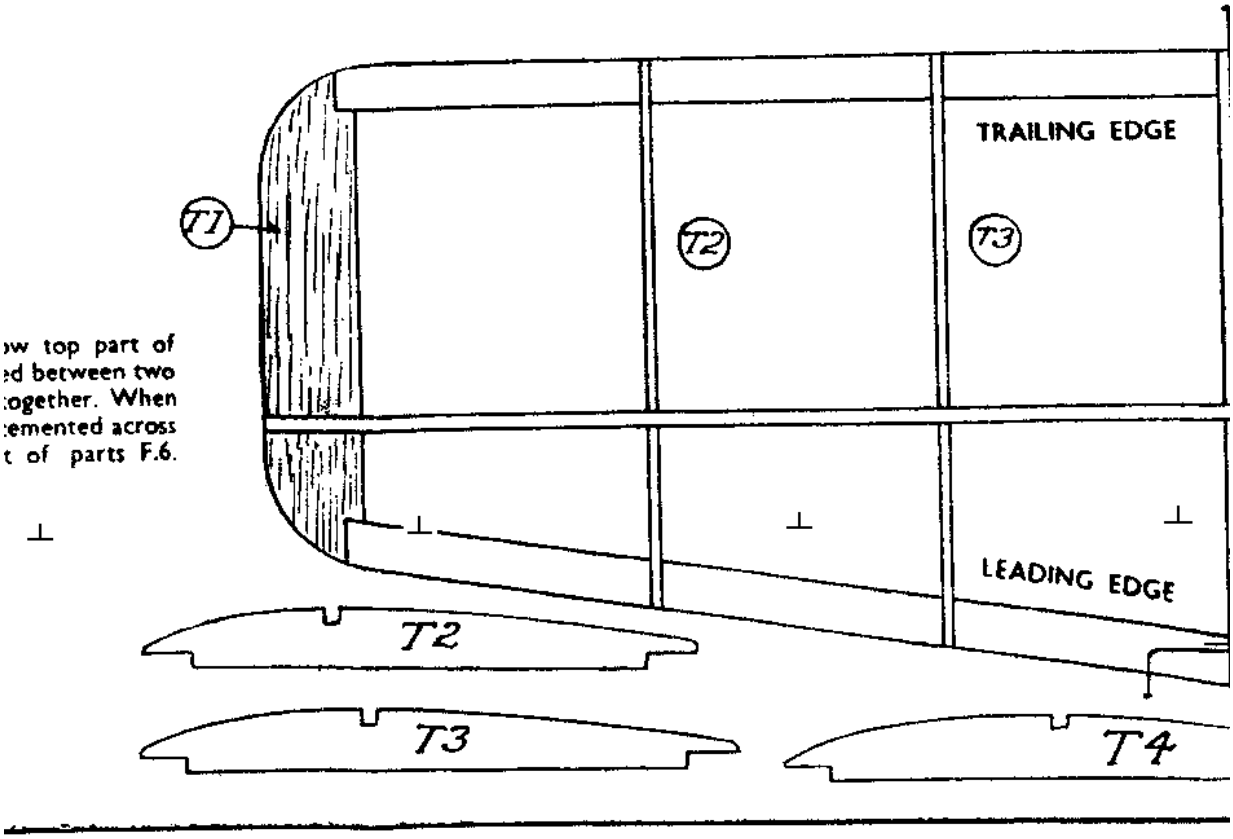
SKETCH No. 7 showing how top undercarriage legs is sandwiched betv blocks of $\frac{1}{2}$" x $\frac{1}{4}$" cemented togethe the fuselage is finished this is cement the lower longerons in front of p



