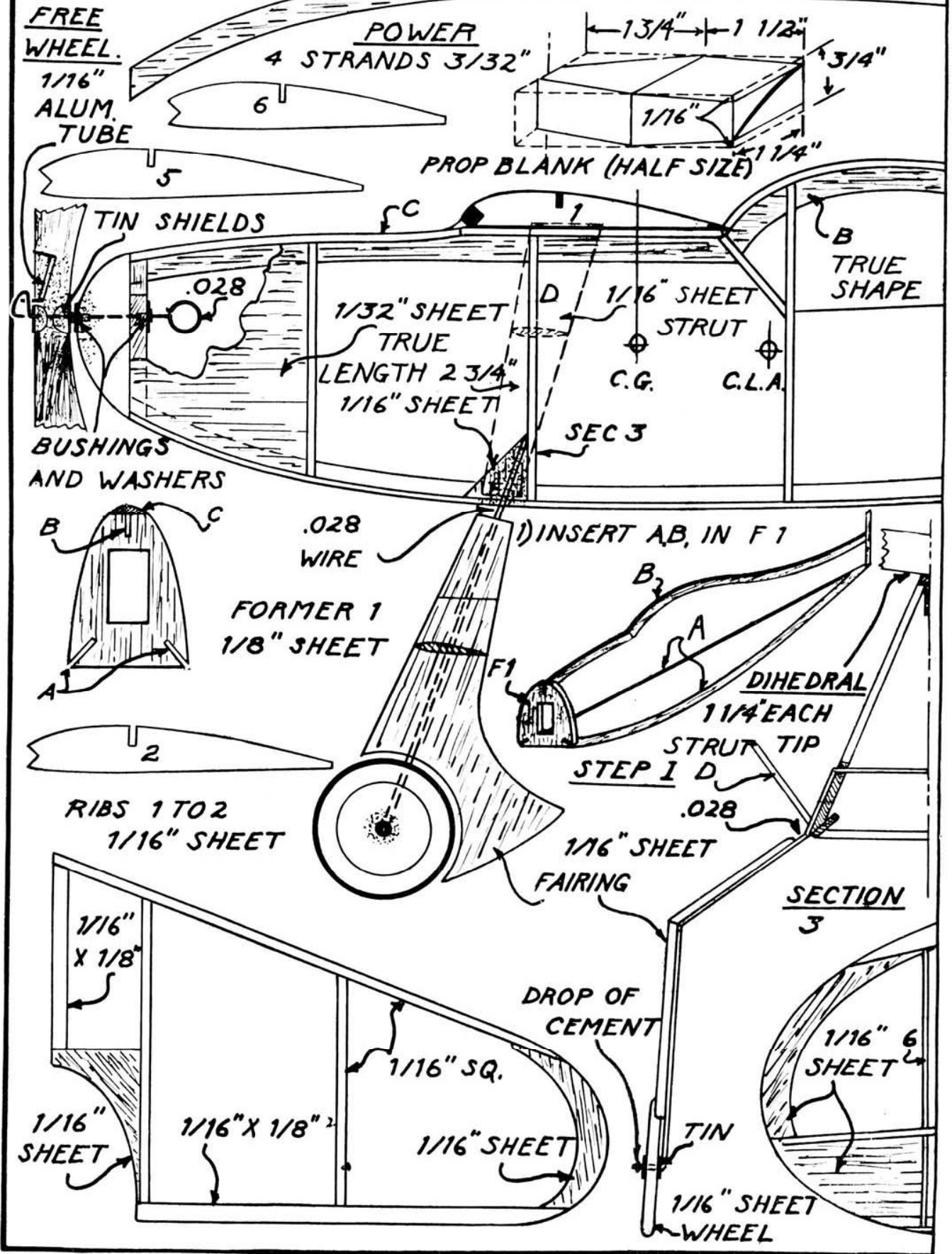
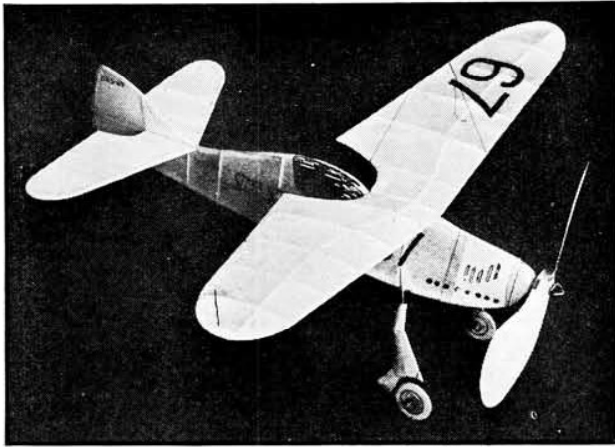


