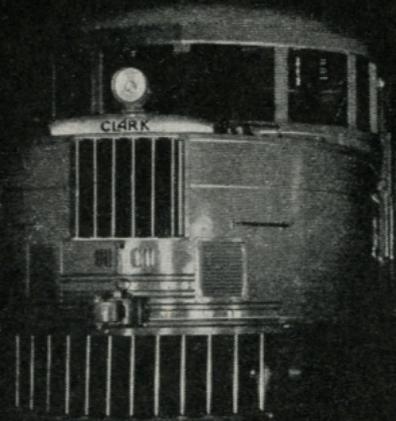
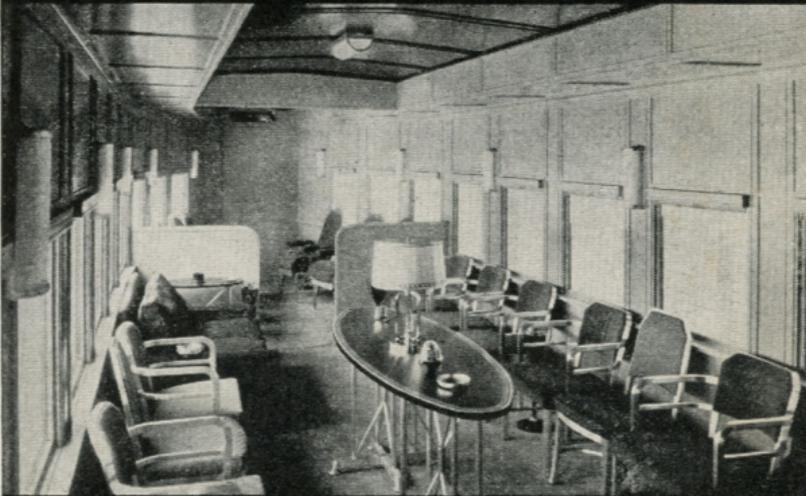


The Clark Autotram represents a distinct advance in the progress of rail car construction and makes available a new phase of railroad passenger service embodying frequent, high-speed schedules and the latest developments in comfort and safety. It is entirely in a class by itself, and is the first streamlined, all-aluminum rail car to be built in this country.



# THE CLARK AUTOTRAM

# THE CLARK AUTOTRAM . . . . .

This modern car, built for swift, frequent passenger service, embodies many innovations in design. It is fully streamlined and powered with a sixteen-cylinder automotive type engine. The double-pane, shatter-proof windows are stationary as the car is equipped with a forced ventilation system.

The entire body of the Autotram is made of the strong "duralumin" type Alcoa Aluminum alloys, while the trucks are of steel with resilient wheels of composite aluminum, rubber and steel construction. The center sill, which forms the "backbone" of the body, is built up of strong aluminum alloy plate and angles 56 feet 6 inches long. In addition to the body frame, outside and inside paneling, doors and

roof all being aluminum, the various fittings and equipment are also of the same metal. The pilot and radiator-grille bars are aluminum streamline tubing. Even the headlight is streamlined and made of aluminum.

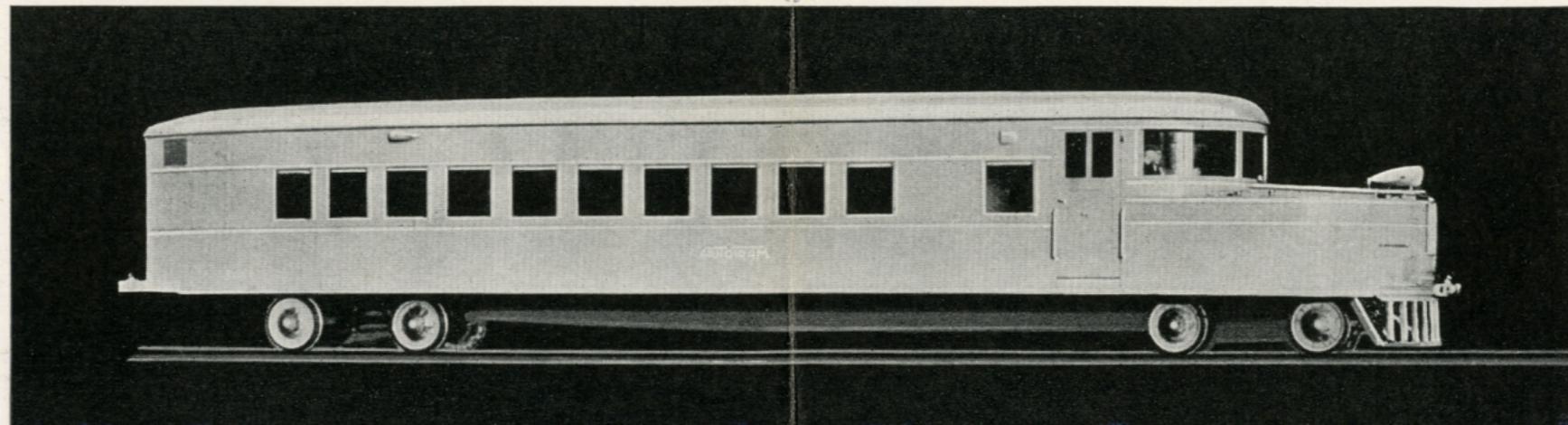
★ *Built For Comfort And Safety*—In designing the Autotram, comfort and safety for the pas-