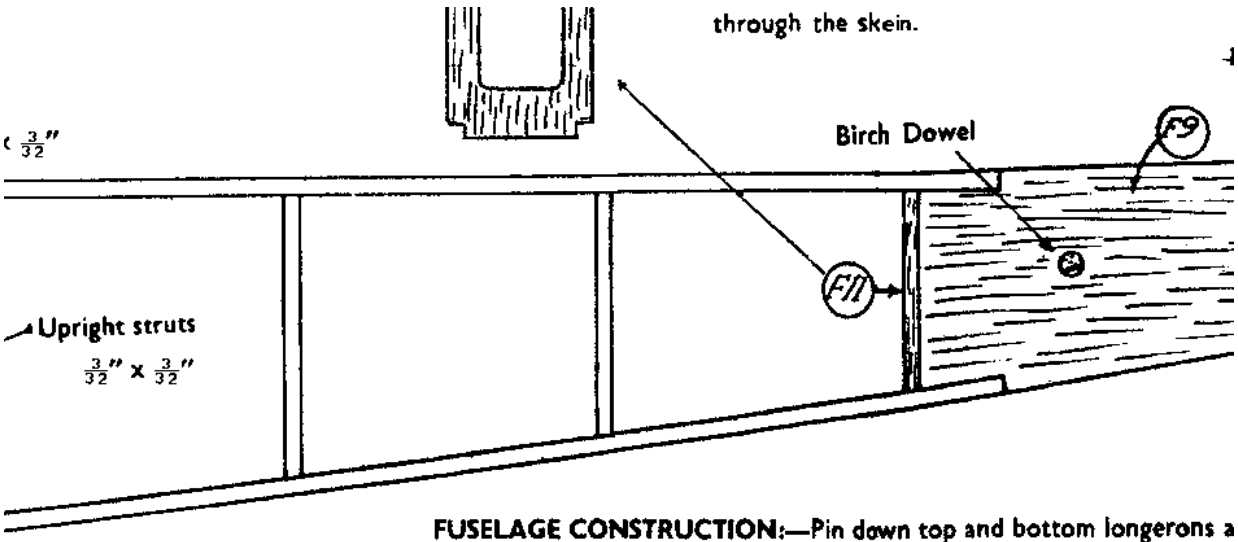


TAILPLANE CONSTRUCTION:—Pin down the leading edges of $\frac{1}{4}$" x $\frac{3}{32}$" strip and t
that the latter is double. Now add the main spar of $\frac{3}{32}$" x $\frac{3}{32}$" strip, pulling it dow
edge push one pin as a securing hook. To the leading edge cement two pins as show
rubber band round the fuselage from these front two, and a band between the singl

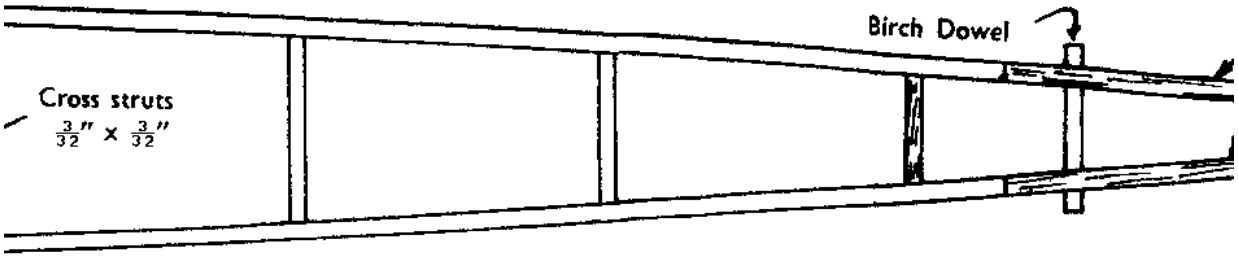
ow top part of
ed between two
ogether. When
emented across
t of parts F.6.