FULL SIZE DWG





Just like a miniature pursuit plane!

THE sport model is one of the most neglected model airplane types. This is a strange situation as a great many builders are not primarily concerned with contest flying, but participate in the hobby for the sheer pleasure to be found in building and flying airplane models.

Bound by no set rules of weight and size, the variety of designs, combining simplified real ship lines and good stability principles, is practically unlimited.

As an example of what can be done in this field the "Triangle Sportster" was designed. The construction is exceedingly light, yet very strong. The inverted triangle fuselage conveys the basic idea of a racy ship, powered by an inverted "Vee" type engine. In the force set-up, the centers of gravity and lateral area, as well as the thrust line are properly located for inherent stability.

The promise of these principles was fulfilled by the long and outstanding performance of the original ship. No offset thrust of any kind was necessary, even though the climb was very swift and steep, with a fairly small circle against the torque. Flown in a large armory a duration of one minute, fifteen seconds was attained. When taken outdoors and tested in both windy and calm weather, unusual buoyancy and stability were exhibited, resulting in many soaring flights.

Full size plans detailing the simple construction used, make it possible to complete this flier in a remarkably short time. For maximum strength and lightness it is advisable to use the "quarter-grain" variety of balsa (speckled appearance).

#### Fuselage

The fuselage consists of three longerons cut of 1/16" sheet balsa. The true shape of A is traced from the pattern at the top of the plan, while B may be taken directly from the side view. Cement the longerons into the nose former F-1, cut from 1/8" sheet balsa. The rudder post of 1/16" square is next glued in place. Check the alignment of this assembly very carefully.

Former F-7 is cut of 1/16" sheet balsa

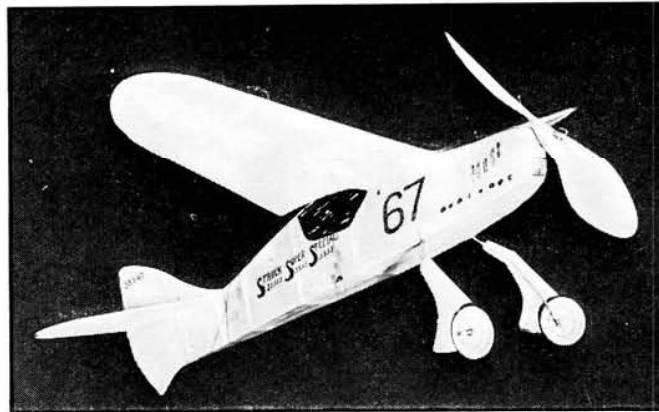
# Build and Fly the Triangle Sportster

An Easily Constructed Unique Semi-Scale Flier of Striking Appearance That Turns in Consistent High Performance

By HENRY STRUCK

and the rear hook, bent of .028 piano wire, is cemented securely to it. Fit the bottom cross pieces in place. The uprights are laid in position and allowed to project above the top longerons. After they are set the excess length is trimmed off.

A 1/16" x 1/4" cap strip, C, is cemented to the top longeron and sandpapered to round off the corner of the fuselage neatly.



Excellent proportions and rakish lines give thrilling flights.

The first panels of the fuselage sides are filled in with 1/32" sheet and small triangular re-enforcements are cemented at section 3.

Cut the rudder outlines from 1/16" sheet, tracing their shape from the plan and build up the rudder frame directly on the rear of the body.

