Bosch. The motor tram accommodates 102 (25 seats) and the trailer 105 (28 seats). The cars are single-ended and equipped for passenger-flow (rear entrance, exit centre and front). The rheostatic brake on the motor car, when operated, applies the airbrake on the trailer by means of an electro-pneumatic valve. There are also air, hand and magnetic trackbrakes. The trucks are similar to those on the latest Hamburg cars and rubber is used plentifully to suppress noise. The car frames are largely welded and are covered with sheet steel. The electro-pneumatic contactors are placed under the centre of the body and can easily be reached by raising the floor boards. Six jack-knife doors are operated electro-pneumatically by the conductor and the signal to start can only be given when the front doors of the trailer are closed. The car is driven by means of a lever to the left of the driver; to his right hand is a lever which works the airbrake valve. To brake, the driver pulls the right hand lever backwards, and to apply traction current he pushes the left hand lever forwards (this arrangement is known in Germany as "the sympathetic arrangement"). Rail sanding, track brakes and warning gong are pedal-operated.

There is a secondary driving position with four driving notches at the rear of the motor car, worked by means of the appropriate levers removed from the forward position. An emergency handle at the conductor's seat can cut off the traction current and apply the air brakes. The four traction motors are arranged in pairs which are permanently in parallel, and in service can be operated in series parallel or in parallel.

# Baku (U.S.S.R.).

Electric trams came to this Soviet city in 1921, replacing horse cars. Before the war, there were 80 km. of route. Lines connect the town centre with the oilfields and one line (to Sabunchi) is 33 km.  $(20\frac{1}{2} \text{ miles})$  long. As the system has been developed in comparatively recent times, cars and fixed equipment are modern and construction of a second large depot was begun just after the war. Many women are employed as drivers and conductors. There are two trolleybus routes, opened in 1941.

### Stockholm.

In addition to the ten regular urban tramway services, eight extra rush hour and special services were operated last winter. All these extra services are provided with older type cars using one or two trailers. On the regular services, modern cars of types A 25, A 26, A 27 and modern trailers (type B 25) work on services 1 (motorcars only), 3, 4, 8, and 10. Services 6, 7 and 9 are worked by older cars rebuilt as single ended vehicles, with one or two trailers, whilst services 2 and 5 are worked by a mixture of older type and rebuilt motor trams and trailers.

We learn from one of our Swedish correspondents that the Stockholm Tramway Museum (mentioned on page 260 of our December, 1952 issue) is at present closed. Circular service 4, mentioned in the same paragraph, is of course now split into two routes as detailed on page 217 of the October, 1952 issue.

#### New Tramcars for Bucharest.

Horse trams began to run in Bucharest, Rumania, in 1870, and electric traction was inaugurated at the beginning of the century. The increase in population, together with the development of the economic and cultural life of the capital and the fact that many tramcars were destroyed in the war, has made it necessary to provide new rolling stock and to extend the tramways, especially to the thickly populated workers' quarters on the outskirts. The number of passengers carried on the Bucharest tramways amounted to about 22 million in the year 1905, 163 million in 1938 and 446 million in 1948. Now some 1,700,000 passengers is the daily average on the trams and buses.

Since 1945, 6.2 miles of double track and 2.1 miles of single track tramway have been laid. As the lines extended, so did the rolling stock. From February, 1947 to February, 1952 rolling stock was increased nearly five times.

The engineers, technicians and workmen of the Bucharest Transport Enterprise set to work to produce a modern tram with a larger capacity and higher speed. Now on the busiest line in the city, a bright red, streamlined car, with large windows, equipped with radio, and with a capacity of 166 passengers can be seen. It is the first streamlined tram to be built in Rumania and mass production of this type of tram has now begun.

The new car is 48 feet long and  $7\frac{1}{2}$  feet wide. It has four motors with a total of 220 h.p. The speed of the new car is twice that of the older trams. The tare weight is about 17 tons and the maximum speed over 35 m.p.h. Acceleration at maximum load is 4 ft. per sec. sec. and deceleration in normal service 3 ft. per sec. sec. The tram has metal coachwork with thermic and sound insulation and controlled ventilation. There are three doors, operated by an automatic signalling device. Trailers to match the new cars are also being mass produced.

Courtesy British-Rumanian Friendship Association.

# Adelaide.

From 3rd February, a new Board of five members has controlled the Metropolitan Tramways Trust. The State Government will assist the new Board with £A 1,180,000 over five years.

## Dutch News.

ROTTERDAM: As from the beginning of the summer service, the Rotterdamsche tramweg Maatschappij (a 3 ft. 6 in. gauge steam line) introduced a buffet service in its diesel trams, on the routes from Rotterdam to Oostvoorne and Hellevoetsluis. The steam trams, for the present, are still without this remarkable provision. This



Photo:
One of the new Bucharest cars referred to above.

N. N. Forbes.