SIMPLICITY AND RELIABILITY NOTED

A description of the battery-powered automobile of the turn of the century indicates that it had reached an enviable position. "Evolution of the American Automobile," by Daniel D. Gage and Anne C. Garrison in Business Topics, published by Michigan State University, Autumn 1965, notes that—

> It was the ultimate in simplicity and reliability, starting immediately with the turn of a switch, moving silently, increasing speed with utmost smoothness. Anyone could learn to drive it with finesse in five minutes. Consequently, it became identified with lady drivers and older people who were not concerned with dash and dreams of glory. Like its upholstery, its public image was dove grey. Its top speed did not exceed 25 miles an hour, and its range was limited by the need for recharging the storage batteries every 60 miles, either at a public garage or by means of expensive home equipment. As a passenger car, the electric car held on until the first World War, but the electric truck for street or in-factory use was revived 25 years later.

The same article notes that after the gasoline internal combustion powerplant won out over steam and electricity—

> For over half a century engineering ingenuity has been devoted to improving the piston engine, which is basically an over-elaborate and unsatisfactory source of power. It may have been the challenge of perfecting this imperfect machine attracted designing talent to it rather than to the steam or electric car.

RESEARCH EFFORT NEEDED

Whatever its merits as a source of automotive propulsion, the gasoline engine is choking our civilization with its fumes. While continuing to perfect this "overelaborate and unsatisfactory source of power" to diminish its contribution to our air pollution, it would be desirable, also, to devote engineering talent to the battery-driven vehicle, which appears to have many uses in our urbanized society today.

A study by the Cornell Aeronautical Laboratory, Inc., at Buffalo, N.Y., last year, made for the Commerce Department, suggested the desirability of two distinct types of vehicles, one for urban use and one for interurban highway travel. The Cornell group predicted that a major market for electric automobiles, primarily for urban use, will appear by 1980, pointing out that the electrically powered car creates no air pollution and, perhaps more persuasive to potential buyers, has operating costs which are considerably less than those with internal combustion engines for stop-and-go driving.

Just recently, an interesting suggestion was made by Columnist Howard K. Smith in the June 1966 issue of Washingtonian magazine. Declaring that there are dozens of things which we can do about city traffic "when the moment of total paralysis and the incidence of lung and throat ailments finally prove that something must be done."

One of these could be to provide inner city drivers with a fleet of drive-yourself electric, two-seater carts, which could be driven for a mile, at a speed of 20 miles per hour, for each coin put in a slot. "There would be no fumes, no important accidents, and no traffic jams caused by a mere 40 or 50 people scattered 1-apiece in limousines big enough for 8."