#### Landing Gear

The foundation of the landing gear is bent of a single length of .028 piano wire nine inches long, to the shape shown in the front view of section 3, and then cemented solidly to the reinforcements provided. Fairings are cut of 1/16" sheet, sanded to a streamline section and cemented to the wire only. The space between the fuselage and the fairing allows the wire to flex and absorb the shock of landings. The wheels are cut of 1/16" sheet with tin bearings, or washers, glued to both sides and are retained on the axle by a large drop of cement.

#### Surfaces

Cut two ribs each of numbers 3 to 6, of 1/32" sheet; two of number 2, of 1/16" sheet; and one of number 1 also of 1/16" sheet. Trace their shape from the full size templates given. Pin the 1/8" square leading edge to the work board and cement ribs 3 and 6 to it. The trailing edge of 1/16" x 1/4" is glued against the ribs and the curved portions of the wing outline added. Fit the remaining ribs and the spar in place. Crack the wing at the center and raise each wing tip 1-1/4" for dihedral.

The stabilizer is flat in section and is simple to build up of 1/16" thick stock.

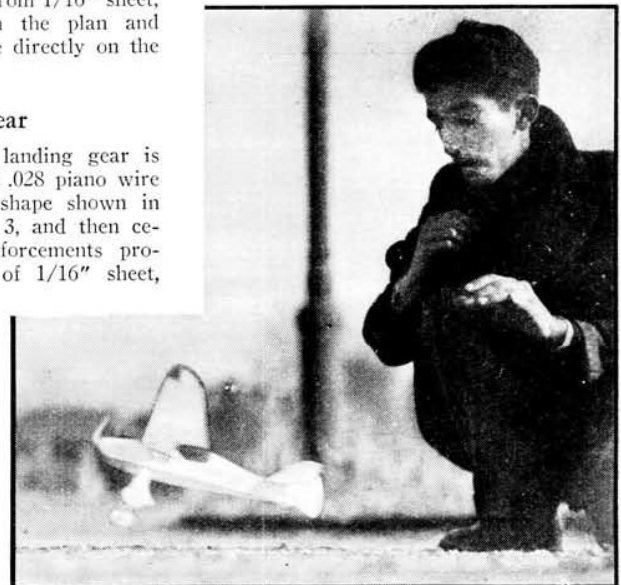
#### Nose Block and Propeller

The nose block is shaped (with a knife) from a block 3/8" x 1" x 1-1/4" and sandpapered to meet the contours of the nose smoothly. The plug portion is made of 1/8" sheet, preferably the piece cut from the inside of former F-1, and cemented to the nose block. With the nose block in place drill a hole for the prop shaft. Cement the bearings, consisting of washers with

