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# Russian Metropolitan Railway Stations as Historical Architectural Masterpieces



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#### **ABSTRACT**

According to the author of the article, the appearance of the first railway stations immediately became the most striking image of the time. The history of the architecture of Russian railway stations begins at the same time when the first railway in Russia was built connecting St. Petersburg to Pavlovsk. Previously existing post stations and the so-called road imperial palaces served prototypes for railway stations.

The railway station is, first, a story in which both the most interesting architectural and social plots collide. The railway station offers passengers the most vivid images of our time. The architects who designed the first railway stations had to solve problems that no one had ever encountered before: to cover train sheds by a roof, to design platforms, lighting, ventilation, acoustics... All this made

the railway station the most technically enriched architectural genre of its time. And in this sense, the railway station architecture is a very interesting plot, in which everything changes very quickly and where all human relations are very aggravated. Therefore, the railway station is a condensed replica of society. Therefore, at the railway station, you can always very clearly see how society is organised. For example, at imperial railway stations, division of passengers per travel classes was obvious and inherent in the architectural program itself. The imperial pavilions, the imperial rooms also make part of the story... The railway station is, first, an image of modernity, mobility and a history of boundaries between the country and the city. This is especially interesting in the case of metropolitan railway stations.

Keywords: railway station, railway tracks, train shed, cable-stayed train shed, platform, station architecture, water tower, truss arch.

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#### INTRODUCTION

The first railway stations <sup>1</sup> in all countries appeared immediately with the mergence of the first railways and became an integral part of large cities, and often their attractions. Railway station buildings [in Russia] were created by many famous architects: I. I. Strukov, N. I. Orlov, R. N. Kuzmin, K. A. Ton, A. V. Shchusev, F. O. Shekhtel and others. As a token of gratitude, for example, busts of architects were installed in front of Moscow railway stations. I. K. Roerich, E. E. Lanseray, B. M. Kustodiev and other famous artists participated in design of facades and internal halls.

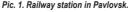
The construction of railway stations is a kind of page in the history of architecture. Initially, the architecture of railway stations had been influenced by traditional public buildings while since the end of 19th century it was associated with the search for functionally grounded types of railway station buildings both in Russia and abroad. This can be illustrated by the examples of the buildings of railway stations built according to the project of K. A. Ton in Moscow

and St. Petersburg, the end points of Petersburg-Moscow railway, as well as of Rizhsky railway station in Moscow. In the 1860s and later, railway station buildings at small stations were often built of wood. The abundance of carved details made them very elegant. Such buildings adorned the railway between St. Petersburg and Moscow. The design of the main station building in the city of Ivanovo-Voznesensk was of considerable artistic and architectural value and was used with minor changes in several cities of this region. In large cities, red-brick station buildings were built. For example, in Moscow, Smolensky (Belorussky) railway station, was erected using this design in 1870. At the end of the 19th and the beginning of 20th century, railway station buildings built in the Art Nouveau style became important elements of urban architecture, often forming the appearance of squares. Striking examples of such structures are the buildings of Small Moscow ring railroad, where 15 railway stations were built in 1903-1908.

A unique architectural ensemble in Moscow is the so-called square of three railway stations. In 1987–1990 railway stations were reconstructed to renew their appearance, expand the premises for passengers, improve service offered to them, and equip stations with modern equipment.

Many architecturally remarkable railway stations were destroyed during the war years and

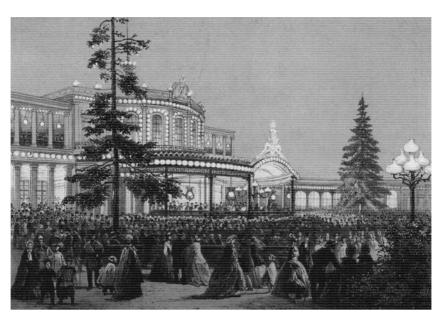






<sup>&</sup>lt;sup>1</sup> [The Russian word «vokzal» meaning railway station] originated from the English word *Vauxhall*, the name of a park with a concert hall for an entertainment variety program [Vauxhall gardens], located in 17<sup>th</sup> century in the suburbs of London; in Russian, this word was first associated with the station building in Pavlovsk. – *Author's note for Russian readers edited by the translator*:





Pic. 2. Ball at Pavlovsky railway station.

then rebuilt following their initial design or created as new buildings. Hence, the interest to the initial appearance of many significant railway stations.

