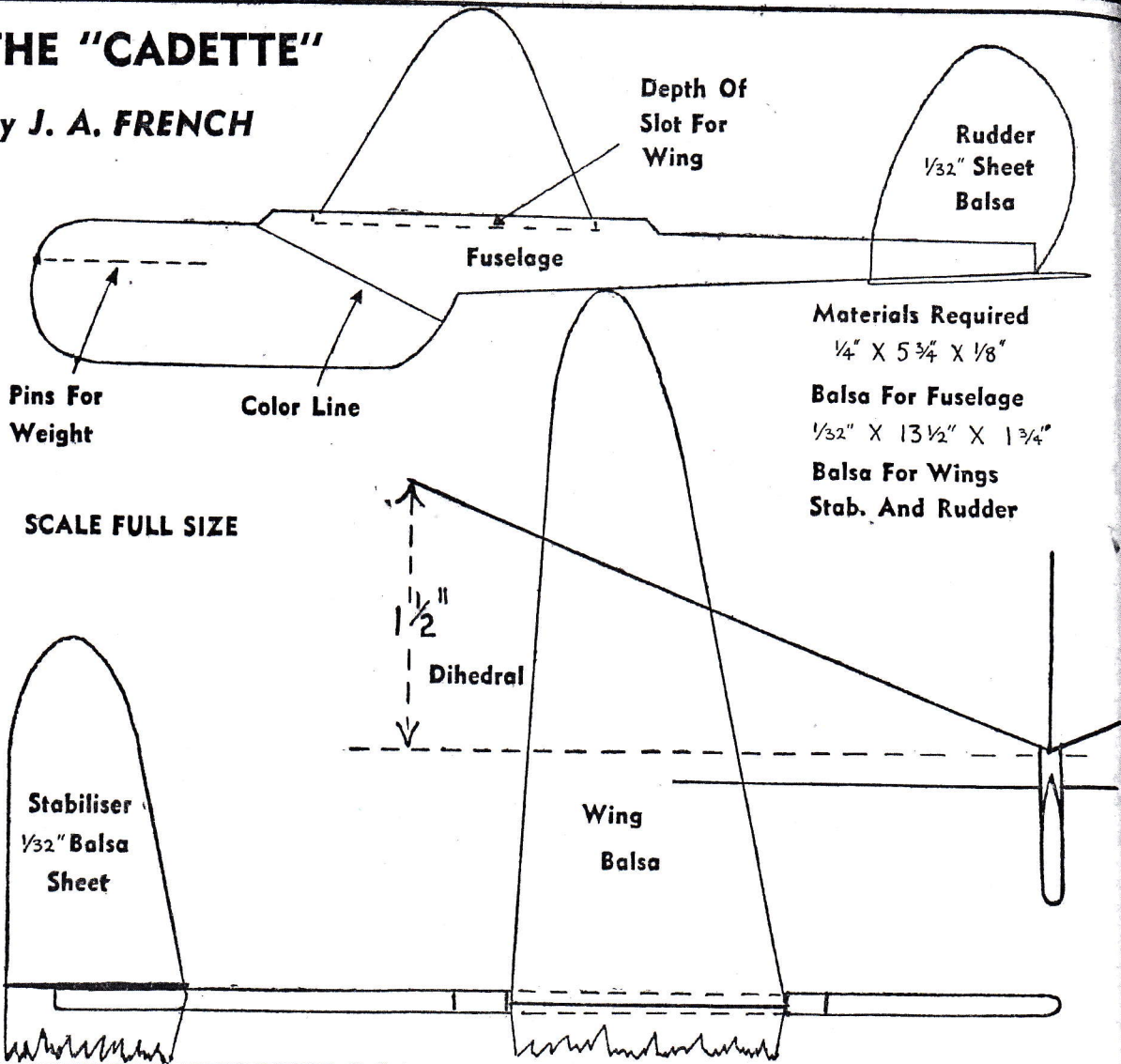


THE "CADETTE"—AN INDOOR GLIDER

THE "CADETTE"

By J. A. FRENCH



So popular was the "Imp" indoor glider (published in last month's issue) that I was asked to follow up on it. So this month we have the "Cadette."

THE "Cadette" was designed at almost the same time as the "Imp," being 2 inches larger in wing-span. Despite this fact, it is still capable of being flown indoors in small or large rooms. The best flights are obtained, however, when the model is flown out of doors—backyards, parks, etc., provide excellent flying grounds.

Costing about ninepence to build, it provides an excellent follow-up on the "Imp," and should be ideal for small boys.

Before you commence building, however, select your wood, which must be fairly light and soft to medium in texture. Keep the weight down as much as possible, for the lighter you are able to make it the better it will soar on the currents of the air.

There is no need to draw up the plans, so let's go!

FUSELAGE: The fuselage is made from a piece of balsa 1-8in. x 1in. x 6in., soft to medium. It is first cut to the side view shown on the plan. Then, with a sharp knife, trim off parts of the side view to obtain the correct fuselage cross-sections, which are mainly teardrop near the nose and rounded elsewhere.

When these have been obtained roughly, use some fine sandpaper and remove all bumps, making the body quite smooth. Notice that there is a slot into which the wing fits and that the fuselage is flat where the rudder and stabiliser connect to it.

WING: The wing is made in one piece

from soft balsa, 1-32in. x 8in. x 1½in., and is cut to shape. Notice that both leading and trailing edges taper, and that the largest taper is on the leading edge.

Round the tips as shown on the plan and sand smooth. Accurately obtain the centre line of the wing and make a neat cut along it with a razor blade. Do not cut right through. To obtain the dihedral, crack along this line, bending the wings upwards.

RUDDER AND STABILISER: The rudder and stabiliser are made also from soft 1-32in. sheet balsa. Cut both to shape and sandpaper the edges round. The rudder is cemented to the right-hand side of the fuselage looking from the front. The stabiliser is cemented to the bottom of the fuselage. Notice that it is set slightly off centre. This counteracts any extra weight which may have been incurred by placing the rudder on the right-hand side.

CONNECTION: The wing is connected

THE GLIDER WHEN COMPLETED

to the fuselage by cement in the slot and held in position by pins. The rudder and stabiliser are also cemented to their respective positions and held in position by pins. Before the cement dries, check the alignment of the wing, stabiliser, and rudder, making sure all are set square. Make perfectly sure before launching on the initial flight that the final alignment is perfect, for a mistake here could mean the difference between a successful model and a failure. Making an exhausting check on the dihedral especially.

Should the model need any weight in the nose to offset any stall which it may have, then add a small pin or pins. This should be quite sufficient if the model has been built perfectly to plan. To give the model an even better appearance, apply some lacquer of any color to the nose up to the point on the plan where the color line is shown.

Finally, to launch the model hold it by the thumb and first finger just behind the trailing edge or just under the wing—then a flick of the wrist—start running!