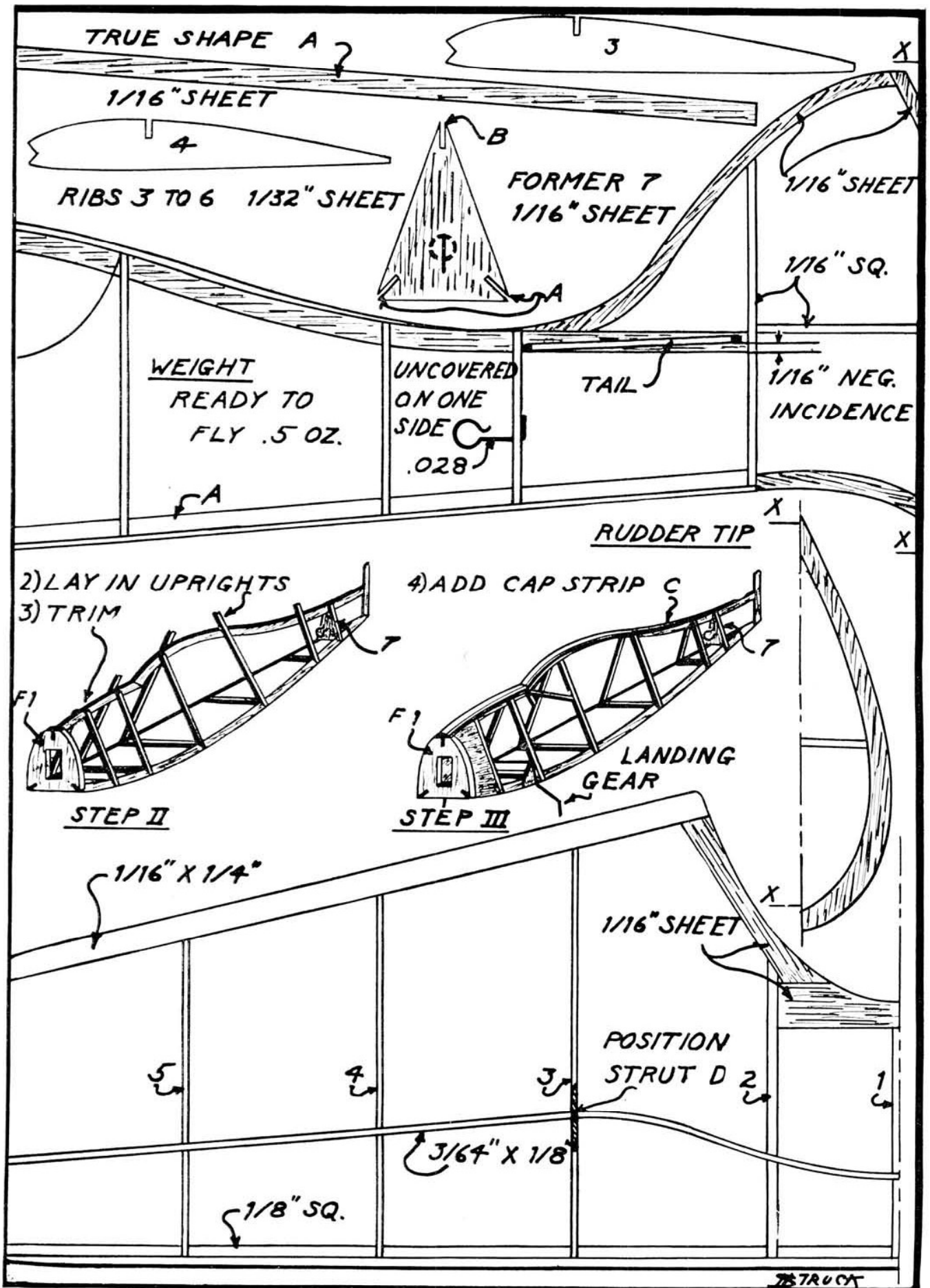
bushings inserted, to the front and rear of the nose block.

The propeller is of a wide-bladed type

(Continued on page 48)



There is hesitation when this ship takes off.



## HERE IS PROOF FRIENDS THAT THE NEW "HUSKY JV" IS O. K.

A Large Eastern Dealer recently received (12) "HUSKIES" and immediately ordered (24) more—When you spend your money for a "HUSKY" you are buying the most Dependable Quick Starting small motor on the market. The New "Auto Type Snap Spark Ignition" Starts the "HUSKY" Right Now—This new feature does away with the breaking of the stiff old style upper spring used on the Husky Jr. Also you don't have to dismantle the timer to clean and adjust the points, which can be done in a few seconds. We guarantee the "HUSKY" to give you 100% satisfaction. The NEW "HUSKY" runs Equally as well Upright or Inverted and was Designed to Fly Models Weighing from 16 oz. up to 21 1/2 lbs. The "HUSKY" will run Steadily at any speed from 250 R.P.M. to 6000 R.P.M. using either a 11" or 12" Prop. The NEW "HUSKY" is BEAUTIFULLY FINISHED THROUGHOUT—It is BUILT to WITHSTAND any TEST It is 6 1/2 oz. including two pencils for Current. Each motor is THOROUGHLY TESTED, RUN IN and FULLY GUARANTEED TO GIVE you Consistent Performance and LONG LIFE. 5/8" bore, 5/8" stroke. Wt. ready to run 6 1/2 oz. We are going to see to it that every HUSKY owner will be completely satisfied and a hundred per cent booster. You can't go wrong. ORDER YOUR HUSKY TODAY! YOUR MONEY CAN'T BUY A BETTER MOTOR.