## FIRST RAILWAY STATION IN RUSSIA<sup>2</sup> First Railway Station

The railway station in the city of Pavlovsk (Pic. 1) was built at the terminal station of the first railway in the Russian Empire which was Tsarskoye Selo railway. On May 23, 1838, a concert building with a restaurant, designed by the architect A. I. Shtakenshneider, was opened to the public in Pavlovsky Park. Pavlovsky Park belonged to the Grand Duke Mikhail Pavlovich, who, at the request of his brother, Emperor Nickolay I, allowed a railway to be built through the park. Pavlovsky railway station became the first permanent concert hall in Russia where symphony orchestras performed. It was there that outstanding musicians Johann Strauss (son), A. K. Glazunov, R. M. Glier, A. K. Lyadov, N. A. Malko, V. I. Suk, V. V. Andreev, S. S. Prokofiev, L. V. Sobinov, N. N. and M. I. Figner, I. V. Ershov, A. D. Vyaltseva, F. I. Shalyapin performed.

After the fire in 1844, the railway station was restored and re-opened. In 1860, 1871, 1884 the railway station was again rebuilt and enlarged. In 1875, according to the project of the great N. L. Benois, Pavlovsky theatre was built nearby. After 1918, the music station and the theatre formed a single complex. During the Great Patriotic War, the railway station building was destroyed.

#### Imperial Railway Station in Tsarskoe Selo

At the end of 19th century, the Alexander Palace became the permanent residence of Emperor Nickolay II. Immediately there emerged a state need to provide transport links between St. Petersburg and Tsarskoye Selo for the Tsar and the royal family. The existing Tsarskoye Selo branch of the railway was overloaded and could not provide necessary safety and comfort to high society people. Therefore, in 1899, it was decided to build its own imperial route from Vitebsky railway station to the Alexander Palace. The allocated 4 million rubles sounded astronomical amount at that time.

In 1902 the «imperial track» was put into operation, but the Imperial railway station (Pic. 3) was built only in 1912, on the site of the burnt down wooden imperial pavilion. A two-hundred-meter-long passenger platform adjoined the railway station. It was used by members of the imperial family, foreign guests and high-ranking officials arriving in Tsarskoe Selo.

<sup>&</sup>lt;sup>2</sup> The journal has published many papers dedicated to the architecture and history of railway stations. As it is impossible to quote all the publications, here are just few examples: Vladimirov, Yu. V. «To fly from the station to the masquerade...». World of Transport and Transportation, 2015, Vol. 13, Iss. 6, pp. 272–279; Ovchinnikova, E. A. The CV of the Railway Station. World of Transport and Transportation, 2012, Vol. 10, Iss. 2, pp. 204–210. – Ed. note.



Pic. 3. Imperial railway station in Tsarskoe Selo.

### Railway Stations of the First Railway Main Line in Russia

At the beginning of 1842, Nickolay I ordered the construction of a railway between St. Petersburg and Moscow to begin. Construction of the railway started in the summer of 1843 following the project of P. P. Melnikov, N. O. Kraft and A. D. Gotman. And already on May 5 (17)<sup>3</sup>, 1847 at 10:00 the first passenger train set off to the village of Kolpino from the place near which Nikolaevsky railway station was subsequently built (it was called Nikolaevsky railway station until 1924, then until 1930 it was named Oktyabrsky railway station, then up to the present time it has been called Moskovsky).

