



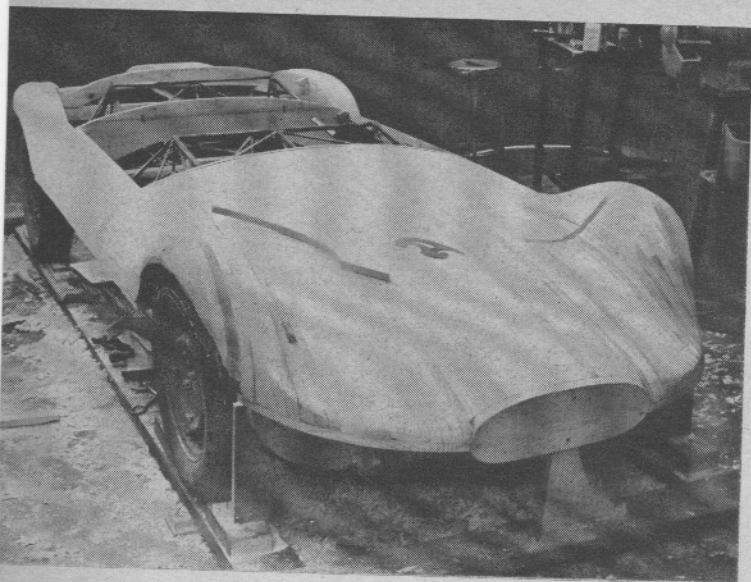
CANARY-SIZED BIRDCAGE

by ROBERT HEGGE

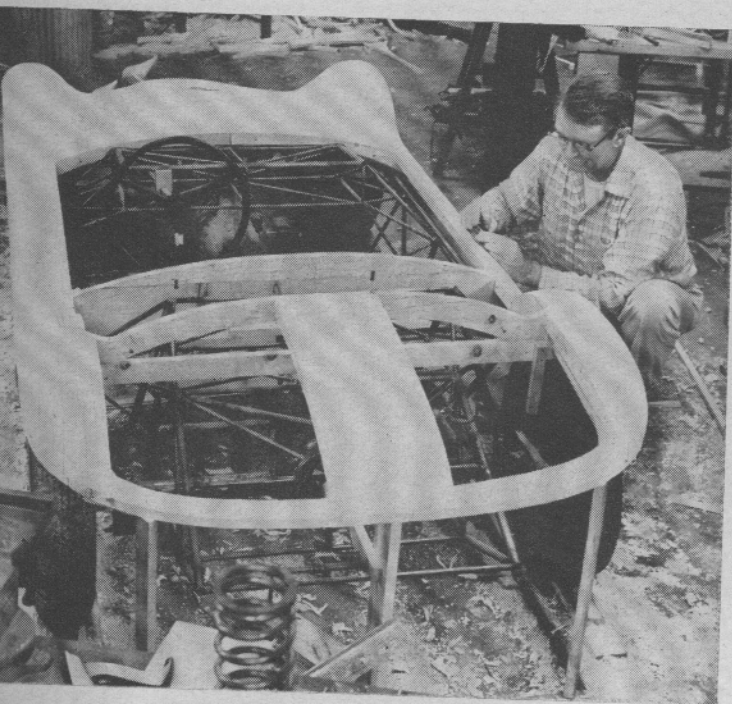
The Crosley car may be deceased, but its rugged little engine lives on, powering racers like this mail-order special.



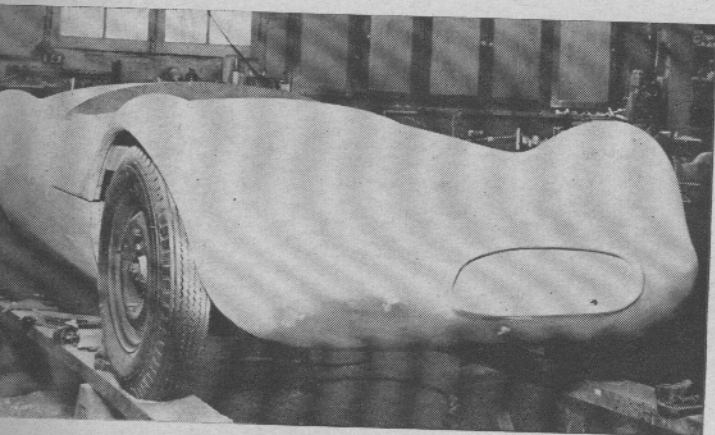
Lentz Perzofsky



The wooden body form is nearing the stage where the final detailed smoothing will begin before adding the prime coat.



Jim Broadwell puts the finishing touch to the side of the laminated wood form that has been built over the chassis.



With a coat of epoxy boat-type sanding filler, the body is ready for sanding and will be prepared for the paintshop.

All the bodies are built with the natural white coloring with flat sections reinforced by glass cloth, thus making a very light and strong body shell which may be primed and painted just like a steel body. The front and rear sections are designed to be hinged at their extremities to provide maximum accessibility. Each section has a weight of 15 to 18 pounds only.

The builder has found, over years of competition, the great value of the three-piece body. Replacement is simple—either end section may be removed by merely undoing two bolts.

Why the "birdcage"-type frame? To me it looked like lots of extra work, with miles of tiny tubing. "It appealed to me," laughed Jim, "it was a challenge!"

The frame was built from .049 mild steel tubing of various sizes. The lower rail is one-inch stock, while tubes of $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ " and $\frac{7}{10}$ " make up the upper structure, according to stress. No holes are drilled for securing the body mounts, as clamps riveted on each side of the tubing insure proper marriage of the frame and the fiberglass body.

