

LADYBIRD SPECIAL POWER BIPLANE

By H. J. PRIDMORE

DESCRPTION.—This is a development of the designer's popular rubber-driven biplane which appeared in *Aeromodeller*, April, 1948. The alternative wing-folding arrangement may be found very useful by builders who suffer from the usual transport troubles of these days. This is described in lowerright-handcorner of plan.

The completed model should balance about 3 ins. behind the leading edge of the upper wing. If C.G. position is incorrect the undercarriage wheels

may be moved fore or aft to trim, by unsoldering the joint between the front and rear struts, finding the correct C.G. position, and re-soldering.

CONSTRUCTION.—Any reasonably experienced modeller should find Ladybird easy enough to build—but, as with all free flight models, care and accuracy will pay dividends. Fuselage is not so tricky to cover as might be expected. One piece of tissue will suffice for each side, and if flour paste is applied to all the stringers the tissue easily conforms to fuselage contour. Original colour scheme was red fuselage and fins, white wings and tailplane.

PERFORMANCE.—Powered with an E.D. Bee Ladybird Special, has a performance equal if not better than a well-trimmed pylon contest model; On its sixth test flight the original flew o.o.s. after six minutes from a 25-second engine run. In more than a season's flying it never sustained a prang.

TRIMMING.—Straight flat glide should be obtained before power flights attempted. Then with $\frac{1}{8}$ -in. left rudder, obtained by slewing whole tail-unit slightly, let go with a 10-secs. engine run. With this adjustment plus the $1\frac{1}{2}^\circ$ built-in side thrust the machine should climb to the right under power, and give a fairly tight left hand circle in the glide. No other adjustments should be necessary. When hand launching it is advisable to grasp the fuselage just ahead of bottom wing where the planking enables a firm hold to be taken.