Nikolaevsky railway station (Pic. 4) was designed by the architect K. A. Ton, with participation of R. A. Zhelyazevich and built in 1844–1851. The building combines the forms of the Italian Renaissance and Old Russian motives. A novelty at the time was a solution to cover the end sections of railway tracks and adjacent passenger platforms with metal roofing. If the passenger station building itself was designed by the architect Ton in traditional forms and with conventional structures, then the train shed had no past architectural analogues. The triangular trusses of the platform roof created a completely new image of the interior of a transport facility.

The railway station building is round in plan and is located lengthwise along the entire Znamenskaya Square (currently it is Vosstaniya square). Konstantin Ton used the motives of the town halls of Western European cities, the clock tower indicates the direction of the main entrance. The Emperor personally took an active part in the design of the new square near the station.

N. I. Miklukha (father of the future ethnographer N. N. Miklukho-Maclay) was appointed the first head of the passenger and railway station of Petersburg-Moscow railway. His apartment was located in the station building, Besides, the offices of employees, the railway administration, and the imperial premises were located there as well.

In 1868, significantly increased passenger traffic resulted in the need to start the reconstruction of Nikolaevsky railway station. A two-storey wing was added for receiving luggage, the right wing of the building was connected to the royal chambers. In 1898, from the side of Ligovsky Avenue, a red brick building of Nikolayevskaya railway office was added.

In the late 1950s, based on the project of the architect V. I. Kuznetsov, the building of Moskovsky railway station was reconstructed and expanded, and a new outbuilding was added to the right wing. In 1967, a new «Light Hall» was opened (also designed by V. I. Kuznetsov), which increased the area of the railway station by 2700 square meters. A monument to Lenin



<sup>&</sup>lt;sup>3</sup> Here and further two dates mean respectively dates according to old and modern style calendar used in Russia. – *Translator's note*.





Pic. 4. Nikolaevsky railway station in St. Petersburg.

by the sculptor L. A. Messa was erected inside the hall. In 1976, the area between platforms and the light hall was covered with an aluminium shed. In 1993 the bust of Lenin in the arrival hall was replaced by the bust of Peter I by A. S. Charkin and V. V. Olenev. In the early 2000s the railway station was renovated.

Leningradsky railway station (it was called Peterburgsky railway station until 1855, Nikolaevsky railway station in 1855–1923, Oktyabrsky railway station in 1923–1937 (Pic. 5) is the oldest of nine railway stations of Moscow. The station building was built in 1844–1851 by the architect R. A. Zhelyazevich based on the project designed by K. A. Ton. For the future site of railway station, the construction commission chose Kalanchevsky wasteland on the northeastern outskirts of Moscow.

The construction of Peterburgsky railway station in Moscow began in 1844 under the direction of P. A. Kleinmichel, the administrator (the Minister) of transportation, who had disagreements with Konstantin Ton. So, Kleinmichel demanded the use of brickwork with thin seams, which seemed to him the most aesthetic. The architect refused to comply with this instruction, fearing decrease in wall strength and the cracks. As a result of conflicts in 1847, the work was entrusted to R. A. Zhelyazevich, which was distinguished by greater compliance with administrative instructions.

The construction was completed in 1851. The building was a stylistic pair of the station in St. Petersburg, but it was smaller. The central part of the building was occupied by a spacious

two-storey lobby. The station premises were decorated with oak parquet and Swedish marble stoves. The imperial halls had massive oak doors and mirrored wardrobes. The second floor of the main building of the station was allocated for apartments of employees.

On the side of the rear façade, two platforms extended from the building. A building with waiting rooms and station services was located along the right platform. For different strata of the population, separate premises were provided, but they all were the same in their purpose. The left platform was separated from the outer space by glass arches. Two additional pavilions adjoined it. One was intended to serve the royal family; the other was used for distribution and dispatch of luggage. Both platforms were connected by the cross platform and the lobby. The railway tracks were connected by turntables to rearrange the locomotives. The cable-stayed train shed was covered with a shed metal ceiling, and this was an innovation of that time.