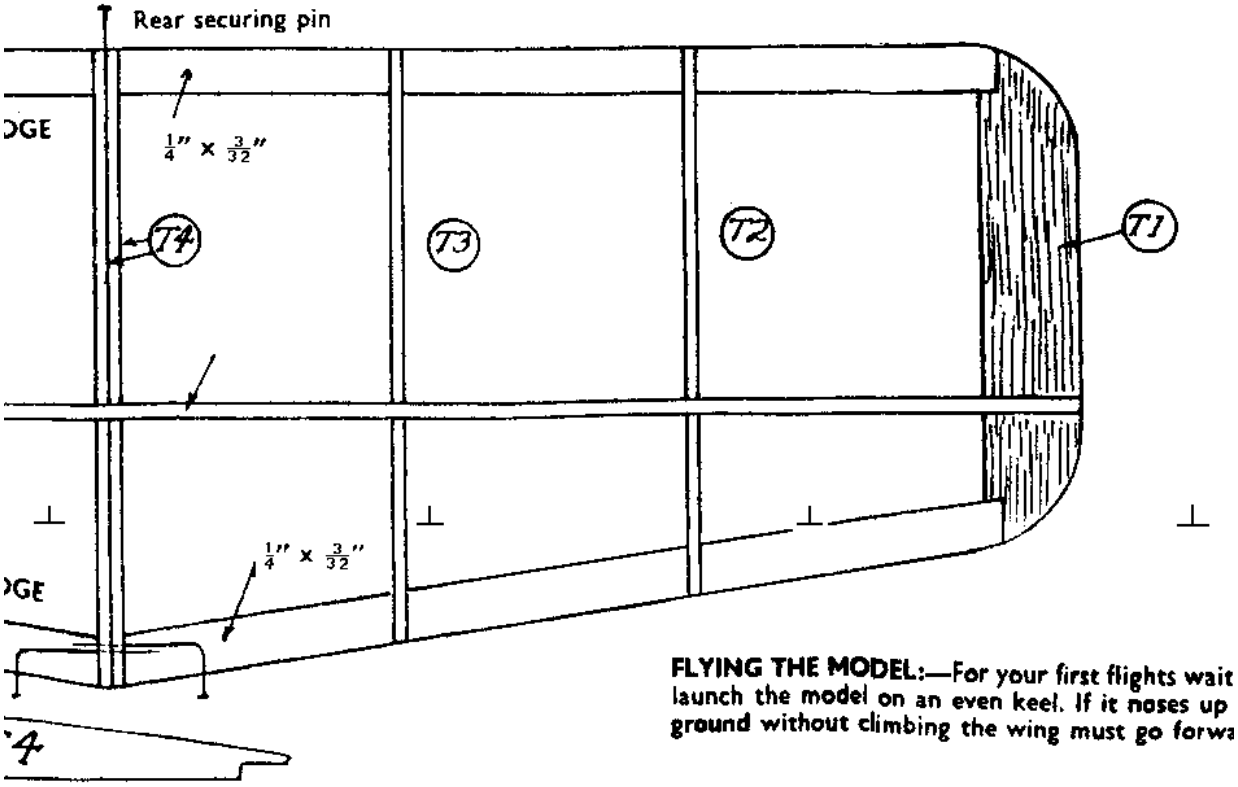
through the skein.



FUSELAGE CONSTRUCTION:—Pin down top and bottom longerons a in place. Also F.5, F.6 and F.9. This completes one fuselage side which these two sides together with bulkheads F.7 and F.8, cementing the sides in equally at the rear and join the two F.9's together. Add F.11. composite bulkhead F.3 and F.4. Hold with small rubber band until and cement in place as in Sketch No. 6.

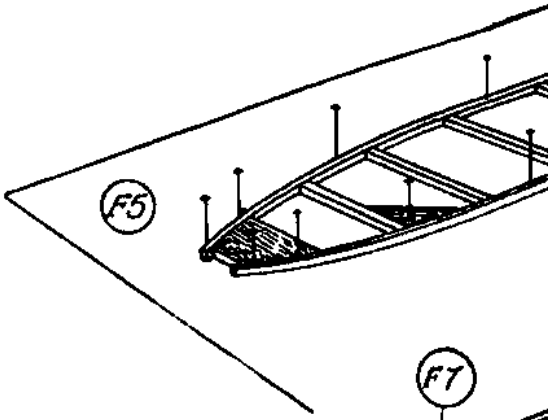


rip and to the ends cement in place the tips T.1. Now add the ribs T.2, T3 and T.4, noting g it down at each end and cementing to T.1. Remove when set and into the centre of trailing as shown, each one being bent round into the centre double rib. The tail unit is secured by a the single one at the rear and the one in the fuselage.

