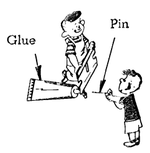
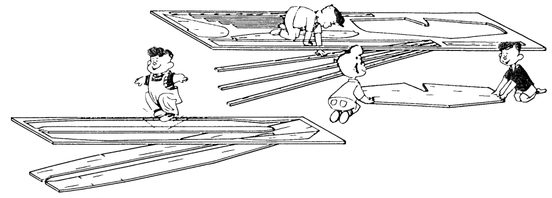
TOOLS NEEDED

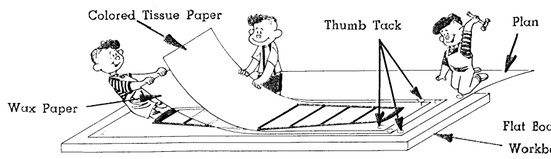
Single Edge Razor or Modelers Knife
Pliers — Thread — Wax Paper
Thumb Tacks and Hammer
Book (used for weight)



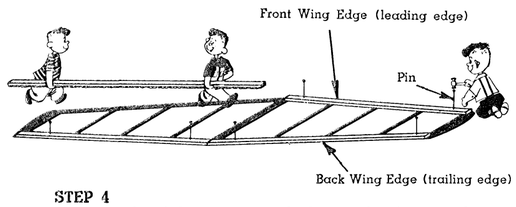
STEP 1
Cut tip off tube of glue. Stick pin in hole to keep glue from coming out. Take pin out only to apply glue. Glue dries fast, so join parts right away. Use plenty of glue on wood to wood joints, use glue lightly on wood to tissue. Ambroid, a fine model airplane glue, is supplied in this kit and is sold in all hobby shops.



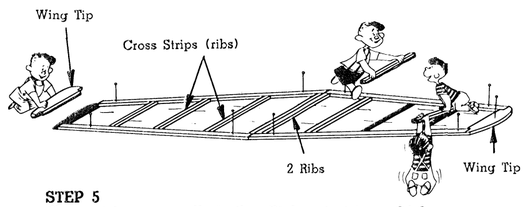
STEP 2
Carefully push out stamped parts from both colored balsa wood sheets. All parts are cut to exact size ready for use. Put parts in box so they won't get lost. Rest of the wood is scrap. Don't throw it away until model is finished.



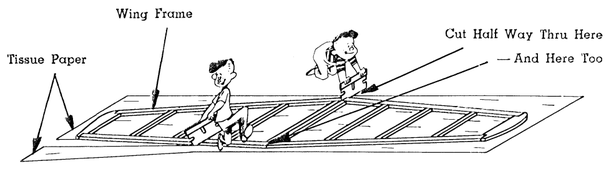
STEP 3
Smooth out plan and hold to flat board or work bench with thumb tacks. Cover wing plan with wax paper so glue don't stick to plan. Lay colored tissue paper over wing plan. Smooth out tissue and hold in place with thumb tacks. Wing is built on black wing plan which shows thru tissue.



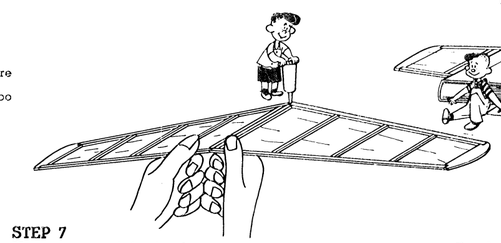
STEP 4
Pick out the 4 long strips, which are the front and back wing edges. One end of the strips are cut on angle to fit against each other in center of wing. Glue 2 of the strips, which make the front wing edge to the tissue over the black lines on plan marked front (leading edge) also glue them to each other where they join in the center. Hold in place with pins. Glue the other two strips over the back black lines (trailing edge) the same way.



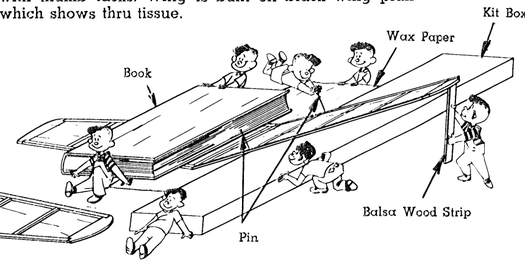
STEP 5
Cross strips are called ribs. Pick out strips which are already cut to exact size to fit between the wing edges at the black lines, and glue to tissue and wing edges. Center has two ribs which are also glued to each other. Glue wing tips to end of strips and to tissue. Wing frame is now done. Let dry for ½ hour before taking out pins.