The reconstruction of Leningradsky railway station took place in 1934. The cashier area was expanded, and the former imperial halls were rearranged to become a mother-and-child room. In 1949, the station premises were restored. In the mid-1970s, next reconstruction and redevelopment of the station took place (Pic. 6). New station tracks were laid, the building was expanded, and the third floor was added. In 1989–1993 during restoration, platforms were lengthened, roofs were erected over the platforms, and lighting was improved. In 2008–2013 during reconstruction, the area of the station was



Pic. 5. Nikolaevsky railway station in Moscow.

increased by 8000 m<sup>2</sup>, of which 3000 are intended for commercial use, the layout of the station was changed, the main facade of the building was repaired, and the bust of Lenin was dismantled.

The railway station at Bologoye (Pic. 7), opened in 1851, was built based on the standard design by the architect R. A. Zhelyazevich, assistant to K. A. Ton. The same station buildings were erected in Malaya Vishera and Tver (Pic. 8), and some very slightly different station buildings were built in Lyuban, Okulovka, Spirov and Klin.

The one-storey brick building of the railway station, 115 m long, with platforms on both sides, is located between railway tracks. In 1877, the

second floor was added to the station building. During the Great Patriotic War, Bologoye station was subjected to brutal bombing. In May 1985, Bologoye station was awarded the Order of the Patriotic War of I degree for logistics services provided to the Soviet Army and the Navy during the Great Patriotic War.

The railway station at Tver (Pic. 8) was built in 1845–1848 based on the standard design of the first-class station by architect R. A. Zhelyazevich. The building is of island type, located between two main routes, and built in the Russian-Byzantine style with elements of Florentine architecture (Bramante's windows). The building



Pic. 6. Leningradsky railway station.







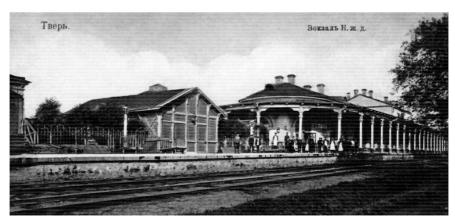
Pic. 7. Railway station of Bologoye.

is brick plastered, two-storey, 115 m long with rounded end facades, surrounded by a gallery on cast-iron columns allowing passengers to exit to the platform. It consisted of halls of respectively first, second, third classes, cash, luggage and telegraph offices, buffet, kitchen. In Moscow wing of the railway station there was a department for cashier receipts and luggage, in St. Petersburg wing there was an imperial compartment (five rooms), which played the role of representative offices, in which solemn ceremonies were held on occasion of arrival of His Imperial Majesty. A garden was laid out in front of the imperial compartment. The interior used drapery, coloured, and mirrored glass, oak parquet for the floor, marble fireplaces made by the Italian master P. Katozzi. The walls were covered with paper floral wallpaper with gilded baguettes. The doors were made to order by the carpenter's master Hasse in St. Petersburg. The most august persons

have repeatedly visited the station, they were Nickolay I, Alexander III, Nickolay II.

In 1984–1990 the railway station complex was expanded, a new station building (coastal part) with a capacity of 2000 people was built. In the waiting room, a greenhouse was set up comprising more than 200 species and varieties of various plants collected.

By the beginning of 2000s a significant part of the historical architectural appearance of the railway station had been lost. In particular, the interiors of the station (including the imperial room), the canopy and columns of the front facades of the building were lost, the original appearance of the windows was changed. During the reconstruction of 2012–2015 the historical appearance of facades and the interior of the station, including the imperial room, halls of the second and third classes, were restored. The original Mettlach tiles, lost by beginning of the reconstruction, were replaced with



Pic. 8. Railway station of Tver.

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Pic. 9. Nizhegorodsky railway station (now Kursky railway station).

similar ones manufactured in Great Britain; the crystal chandeliers in halls that did not survive were made at Tver Glass Factory.