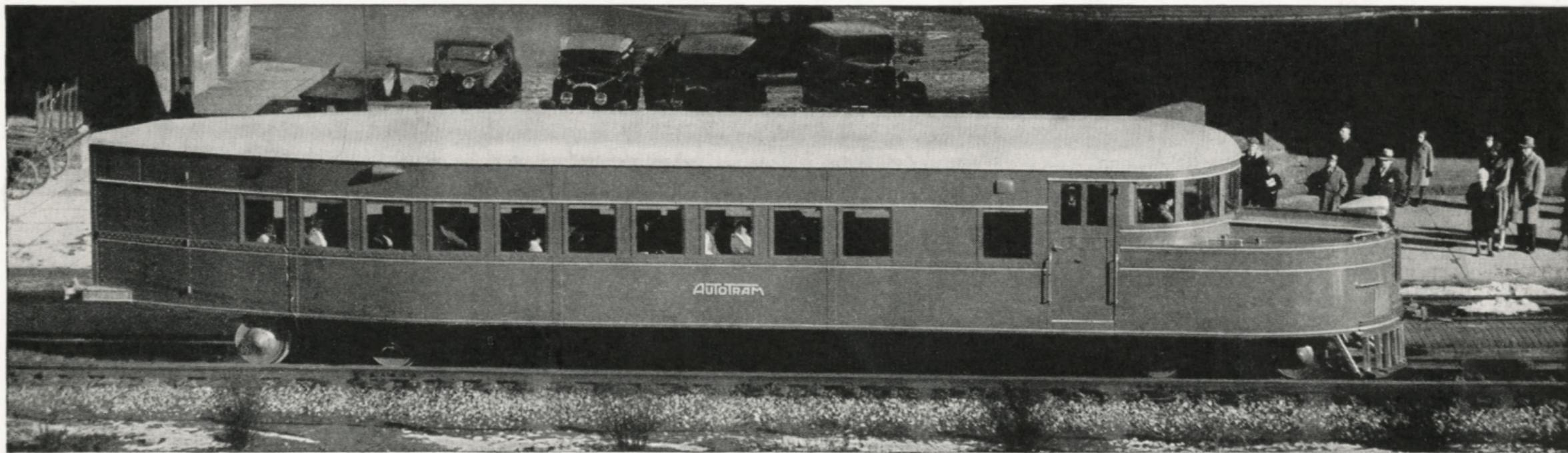
# A NEW-TYPE ALUMINUM RAIL CAR

sengers and economy of operation were uppermost in the engineers' minds. Although no similar vehicle has ever been made of heavy metals, it is conservatively estimated that the aluminum construction saves 18,000 pounds of weight. Yet the Autotram meets all the strength requirements of the American Railway Associ-

ation and is fundamentally qualified for main line use on any railroad.

While aluminum construction saves a large percentage of weight, *neither strength nor safety are sacrificed* in any way, because the light, strong aluminum alloys of the type used in the Clark Autotram are equal in strength to the other commonly-used structural metals. In some respects aluminum cars may be considered to have added safety features. They have less tendency to be top-heavy, as a greater proportion of their weight is concentrated in the lower part of the car. Furthermore, thorough investigation of high strength aluminum alloy structures has shown that they have a greater ability to cushion impact than those made of other metals.





**Clark Autotram**

**Clark Equipment Co., Battle Creek, Mich.**

*(over)*

## CLARK AUTOTRAM

### STREAMLINED

Autotram is a full streamlined, railway passenger coach.

### ALUMINUM

Body and center beam of strong, light, aluminum alloys.

### POWER

Direct gas power by 16 cylinder engine with mechanical drive and special hydraulic clutch.

### RESILIENT WHEELS

Autotram equipped with Clark-Goodrich resilient wheels with steel tires of standard A. R. A. contour: resilient wheels dampen rail shocks.

### INSULATION

Body completely insulated against heat, vibration and noise. Permanently sealed, double plate and safety glass windows.

### AIR CONDITIONED

Car equipped with forced ventilation; heated in winter and cooled in summer.

### CAPACITY

This model carries 40 passengers with conventional seating arrangement. Larger models in single, two and three car articulated units with full accommodations up to 164 passengers.

### SPEED

Capable of speeds up to 110 m. p. h. as specified.

### CONTROL

Car carries special electric signal apparatus assuring positive operation of all automatic railway signal devices.

### CAB

Engineer has 180° full vision through six safety glass windows. "Dead man" control on throttle.

### BRAKES

Fully automatic air brakes operating on all wheels and inter-connecting with modern railway equipment.

### ACCELERATION

Capable of extremely rapid acceleration and deceleration (quick get-away and rapid stopping.)

*Note: — This particular car has had seven months' service in operation.*

CLARK EQUIPMENT COMPANY  
Battle Creek, Michigan