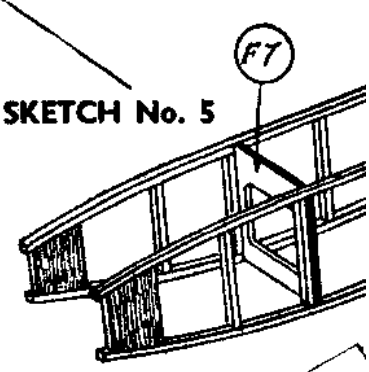


FLYING THE MODEL:—For your first flights wait launch the model on an even keel. If it noses up ground without climbing the wing must go forwa

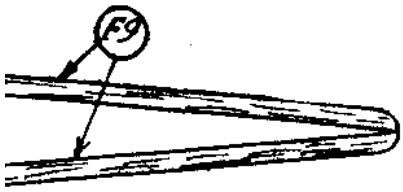
Rear Securing Pin
for tail unit

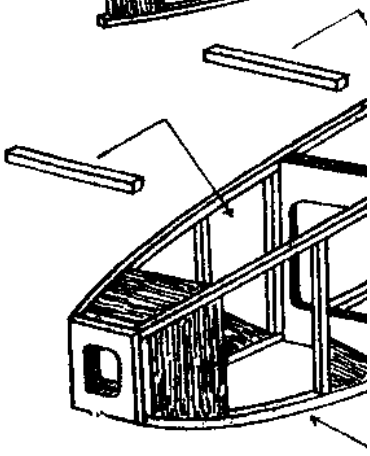


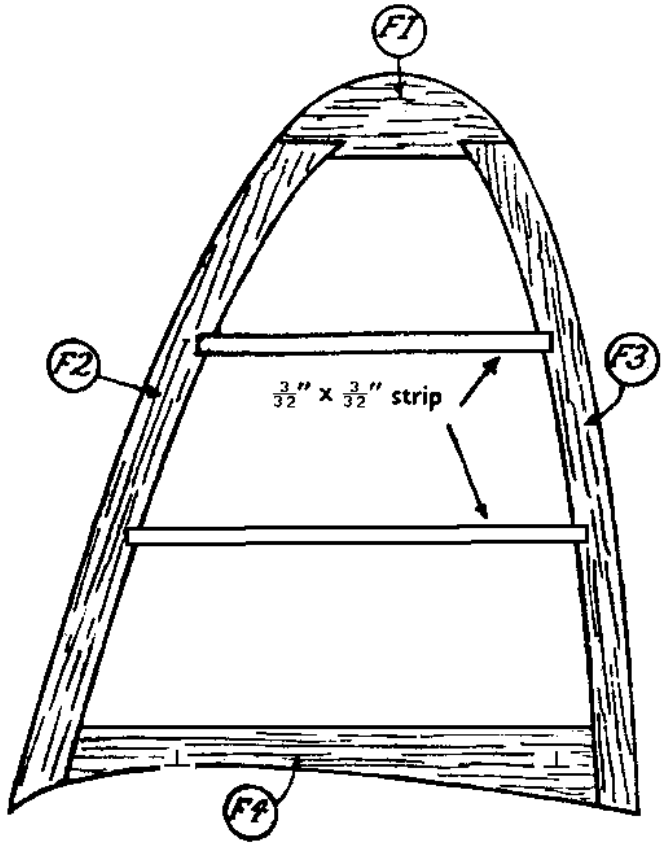
SKETCH No. 5



ɪrons as in Sketch No. 4. Cut all the upright struts to length and cement
which is removed when dry. Make another in exactly the same way. Join
ng them to appropriate upright struts as in Sketch No. 5. Now pull the
d F.11. Pull the sides inwards equally at the nose and cement to the
l until set. Add F.10 top and bottom. Finally cut all cross struts to length