#### **Moscow Railway Stations**

The history of *Kursky railway station* began with construction of Nizhny Novgorod railway and construction of Nizhegorodsky railway station in 1861. The railway station was built outside the city limits behind Kamer-Kollezhsky Val. The site was personally chosen by P. P. Melnikov, then the Minister of Railways. Land plots on the territory of Moscow district [outside city territory] was cheaper, and taxes and labour organisation requirements were noticeably softer than within Moscow.

The founder of the railway station, the Main Society of Russian Railways, intended to further obtain land closer to the city centre, therefore, documented the station as temporary one, reluctantly allocated funds for construction and limited itself to a one-storey wooden building designed by the architect Maximilian Arnold.

In November 1866, the railway was extended to Serpukhov, and then to Tula, Oryol, and Kursk. With the increase in the number of passengers, two annexes were adjoined to Nizhegorodsky railway station (Pic. 9), but this was still not enough: a new railway station was required. The discussion on its construction dragged on for 30 years. Many different options were proposed, but the Main Directorate of Russian Railways could not finance them.

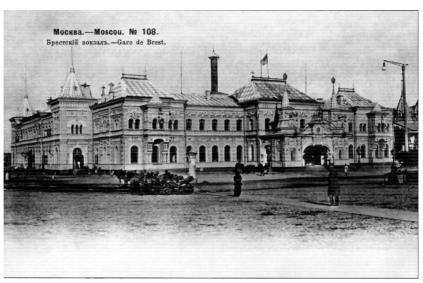
The situation was resolved after Nizhny Novgorod railway was sold to state treasury in 1884 and Moscow–Kursk, Nizhny Novgorod and Murom railways were incorporate. Nizhegorodsky railway station was merged with the new station laid on the Garden Ring by the architect N. I. Orlov.

After the opening of Kursky railway station in 1886, Nizhegorodsky railway station was closed. In the 1930s, reconstruction of Kursky railway station was conceived, but it was finally limited to reshaping the existing building into the classical style. In 1968–1972 after all, a radical reconstruction was carried out. The new building received a two-hundred-meter-high glazed facade, lined with a grid of aluminium sashes, and an original folded roof with a ninemeter peak. The old building was included in the new one, retaining the architectural decor in its central part, decoration in one of waiting rooms and the facade facing railway tracks. The building was faced with marble. The final design did not include glazed strips between roof spans, which would have allowed penetration of sunlight, and the 30-storey hotel complex on the south side of the station square. However, the new station became the largest in the country. More than 6,5 million passengers are served there every month.

Belorussky railway station (in 1870–1871 it was called Smolensky railway station, in 1871–1912 and then again in 1917–1922 it was named Brestsky railway station, in 1912–1917 it got the name of Aleksandrovsky railway station, in 1922–1936 it was known as Belorussko-Baltiiskiy railway station) (Pic. 10) was opened on September 19, 1870, together with Moscow-







Pic. 10. Brestsky (now Belorussky) railway station at the beginning of 20th century.

Smolensk railway. In November 1871 the railway was extended to Brest and the railway station became known as Brestsky station.

In the early 1890s, the railway became double-tracked, while there was only one departure platform. The reconstruction of the railway station, which could no longer accommodate all passengers, began only in 1907. On May 15, 1910, the right wing of the new station was opened, and on February 26, 1912, the left wing (Pic. 11) followed. The project was authored by the architect Ivan Strukov. On May 4, 1912, the railway was renamed to Aleksandrovskaya, and the railway station was renamed Aleksandrovsky in honour of Emperor Alexander Pavlovich.

In August 1922, Aleksandrovskaya and Moscow-Baltic railways were merged into Moscow-Belarusian-Baltic railway, so the railway station was renamed to Moscow-Baltic railway station. In May 1936, after another reorganisation of railways, the railway station received its current name of Belorussky railway station.