Jim Broadwell prefers the Crosley engine for the Jabros he has raced himself. Of course, the car may be powered with any of the small mills available, such as Mercury (outboard), Saab or OSCA.

The modifications undertaken by Broadwell on the Crosley unit include some quite drastic work on the cylinder head. In its stock form, the Cincinnati four runs on two intake ports. In earlier Broadwell form, it was given siamesed ports, which improved breathing a good deal. The Mark III engine, however, has separate ports to all cylinders, intakes on the left and exhaust on the right, and develops 65 bhp.

The carburetors used are four Dell'Orto SSI-25s, but the engine may of course be adapted to take Amals or Webers. Experiments on the Mark II showed that an Iskenderian Rev-Master 8000 camshaft would allow the engine to reach 8500 rpm. Kenny Harmon of California designed a camshaft especially for the four-intake-port engine. This shaft has a 42-72-72-42 degree operation with .300 lift, and uses a lightweight valve train with Ford cam followers.

In order to obtain equal temperatures all over the block, the water circulatory system has been modified and comprises a special manifold picking up water at three points.

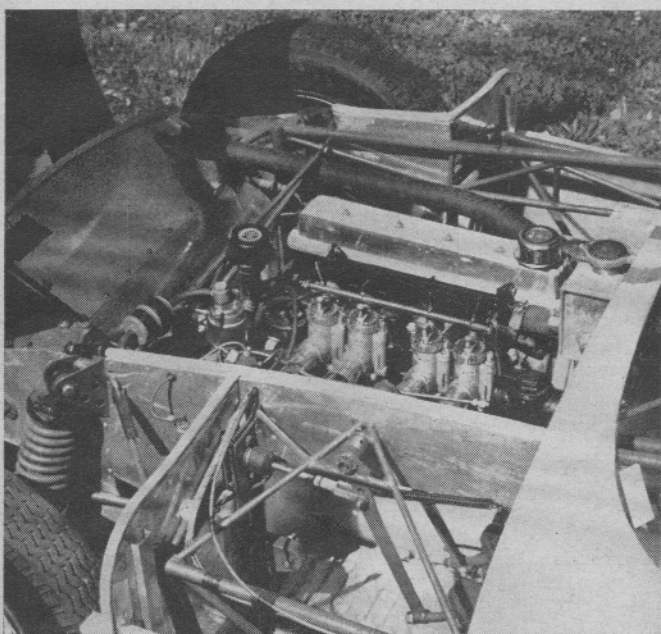
While previous Jabro cars have made do with the Crosley torque-tube rear end, the Mark III uses a live axle with radius rods and narrow-diameter coil springs enclosing telescopic shock absorbers. The front end remains typically Jabro with a divided axle and coil springs. The Crosley steering gear is retained.

If you have an old Crosley engine, Jim Broadwell will rework it to four-port specifications for the sum of \$245. A complete engine with four Dell'Orto carburetors costs \$850. The price for the complete "birdcage" chassis is \$850, and the three sections making up the complete body are available for \$360. For further information, write to Jabro Sports Cars, Mr. James P. Broadwell, #1 Sunnymead, St. Louis 24, Missouri.

The latest development, which has met with a great deal of interest, is a rear-engined Mark III. This car was built in St. Louis by a friend of Broadwell's and has already been raced with a Mercury outboard-type engine with some degree of success, coming in second to a 750 cc OSCA in five consecutive races. The front end and steering are identical to the front-engined Mark III, but the rear end is fully independent. For this model, according to Broadwell, Fiat 600 components make up the best units. The Italian firm's wheels, transaxle and independent rear suspension have proved very suitable indeed.

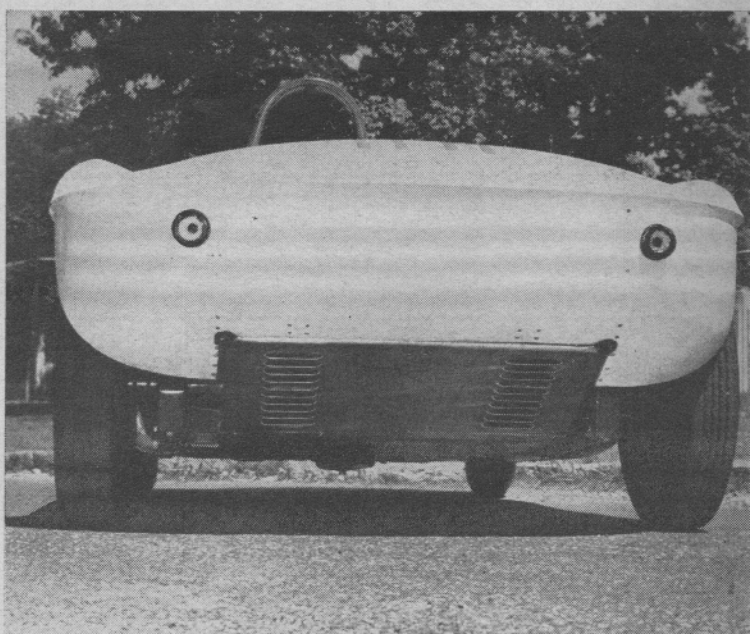


A surprising number of the chassis frame tubes remain in full view from outside after the bodywork has been completed.



The full potential of the reliable little Crosley engine is now realized with an eight-port head and four carburetors.

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The neat undershield with the louvers is made of aluminum—one of the few non-mechanical metal parts in this car.