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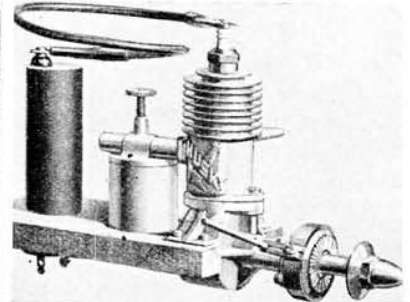
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Husky complete ready to run (less motor mounts, batteries and prop.) Postpaid..... **\$12.50**

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of dark brown and green paint for camouflaging.

Draw the outline of the top view of the fuselage on the wood with the grain of the wood running lengthwise, and cut with jig-saw or sharp chisel. Then draw the side view in correct position and cut. Shape out the contour, as shown by the cross-sections, with a razor blade. Go over the surfaces with coarse and fine sandpaper until smoothness is obtained.

The other parts of the model are to be made in the same manner, using care and accuracy as the most important rule to follow. The neatness of workmanship also counts considerably in the building of a model.

The wing may be made in three parts, the two outer panels and the center section which will fit into a groove made in the belly of the fuselage later. The blades of the propeller may be shaped out and then cemented to the spinner with the correct pitch. Go over all parts with first coarse and then fine sandpaper, after they are whittled into shape.

The assembly is very simple. Lay the fuselage in flying position on a flat surface after cutting a groove to fit the center wing section. Cement the wing section in place and then the two outer panels with the desired dihedral. Put blocks under the wing tips to hold them in place. Join the tail pieces with plenty of cement to hold them firmly. When joints are thoroughly dried lay the model on its back and cement the radiator and landing gear in place. Using a straight pin as a shaft put the prop in the nose.

The wing fillets, the fairings that join the wing to fuselage, may be made of putty or plastic wood if you find them too hard to shape out of balsa wood. Go over the model once more with fine sandpaper and then begin the paint job, using the realistic camouflaging effect. Many coats will have to be applied before a smooth finish is obtained. After the last coat has dried your model will then be ready for exhibiting.

## Building the Privateer

(Continued from page 13)

in plate 2. This will make the model fly to the right. The first flight should be made in the evening when there are no atmospheric currents. Such procedure will ascertain the attitude of the ship in flight. The plane is first tested by gliding, and when the flattest possible glide is attained then fly the ship under low power till a smooth right circle is obtained. Gradually increase the power, thus increasing the climb, always making sure that the spiral is not too tight. This arrangement will definitely produce consistent results under any flying condition.

Any questions should be addressed to the author, care of MODEL AIRPLANE NEWS.

## Build and Fly the Triangle Sportster

(Continued from page 7)

found to be very efficient for a model of this size. The block is 3/4" x 1-1/4" x 6-1/4" blanked out as shown on the plan in the half-size sketch. Carve the blank slowly and carefully, undercambering the back about 1/8" at the widest section of the blade. Round off the tips and cut out the rear of the hub using the photos as a guide to shape.

A free-wheeling device adds greatly to the performance of any model through the reduction of the drag and upsetting force caused by a stationary propeller during the glide. Any type that works easily and efficiently may be used. A very practical type is illustrated on the plan. The upper end of the wire, passed through the 1/16" aluminum tube, is pressed against the face of the prop by the pressure of the bent-over portion of the prop shaft on the lower, or upright end. When the torque of the rubber is gone the shaft rotates the wire away from the face of the prop, allowing the propeller to spin freely during the glide.

Dope both the prop and nose block several times for strength and smoothness.

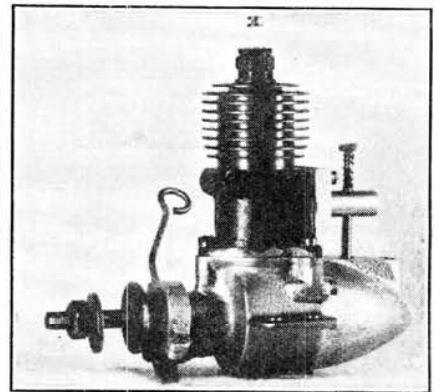
## Covering and Assembly

Round off all sharp corners and edges with fine sandpaper. Cover the framework with either white or colored tissue, using dope for adhesive. Spray the surfaces lightly with water and apply a thin coat of dope, correcting any tendency to warp while drying.