In September 2007, Aeroexpress company began reconstruction to organise a railway connection to Sheremetyevo airport. The new air terminal, with an area of 600 m², is located in the fourth hall of Belorussky railway station. The terminal was opened on August 27, 2009. Railway express trains began to deliver passengers to Sheremetyevo Airport station.

The sights of Belorussky railway station comprise a mosaic panel on the theme of the Great October Socialist Revolution; portraits of the Soldier-Liberator, Alexander Nevsky and Georgy Zhukov; a memorial plaque dedicated to the first performance of the song «Sacred War» on June 26, 1941; the monument «Farewell of Slavianka», opened on May 8, 2014 on the platform.

Yaroslavsky railway station (from 1862 to 1870 it was called Troitsky [Trinity] railway station, from 1922 to 1955 it was named Northern railway station) was opened and consecrated by Metropolitan Filaret on August 18, 1862 (Pic. 12) A small two-storey U-shaped building with strict architectural forms leading to the platforms. The roof of the railway station was decorated with a flagpole with the banner of the Ministry of Railways. The left building was occupied by the Railway Board, the waiting room, and the luggage compartment, the right one was occupied by halls for different classes of passengers.

By 1870, construction of a railway line to Yaroslavl had been completed, passenger traffic increased, and the station was renamed to Yaroslavsky. In August 1897, the train arriving on the platform accelerated too quickly. The wall of the building of the Railway Board was destroyed. Fortunately, no one was there at the time.

With the increase in passenger traffic, it was decided to reconstruct the railway station. In 1895–1897 the east wing of the railway station was rebuilt, and construction of a water tower began. At this time, the head of Moscow-Yaroslavl Railway Society, Savva Mamontov, was accused of embezzling funds, and the new management preferred to choose a more



Pic. 11. Brestsky railway station (now Belorussky railway station).

economical project. In 1900, the railway station building was expanded with two wings, but this did not solve the problem. Fyodor Schechtel became the author of the new architectural concept. The architect's idea to implement the «North Russian style with some monastic tinge» was unanimously approved by the customers and was also liked by Nickolay II. Schechtel retained part of the former building, expanding only the passenger area using two side buildings on the side of Kalanchevskaya Square and one at the rear facade. He used materials that were new for that time: reinforced concrete and metal structures, which significantly reduced the cost and facilitated construction. Work began in the spring of 1902 and was completed two years later.

The new building (Pic. 13) was more than three times larger than the old one. The right side of the building was occupied by service and ceremonial rooms, the left hosted the waiting rooms. The second floor was allocated for offices of Railway Board members and for a conference room. The architect managed to skilfully use the space to place a large lobby with cash desks, spacious lounges for passengers, and to equip convenient exits to platforms.

In 1922 the railway station was renamed to Northern railway station to remove the reminder of Yaroslavl mutiny. On June 20, 1929, the first electric train departed from Northern railway station. During this period, the building could not cope with the increased passenger traffic and two years later it was reconstructed again. The railway tracks were moved away, increasing the inner part

of the building. Because of this, the columns previously built above the north-eastern platform were then located in the centre of the waiting room. The lamps created according to Schechtel's sketches were removed, the wooden wall cladding, benches and food stalls were dismantled.

In the post-war years, Schechtel's interiors were rebuilt. The upper part of the walls between the semi-columns of the vestibule was decorated with reliefs depicting fishing and hunting, and the previous paintings by Konstantin Korovin were transferred to the storerooms of Tretyakov Gallery. The name of Yaroslavsky railway station returned only in 1955.

During the reconstruction of 1965–1966 railway tracks were pushed even further and between the wings of the old building a two-storey annex with a glass wall and reinforced concrete vaults was erected supposing that it responded to the «spirit of the time».

In the autumn of 1961, the management of Yaroslavsky railway station was the first in the city to take a decision to charge a fee for passage of persons accompanying the passengers to the carriages to reduce crowding at the platforms. In the future, the rule was repeatedly cancelled and renewed. In 1995, the layout of the station was greatly changed, which made it possible to double the capacity of the facility. In addition, the columned and heraldic halls were restored.

