*  *  *

When the wintry winds wail without and the modeler attempts to "strut his stuff" in the house, china closets and chandeliers usually conspire to spoil his fun. But now you needn't worry about that, fellows! For no matter how small the available space, you can always fly our-

# "Phone Booth Special"

*  *  *

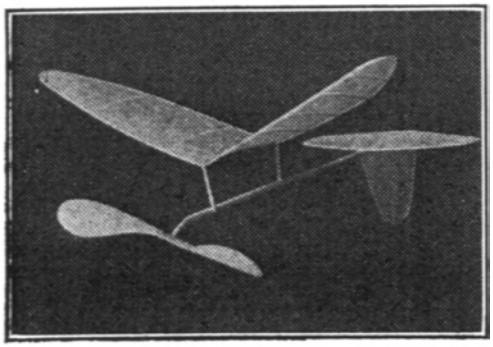
**by Louis Garami**

MODEL AIRPLANES are not reputed to be endowed with brains. But here's one, which, in the opinion of a lady acquaintance of ours, most certainly *is* possessed of an ample amount of cerebral sensibilities. For, when she saw the plane flying in perfect tight circles in an area hardly larger than the confines of a telephone booth, she exclaimed in absolute amazement:

"But how does It know when to turn?" And she it was, incidentally, who suggested that the craft might be called the *Phone Booth Special.* For she pointed out the plane's possibilities as a means of recreation while waiting for a number. "Lot's better than 'doodling'!" the lady enthused.

Ownership of this swell little indoor job is less than four hours away, if your balsa's handy and your razor blades are sharp. In fact, the original one was built in just *two* hours! And was test-flown in the kitchen where she *almost* became an ingredient of the Hungarian goulash which the excellent *frau* was then making under difficulties.

Weighing only 1/50th of an ounce, our *PBS* can bounce off even the finest chinaware without wrecking either party to the collision. So up an' at it, fans. And the slogan is - More fun per fly-power!



## CONSTRUCTION

THE stick is made from very soft 3/32" square balsa. Note that the rear half tapers toward the tail to make it lighter. The nose turns down like a beak, and for the bearing we use a small piece of aluminum tubing. This is cemented several times, a procedure that should be followed with all metal-to-balsa contacts. The rear hook is bent from .014 wire and glued into the stick at the designated place.

For the propeller, we use 1/32" soft sheet balsa. Copy the blank from the drawing and cut it out with a razor blade. Now soak the prop blank in hot water for a few seconds,

and pin the blades down to a solid block of wood measuring about 2" by 7", just as the sketch shows in the plan. After the blank is pinned down you can adjust it in such a way that the hub will be perpendicular to the board. To speed up the drying process, place the whole thing on a radiator for about 10 minutes. After it has dried, smooth it out with fine sandpaper.

The propeller hub is protected by a small piece of sheet aluminum which is drilled and bent into a channel, then glued to the hub. Put the prop shaft through, bend the shaft over, and cement the two together. The surface outlines for the wing and tail can all be bent at the same time on a fairly hot soldering iron or similar round metal object. Do not heat the metal too much, or it may injure the wood.

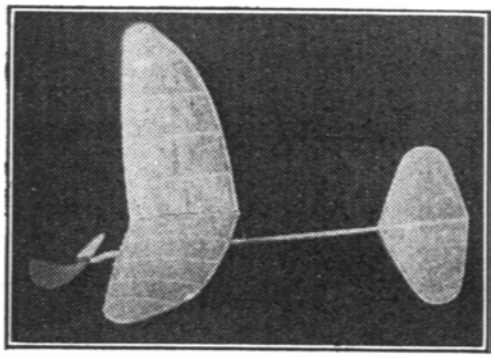
The wing is made of two halves joined at the middle. The nine ribs are first cut the same size, then shortened at the trailing edge when being inserted to allow a uniform airfoil.

The tail surfaces are merely bent balsa outlines without ribs. The rudder should be offset about 1/4 " to the left to make the plane circle in that direction.

For covering, use superfine tissue. Apply the dope only to the outlines, and be careful not to break the frail framework in the procedure. Since the surfaces cannot be tightened with water or dope, apply the paper as smoothly as possible. The tail assembly is covered after the frame has been glued to the stick.

A single strand of 1/32" rubber will give the best results--anything more powerful might even yank the stick right from under the wing and run away with it!

Balance the plane on a knife edge, and mark the spot at which it balances with a pencil. The center of the wing should be right above this point.



**FLYING**

OUR *Phone Booth Special* gives the best performance if it is adjusted to fly in left circles about 6 feet in diameter. She will make much larger or smaller circles, of course, if desired. The stabilizer, the rudder and the left wing are the usual units to adjust when things go wrong. The rear part of the stick can be bent in all directions, and if it should snap, a drop of cement would quickly heal the damage.