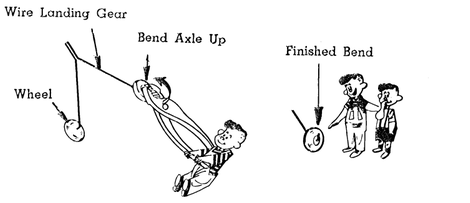
STEP 6
Take pins out carefully and lift wing off board. Remove plan and wax paper. Lay wing on board and carefully cut off tissue around wing frame. Cut half way thru the center joint of front and back wing edges.



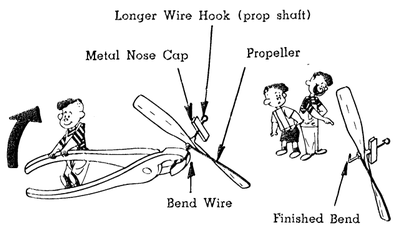
STEP 7
You now need the book, wax paper, and the last balsa wood strip. Hold wing as shown and carefully break at leading and trailing edges where you cut half way thru them. Fill break with plenty of glue and also spread glue all around joint. Lay wax paper on board. Put wing on wax paper so glue in center will not stick.



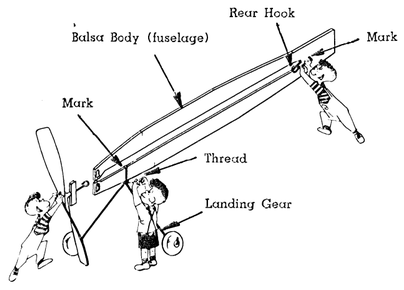
Put book on half of wing to hold it flat. Prop up other half with the last balsa wood strip, placed under tip as shown. Slide kit box under wing to support it, then pin wing to box. Allow to dry for ½ hour. This angle in the wing is called dihedral (pronounced die-hee-dral) angle.



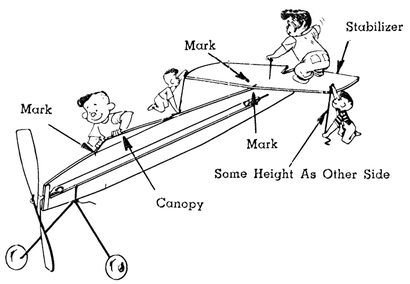
STEP 8
Slide wheels on wire landing gear axle. Bend up end of axles to hold wheels in place.



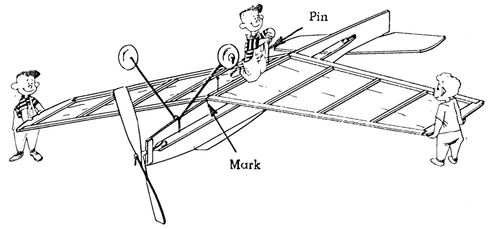
STEP 9
Slide longer wire hook in hole thru back of metal nose cap and long hub in back of propeller. Bend end of wire as shown. It slips into step in front of propeller when winding.



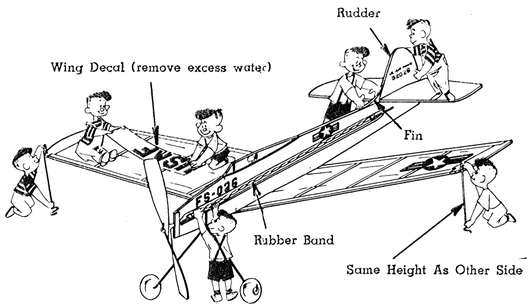
STEP 10
Push straight end of rear hook into balsa body (fuselage) at mark on rear side. Cover with plenty of glue. Slip landing gear in the center of fuselage and pull down over marks. Wrap thread tightly three times around landing gear at bottom of fuselage and tie knot. Cover landing gear and thread with plenty of glue. Put glue on front of fuselage and push on nose cap (prop attached). Nose cap is even with top and bottom of fuselage. Spread glue all around edges of cap to hold it securely on fuselage.



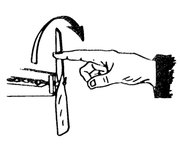
STEP 11
Glue canopy to top of fuselage at mark. Glue stabilizer to the top of fuselage. Front of stabilizer must be at mark. Stabilizer will be on straight if mark and vee cut out in center of stabilizer are over center of fuselage. Hold in place with pin. Put on table and make both tips of stabilizer the same distance from table top.



STEP 12
Turn up-side-down and glue wing to bottom of fuselage. Front of wing must be at mark and center joints must be over center of fuselage. Hold with pins. Cement air scoop to wing and fuselage and go right to the next step.