The building of Yaroslavsky railway station is considered one of the outstanding creations of F. Schechtel. He managed to combine elements of Old Russian architecture with Art Nouveau decor. The structure acquires a special similarity







Pic. 12. The first building of Yaroslavsky railway station.



Pic. 13. Yaroslavsky railway station at the beginning of 20th century.

with the «terem» due to the combination of different architectural volumes. Thanks to this technique, unique images of the structure are formed from different points of view, the left tower being a single component for all of them. According to the architect's idea, it and the lobby became the main vertical axes of Yaroslavsky railway station. Their importance is emphasised by the shape of the roofs: a ridge-shaped roof rises above the vestibule, and a high tent crowns the tower.

The massive volume of the lobby is highlighted by a projection (*risalit, avant-corps*), which is intended to personify the «city gates» leading to a spacious arched waiting room. Above the entrance, the architect placed the coats of arms of the main cities of Yaroslavl railway: Moscow, Arkhangelsk, and Yaroslavl.

Savyolovsky railway station (before 1912 it was called Butyrsky railway station) (Pic. 14) was opened on March 10 (23), 1902. The construction of Savyolovskaya line to the village of Savyolovo with further plans to continue it to Kalyazin, Uglich and Rybinsk was initiated by Savva Mamontov, chairman of the Board of Moscow–Yaroslavl railway. The

<sup>&</sup>lt;sup>4</sup> Separate living quarters occupied by women belonging to families of illustrious noblemen in ancient Muscovite Russia, the upper storey of a home or wooden castle. – *Translator's note*.

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Pic. 14. One-storey building of Savyolovsky railway station.

building was mainly one-storey (it had two storeys only in the central part, where the service apartments were located). In the distance, there was a 30-meter water tower, necessary for steam locomotive traction. This tower, that has the same age as the railway station, is its only historical building that has survived intact to this day.

The railway station, which had not been reconstructed since its foundation, became dilapidated and could no longer cope with the increased passenger traffic. In 1987, work on its expansion began. The reconstruction was completed on September 1, 1992. As a result, the railway station building became two-storey, the internal area increased by 2,5 times, the style features were preserved.

In December 2012, the next modernisation of the railway station building was completed. A new waiting room, a ticket desks hall, a restaurant, and a medical centre were opened. The area of the railway station is 6000 m<sup>2</sup>.

Since 1999, it has been the only railway station in the city serving only suburban electric trains. Almost 100 electric trains depart daily from the station on Savyolovsky route and 28–33 electric trains on Belarusian route. In 2020, Moscow Central Diameters project was implemented, which provides for a through high-speed route Lobnya–Odintsovo through Savyolovsky railway station.

*Kievsky railway station* (until 1934 it was called Bryansky railway station) was built in 1914–1918 to replace old building (Pic. 15). Architectural project was developed by

I. I. Rerberg with the participation of V. K. Oltarzhevsky, the project of the train shed and of hall roofs was designed by V. G. Shukhov, sculptures were created by S. Alyoshin, painting of halls was created by artists F. I. Rerberg and I. I. Nivinsky.

The architectural concept of the station, the murals of the halls and sculptures refer to the Patriotic War of 1812. The station was built in the style of neoclassicism with elements of the Empire style. The total area of Kievsky railway station is over 36 thousand m², the passenger traffic is over 400 people/hour (Pic. 16).

A train shed adjoins the station building: the space above the platforms is covered by a huge single-vaulted glazed arched roof (length 321 m, span width – 47,9 m, height – 28 m, weight of the structure – more than 1250 tons), shaped like a parabola. High steel three-articulated arched trusses demonstrate the grace of a stately structure.

The first train from the unique platform of Kievsky railway station departed on February 18, 1918.

The general plan for reconstruction of Moscow of 1935, to emphasise the grandeur of Kievsky railway station building, provided for expansion of the area of Kievsky railway station to Dorogomilovskaya street and for architectural design that would have highlighted the ensemble with the Moscow River and the Borodinsky bridge.