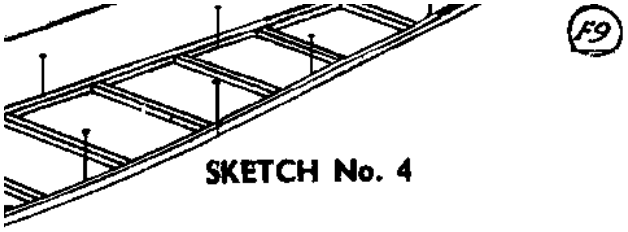




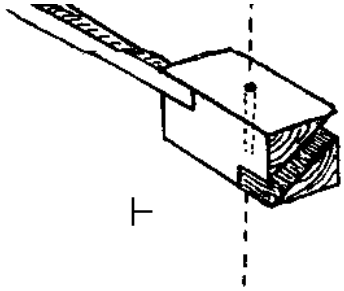


THE FIN is easily co
the parts F.1, F.2, F.3,
strip. Remove when
dope as directed at t
built, covered and do
to the two centre rib
is upright.

ts wait for a calm day. Place the wing in the approximate position shown, give the propeller about 50 turns
ses up and stalls the wing must be pushed back a bit until level flight is obtained. If it goes straight to
forward. Once trimmed, the turns can be increased gradually up to 600.



SKETCH No. 4



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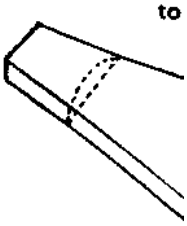
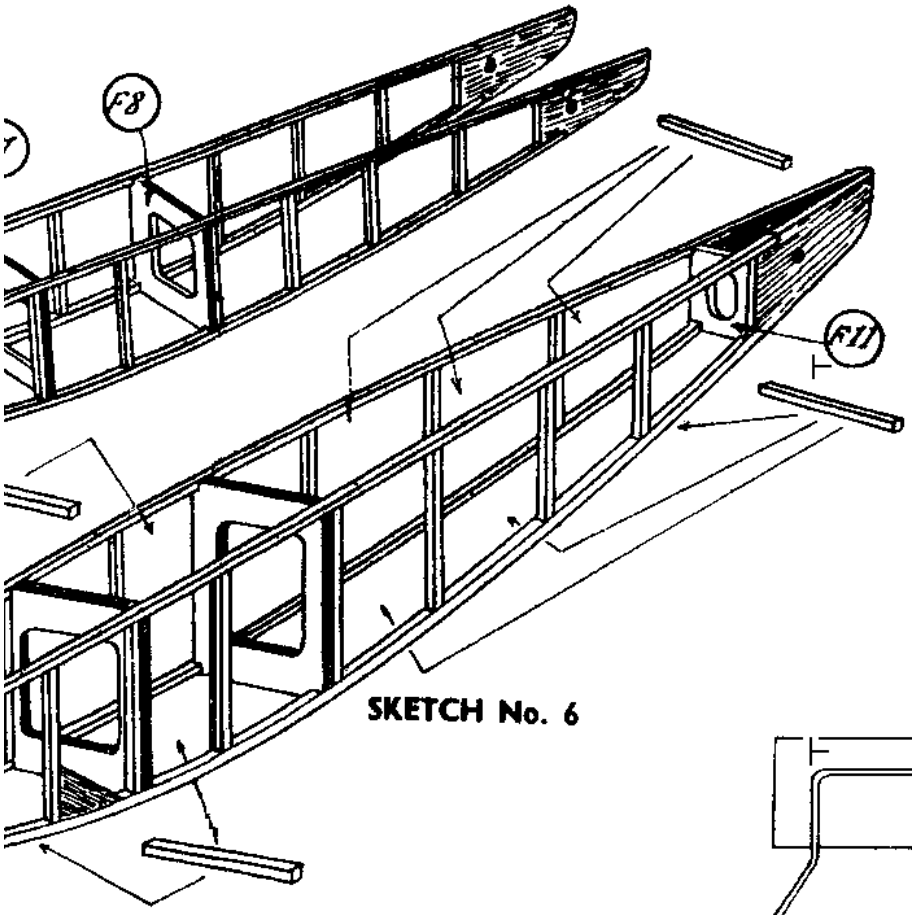
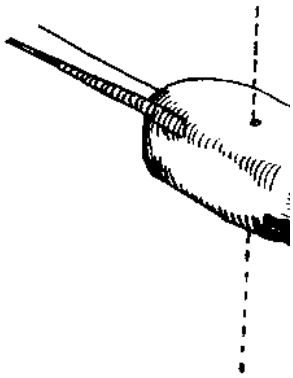
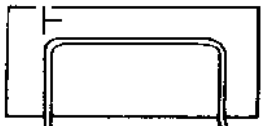