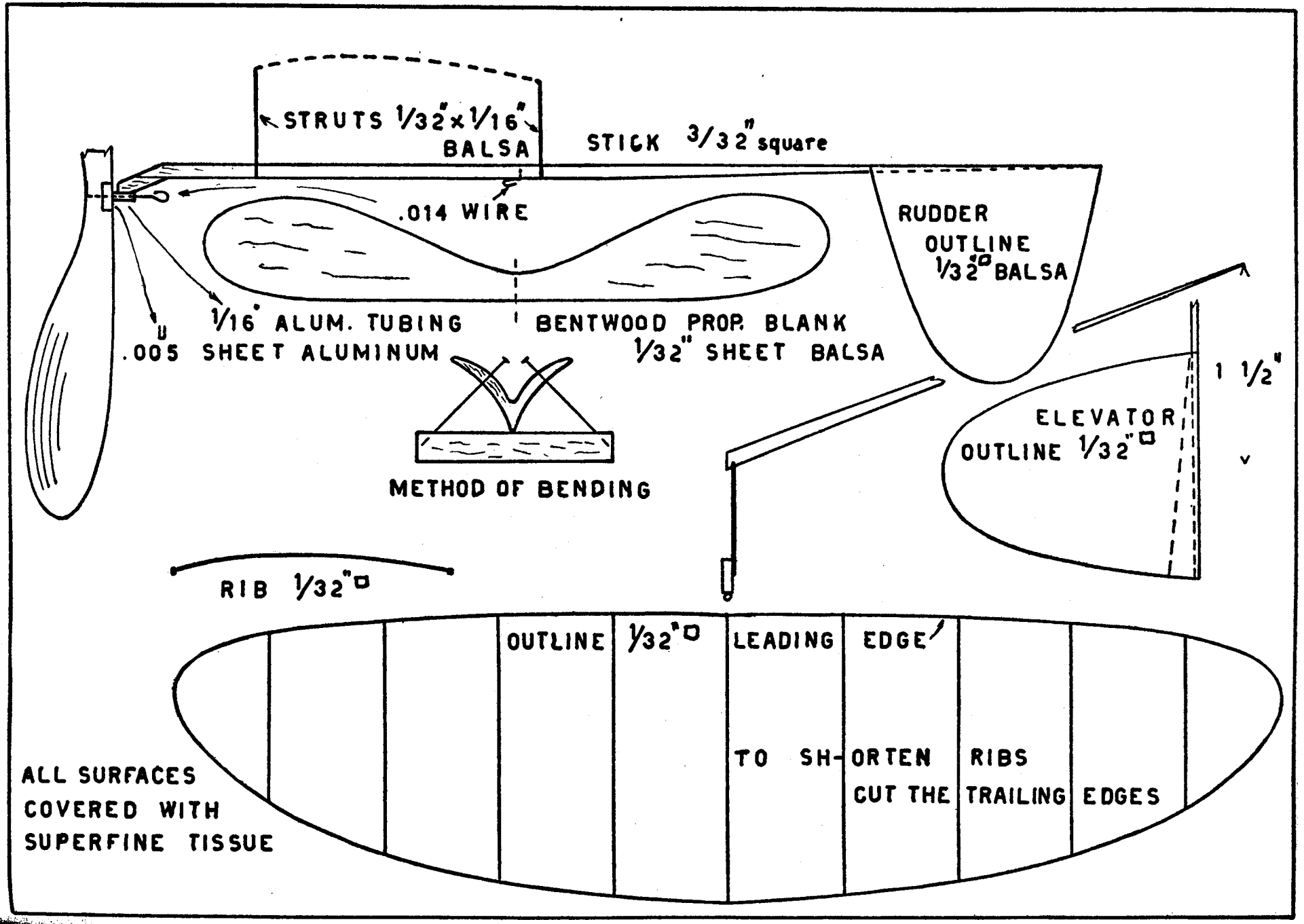
Stalling and diving is corrected by changing the elevator setting or warping the trailing edge of the left wing.

After a few experiments, you will know this model "like a book." With good adjustment and 150 winds of the rubber she will easily do 30-50

seconds every time. And when conditions are good-! But try the *Special* yourself.

Perhaps we should say here that a model such as this *Phone Booth Special* is about the best plane a beginner in our hobby could tackle. For as the foregoing instructions show there's nothing complicated or difficult about the job. In line with all other stick jobs, carving and shaping is of the simplest kind. And there's absolutely nothing hard about flying this type of ship.

**Flying Aces – April, 1938**


STRUTS 1/32"x1/16" BALSA
STICK 3/32" square
.014 WIRE
RUDDER OUTLINE 1/32" BALSA
1/16" ALUM. TUBING
.005" SHEET ALUMINUM
BENTWOOD PROP. BLANK 1/32" SHEET BALSA
1 1/2"
ELEVATOR OUTLINE 1/32"
METHOD OF BENDING
RIB 1/32"
OUTLINE 1/32"
LEADING EDGE
TO SHORTEN CUT THE TRAILING EDGES
RIBS
ALL SURFACES COVERED WITH SUPERFINE TISSUE