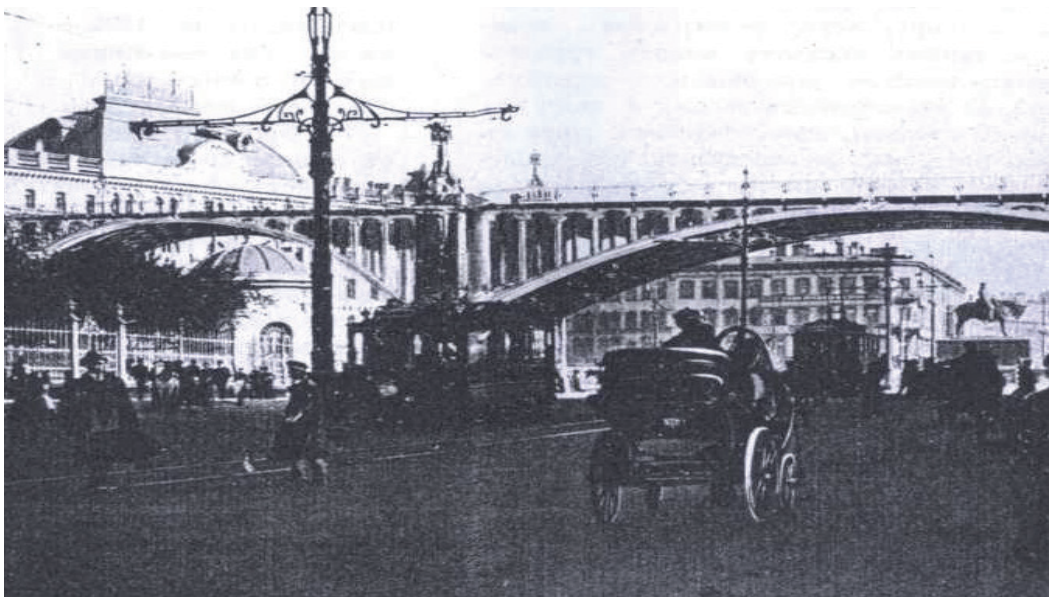
ABOUT THE PROJECT OF ELEVATED ELECTRIC RAILWAYS IN ST. PETERSBURG

In 1909, the Minister of Railways, S. V. Rukhlov, formed a commission, chaired by the Chief Inspector under the Ministry, to consider the electrification project of St. Petersburg railway junction. The fact is that the suburban passenger traffic on the sections of the railways adjacent to St. Petersburg is already large in itself, but, in addition, every year it increases, on average, it grows by 7,6 % per year. In 1908, using a suburban tariff, 20.722.000 passengers were transported. In the same year, only 1.904.000 long-distance passengers on all St. Petersburg railways etc., including those in Finland, were transported. Everyone knows how crowded are trains at certain times, in the summer period, and what kind of mess is at the stations. It is impossible to increase the number of trains, and it is also impossible to increase the size of a train. Therefore, it was assumed in all suburban areas, namely, to Luban, Gatchina, Oranienbaum and Sestroretsk, to introduce electric traction and build across the city two lines that, firstly, would connect all the railways, and, secondly, would serve as a collective apparatus by means of the city stations located on them, thus freeing out the existing stations from the suburban traffic, which would remain adapted for long-distance passengers. One of these lines was supposed to be laid from Flugov Lane (from the Primorskaya Railway Station) past the Catholic Cemetery, along Arsenalnaya Street, past the Tauride Palace and the Garden, through the Preobrazhensky Platz and further along Ligovsky Prospekt and from the end to the Baltic Railway. etc. The second line was also supposed from Flugov Lane to the river Neva, along it, under the Neva and the Field of Mars, further along the Catherine and Kryukov canals and up to the same Baltic Railway. etc. The first line was designed on metal and reinforced concrete overpasses, and through Nevsky Prospect near Znamenskaya Square it was planned to build a high reinforced concrete overpass, so high that it did not block the view of the monument to Emperor Alexander III (the view of this overpass is given). Indeed, this building not only would not spoil and would



The overpass on Znamensky Square against Nevsky Prospekt.

not block the view of the monument, but, conversely, decorate it, forming as a frame of the monument. The second line was partly designed under the earth: the tunnels under Neva, instead of the bridge, under the Field of Mars and in the channel of the Catherine Canal to Gorokhovaya Street, the rest also along the elevated metal and reinforced concrete overpass.

To supply electricity, it was intended to use the rapids on the river Volkhov, located near the village of M.-Arkhangelskoe, located 110 versts from St. Petersburg.

This project arose on the initiative of the engineer I. P. Taburno and was developed by him together with the engineers G. O. Graftio, D. D. Belago, and N.V. Rudnitsky[1]. These engineers have developed a fairly detailed design of both urban lines and the reconstruction of existing sites etc., required rolling stock, hydroelectric structures on the river Volkhov, as well as transmission lines for high-voltage electric power and transformer stations.

The Commission reviewed the project from a technical and economic point of view, made corrections and in principle recognized the timely settlement of the passenger movement of the St. Petersburg railway junction. On the economic side, the commission recognized the project as beneficial, not only not bringing monetary damage to the treasury, but, on the contrary, giving additional income.

The Minister of Communications, as is known, made a proposal to the State Duma to allocate him funds for the production of additional research, mainly on the study of the r. Volkhov. These additional studies will soon be over; they are produced by Administration of inland waterways and highways.

In No. 28 of *«Zheleznodorozhnoe delo»* last year, this project was described in more detail. It is clear from this statement that the main obstacle in this case is the interests of St. Petersburg homeowners, still dominant in the City Duma and considering their tenants as such tributaries, to facilitate the participation of which the proposed measures without their, homeowners, permission should not be accepted.

(Zheleznodorozhnoe delo, 1911, No. 17–19, pp. 142–143) ●

[1] All these four engineers were leaders in the construction of St. Petersburg electric trams.

NEWS

Trans-Mongolian Railway.– An exchange of views took place between the Russian and Chinese governments on the project for construction of the Trans-Mongolian railway, which will connect Beijing with one of the Trans-Baikal railway stations. According to the plan, construction of the railway from Kalgan to Lake Baikal must be completed by 1913. The most difficult place for construction of the line is the Gobi Desert, the crossing through which, at the present time, takes up to 50 days, whereas by rail this distance can be traversed in 40 hours (*«Vestnik Putei Soobscheniya»*, 1911, No. 17).

Obviously, such a railway can be and just considered in the Commission on new roads, introduced by private individuals from the local Kyakhta and Kalgan, Russian merchants, the road from the station Mysovaya of Transbaikalian railway to Kyakhta and Urga, so that the Chinese government build the railway from Urga to Kalgan. They say that the Commission approved this road, but found it to be of poor profit and therefore, subject to the construction with funds of a treasury. Of course, even the treasury could fulfill the above two-year construction period, if it changes its procedures accordingly, and the private company can, if the rate of work is high enough. As for the low profitability or unprofitability of the road, the Commission in this case disagreed with the Colonel Kozlov, an associate of Przhevalsky, who studied the region directly. Its rules do not allow counting on faith and at the same time do not lead directly to truth, but only to the minimal assumptions about profitability, which can be harmful to the state, delaying the construction of the railway.

(Zheleznodorozhnoe delo, 1911, No. 17–19, p. 144) ●

The editorial board expresses gratitude to the staff of the Library of MIIT university for their contribution to preparing this publication.