SKETCH No. 6



asily constructed by pinning down and cementing all
F.2, F.3, F.4 followed by the cross pieces of $\frac{3}{32}$" x $\frac{3}{32}$"
when set, sandpaper edges round and cover and
ted at top of drawing When tailplane has been
and doped, this fin is cemented permanently
entre ribs on the tailplane, making sure it



Both legs are in one length of wire, bent to shape as shown here in this frontal view. Fit the wheels in place before bending up the ends of the wheel axles. See Sketch No. 7 for further instructions.

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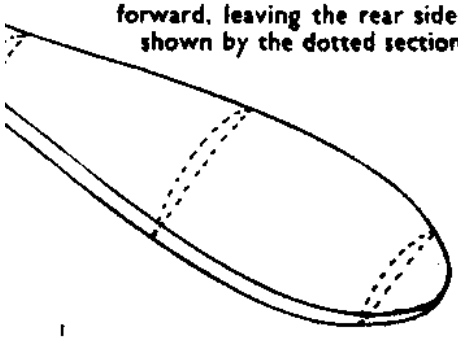
ight to the

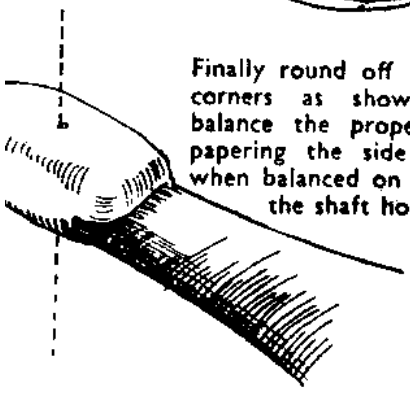
DESIGNED AND PRODUCED IN ENGLAND BY

INTERNATIONAL MODEL AIRCR
LTD.

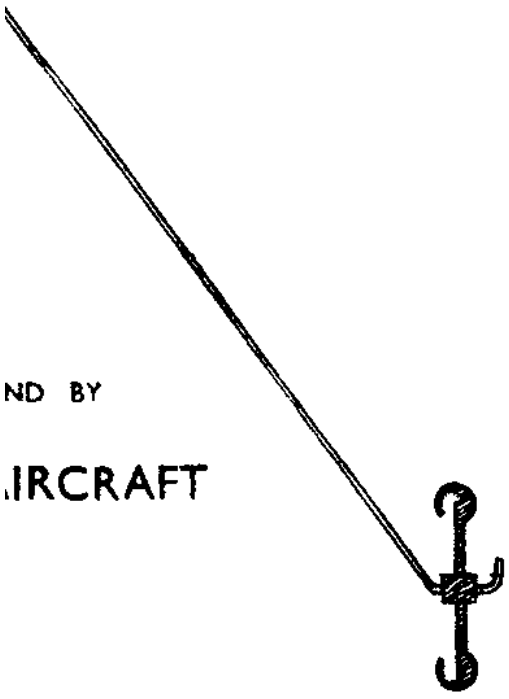
LONDON — ENGLAND.

PELLER ASSEMBLY:—Cement the two blades curely into the diagonal slots in the balsa hub lock provided. When set sandpaper the blades to a convex surface on the sides facing forward, leaving the rear side flat as shown by the dotted sectional line.





Finally round off all edges and corners as shown here, and balance the propeller by sandpapering the side which drops when balanced on a pin through the shaft hole



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