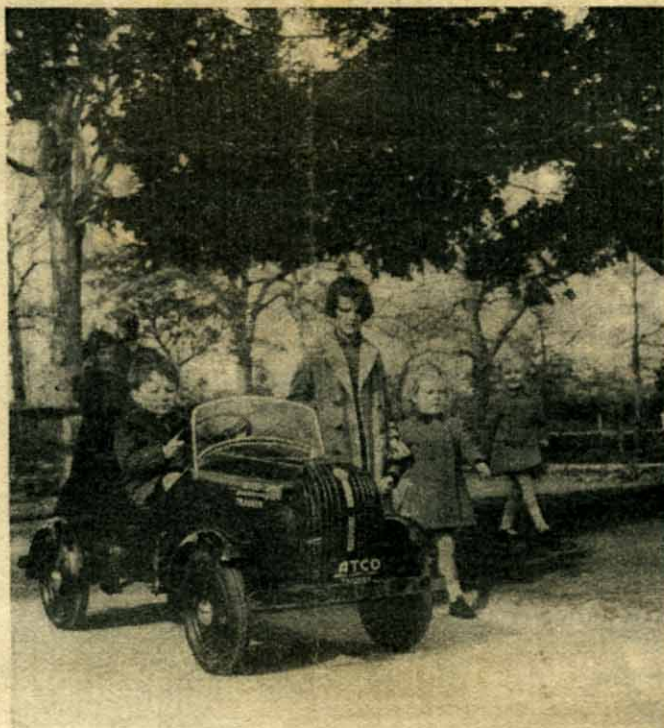


A 1-H.P. TRAINER CAR



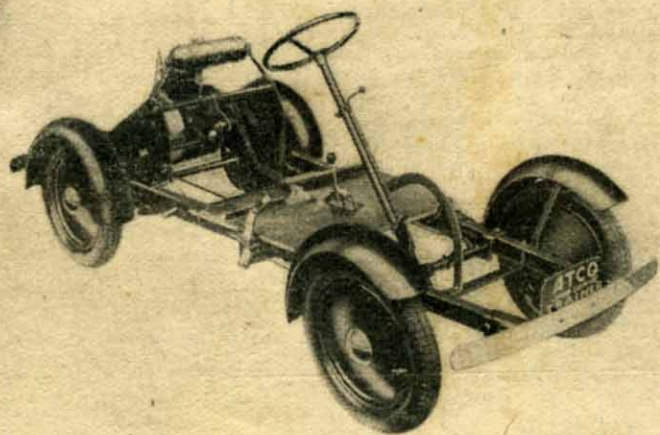
(Left) Children should enjoy their road-safety lessons if they can drive the Atco trainer.

A Miniature Power-Driven Car For Teaching Road Safety And Elementary Engineering To Children.

Early Training

"Whether we welcome it or not, the environment of human beings is becoming more and more mechanical, and children should be taught as early as possible the elementary secrets of mechanical power and the safe control and the use of it.

"Such training is at least as popular and vital as Latin, mathematics or physical training, and furthermore it would do more than anything else to reduce to a fraction to-day's grim life-toll of the roads in the years to come."



(Right) The neat chassis showing the position of the controls. A two-speed gearbox is fitted—one forward and one reverse.

A 1-H.P. miniature car is one of the newest devices now being considered by the educational authorities as a means of teaching road safety to children. The fact that the car is power-driven and has the usual controls should enable the child to develop road sense through practical experience. The car is known as the Atco "Junior" Safety-First Trainer, and costs £35, but is available to local authorities and schools at special rates.

Two-Stroke Engine

The main interest to our readers, however, no doubt, lies in the specification. The engine is a 98 c.c. 1-h.p. air-cooled Atco-Villiers two-stroke. It is placed immediately over the rear axle with chain drive to the rear wheels. There is a friction cone type clutch, and this is foot operated. The gearbox is of the two-speed type—one reverse and one forward speed; the gear lever is centrally placed. Gear ratios are such as to give adequate power and a maximum speed of between 8 and 10 m.p.h. There is a foot-operated accelerator pedal, with a hand throttle on the steering column.

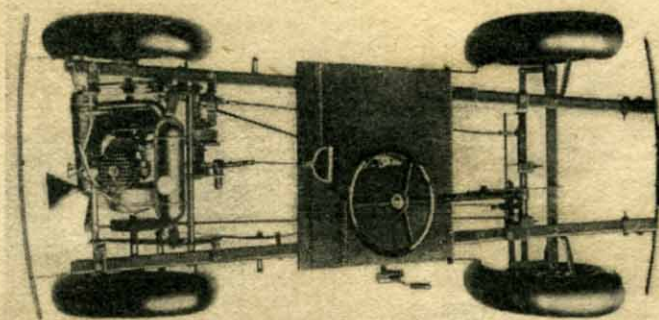
There is a single brake acting on the rear axle. It is controlled by a pedal and by an outside handbrake.

Adjustable Steering Column

The steering column is adjustable both for length and angle of rake, a desirable feature for making children feel "at home" in the car. Disc wheels are used with 16-in. by 2½ in. Dunlop tyres. The wheels run on roller bearings.

Starting is easy and is by means of a pull-up type handle situated near the floor, and between the driver's and the passengers' seats. The engine runs on petrol, the rear tank having a capacity of 2 pints. Consumption works out at ¾ pint per hour's running.

The two-seater body is attached to the



(Left) The engine is mounted over the rear axle. It is a 98-c.c. two-stroke unit. Note the pull-up starter placed centrally near the steering wheel.

chassis by 12 accessible bolts. The body can thus be easily removed, allowing the chassis to be used as an educational lecturing model.

As the total weight of the whole vehicle is only 150 lb., it would not be a difficult matter to get the chassis on to a raised dais, or even a low table, so that pupils would be able to get a better view.

Maintenance Manual

To assist in this training the makers have prepared a 66-page manual. It constitutes a useful text book of elementary motor engineering and the ethics of driving. A chapter on maintenance and lubrication is also given.

"We have built this car in full faith that it is meeting a real need as a piece of educational equipment," said Mr. J. G. Pugh, managing director of Charles H. Pugh, the makers.

Miniature Road Layouts

The "trainer" is specially suitable, the makers suggest, for use on miniature training-grounds with road crossing signs and beacons.

Grounds of this kind have been recently laid out in a number of schools and by one or two municipalities, and a model "Safety First" training-ground has been built for demonstration purposes at the firm's works at Birmingham.

Of course, where the trainer is used on school premises and private grounds, the Road Fund licence and driving licence are not required.

The use of "trainer cars" in schools will compare with the adoption of "trainer" aircraft, which have been for many years a teaching medium in training pupil-pilots.

There seems to be a very wide scope for this car-in-miniature.

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