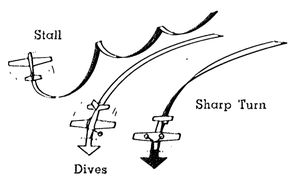
STEP 13
Turn model back over. Set on table and make both wing tips the same distance from table top. Allow to dry for ½ hour. Glue rudder straight up and down in center of stabilizer over mark and to end of fuselage. Glue fin to front of rudder over stabilizer. Apply decals in place as shown, using the directions on back of decal sheet. WHEN APPLYING DECALS TO WING, BE SURE TO REMOVE ALL EXCESS WATER! Attach rubber band to propeller hook and rear hook. Your model is now finished and ready for flight.



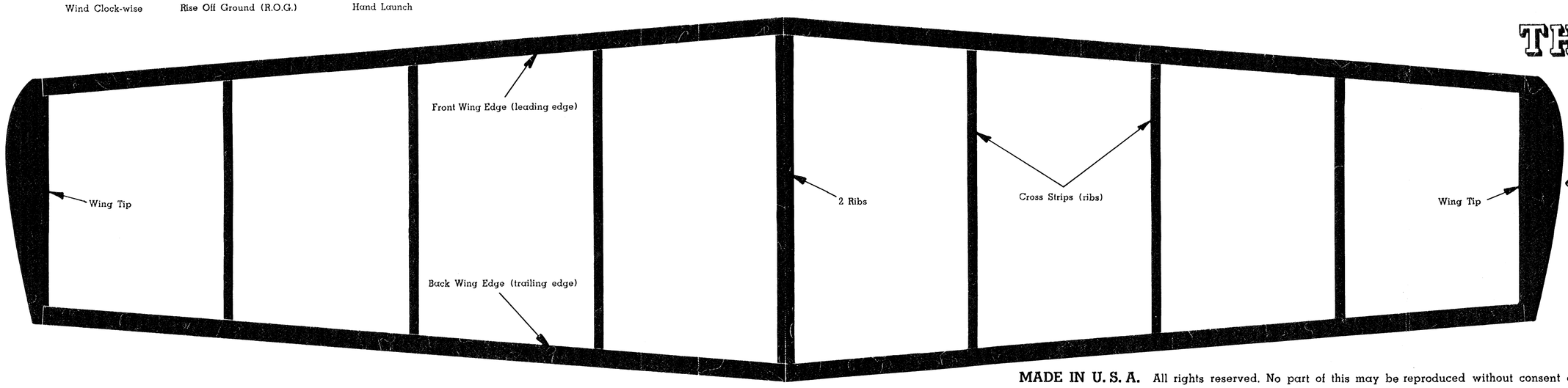
Wind Clock-wise

Rise Off Ground (R.O.G.)

Hand Launch



STEP 14 — flying model
Wind propeller clockwise with finger, as shown in sketch. If you wind the wrong way, model will not fly. When winding, hold model by the fuselage as close to propeller as possible even if you have to hold model up-side-down. First fly model rising off ground (R.O.G.) before hand launched flights; see sketch. Wind propeller 100 turns and place model on ground. Release propeller FIRST allowing it to spin for a few seconds, then release model without pushing. DO NOT RELEASE PROPELLER AND MODEL AT THE SAME TIME. If model stalls as shown in sketch, glue thumb tacks under nose. If it dives, glue tacks under tail. A twisted (warped) wing will cause model to turn sharply to one side. Correct by gently twisting wing in opposite direction, and blowing your hot breath on it. Hold for a few seconds, then release. Wing should straighten out. If rudder is twisted or glued on crooked, model also will turn sharply to one side. Correct by twisting in opposite direction, or break off and glue back straight. When hand launching your model, allow propeller to spin for a few seconds, then push model gently into the air, aimed slightly downwards. DON'T THROW HARD OR MODEL MAY STALL OR YOU MAY BREAK THE WING. Propeller can be wound approximately 150 turns for longest flights. If you like model building and flying and you would like to join a club, write to: Academy of Model Aeronautics, 1025 Connecticut Avenue, Washington 25, D. C. and tell that Sterling Models told you to write. Building and flying models is great fun that is enjoyed by modelers all over the world. Most of the famous men in real airplane and rocket work were modelers, including Col. John Glenn, our first man to orbit the earth. There are many magazines devoted entirely to model airplanes which you can buy on news stands. Your club members will help you progress until some day you may wish to fly all types of powered model airplanes, including control line, free flight and radio control models.



THUNDER JET F84

KIT R6-69 WING SPAN 18"

A rubber band powered balsa flying model for beginners.

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