Cement wing to the top of the fuselage and brace with streamlined struts of 1/16" sheet balsa. The stabilizer is attached at the proper negative incidence of 1/16", which will assure a difference of two degrees in incidence between wing and stabilizer.

## Flying

Four strands of 3/32" flat brown rubber, preferably lubricated, are ample power for a .5 ounce model, though a greater amount may be needed for a heavier job. Before flying check the location of the center of gravity, adding enough clay inside the front or rear to balance model level at the C.G.



### THE BELMONT

Bore 7/8" Stroke 15/16" H.P. 1/5 Plus Exhaust Stacks \$1.00 per pr.  
**\$9.95** Complete with Coil Condenser and Spark Plug  
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These features found in no other motor at this price. Twin exhaust to each side of fuselage. Gas tank integral with crankcase. New port design assures easier starting, more economical operation. Cylinder and piston ground and lapped to .0002" tolerance. Guaranteed to hold compression as long as any motor on the market regardless of price. Cylinder cadmium plated. Extra large main bearing of Tobin bronze, crankcase practically indestructible. Every motor thoroughly run in and given wide open test before leaving factory. Satisfaction guaranteed.

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BELMONT MINIATURE MOTORS  
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For the first flight wind the rubber about 100 times and hand-launch the ship in a suitable field free of obstructions. The model should fly in right circles and climb slowly. The rudder may be warped slightly to aid in turning in the desired direction. After testing under successively greater power, a machine winder can be hooked onto the eye of the prop shaft, the rubber stretched and wound to the capacity of 800 turns. Should the first burst of full power tend to fly the model in too small, banked circles without climbing, warp the leading edge of the right wing up about 1/8" to 1/4". (Looking at the plane from the front). With the construction and adjustment of the "Triangle Sportster" completed, many hours of true sport flying lie ahead.

**Materials Needed**

*Sheet Balsa*

- 1—1/32" x 2" x 18"
- 1—1/16" x 2" x 18"
- 1—1/8" x 2" x 2"

*Strip Balsa*

- 4—1/16" sq. x 18"
- 2—1/16" x 1/4" x 18"
- 1—1/8" sq. x 18"

*Block Balsa*

- 1—3/8" x 1" x 1-1/4"
- 1—3/4" x 1-1/4" x 6-1/4"

*Miscellaneous*

- 18" .028 piano wire
- 4 washers, 2 bushings
- 1 sheet tissue
- 1 oz. each of cement and dope
- 36" of 3/32" flat brown rubber
- Scraps of tin or brass sheet.

**The Passing of the Nationals**

(Continued from page 21)

Moffett International Trophy and a MODEL AIRPLANE NEWS Plaque. All other winners in the event won MODEL AIRPLANE NEWS Plaques. In the order of their winnings, they were: Carl Stahl, Johnstown, Pennsylvania; Kenneth Lane; Leo Bailey; Arthur Beckington; Roy Smith, Toronto, Canada.

The flying scale model event brought out many ships of unique design. This event, in the open class, was won by Henry Struck of Jackson Heights, New York. He flew a flying scale model of a Caudron monoplane of about 1913 design (the ship, not Struck's model). This was a beautiful job and especially suited to this type model. Final results were:

**Flying Scale Event**

First place, senior division, went to Leo Bailey with 81 points. He won the Thomas Bourne Joy Memorial Trophy and Miniature, plus \$19.52 as his share of the \$100 awarded by William and Richard Joy in memory of their brother. John Ogilvie of New York City was second with 66 points to win a Cleveland gas kit, M & M gas wheels, \$15.90 and a medal. Sydney Walzerstein of Boston placed third with 52 2/5 points to win \$12.53. Roger Hammer of New York City won \$11.33 by placing fourth with 47 2/5 points. Frank Merritt

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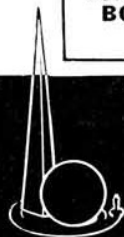
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