In 1940–1945 on the north side of the station, a building with a suburban ticket office and Kievskaya metro station was additionally built.







Pic. 15. Old building of Bryansky railway station.



Pic. 16. Bryansky (now Kievsky) railway station in 1920s.

The design of the suburban pavilion maintained the general style of the station building, while using the features of Venetian palazzo.

In 2003–2004 the train shed of Kievsky railway station was rebuilt according to a simplified project: 27 original riveted steel arches of the ceilings were replaced by welded ones, only four riveted Shukhov arches were left at the end of the roof, adjacent to the station building; transparent polycarbonate is used instead of glass. A mechanical clock is installed on the tower of Kievsky railway station.

After the reconstruction of 2012–2013, a new turnstile hall for suburban trains was opened at the station.

The first building of *Kazansky railway station* (until 1894 it was called Ryazansky railway station) (Pic. 17) was wooden and opened in 1862 to serve Ryazan railway, and since 1894 to also serve Kazan railway. In 1864, a stone

railway station building was built (architected by M. Yu. Levestam). It was a small building with a common roof with a train shed over tracks and platforms. A clock tower was placed over the entrance. The station was cramped and inconvenient, and its architecture was rather modest. The building was rebuilt many times, and when Moscow-Kazan railway opened in 1893, and the passenger flow increased greatly, construction of a new station building was highly required. However, it was only in 1910 that the board of the joint-stock company of Moscow-Kazan railway decided to build a new building. The architect Shchusev proposed a project in the national-romantic style with elements of the neo-Russian style and art of the East.

Construction began in 1913 and overshadowed all other construction projects regarding Moscow stations. N. K. Roerich, A. N. Benois, B. M. Kustodiev, E. E. Lanseray, Z. E. Serebryakova



Pic. 17. Old building of Kazansky railway station.

took part in creation of the interiors of Kazansky railway station. In 1914–1915 the foundations were laid, a boiler room, a luggage compartment, a main entrance with a tower were under construction. However, during the World War I, construction was repeatedly stopped, and only by the winter of 1916–1917 builders had managed to build a roof. In 1919 the building was commissioned in a simplified form. In 1926, the first stage of construction and decoration was completed. In 1940, the last stage of construction was completed, but many of Shchusev's plans remained unfulfilled.

In 1935, an exit from Komsomolskaya metro station was built into the former luggage compartment. In the 1950s a commuter hall was completed, which was connected to the lobby of the metro station. In the 1970s, the railway station was reconstructed, and its transit capacity was increased.

In 1987–1997 the building was extensively reconstructed. The appearance was renewed, the internal premises were expanded and re-planned, roofs were erected over the platforms, the building was equipped with modern technology. In 2012, a two-storey ground building for suburban traffic was erected on the platforms.

Kazansky railway station (Pic. 18) is a complex composition in which symmetry is deliberately broken and in which different-sized masses of architectural volumes are connected to each other. The architect, wishing to «coordinate» the building with two already existing ones [now Leningradsky and Yaroslavsky railway stations] and at the same time to give it individuality, presented buildings elongated in a line with rooms of various functions in the form of volumes of different height, width and rhythm with peaked roofs, a small clock tower, and a high corner tiered tower above the base in the form of an arched passage. As a result, the station seems to be a complex historically formed for many years, and not implemented by a single architect according to a single project.

Paveletsky railway station (Pic. 19) was designed by architects N. A. Kvashnin and Yu. F. Diderikhs and opened on September 1, 1900, to serve Ryazan–Ural railway. Initially it was called Saratovsky railway station due to the fact that management of Ryazan–Ural railway had headquarters in Saratov, only after the Great Patriotic War the railway station received its present name after the village of Pavelets of Ryazan region.

The railway station was built according to the construction canons of that time: the building is symmetrical with an elevated centre, has high windows, a wide and convenient entrance. On the main facade from the side of the square, there were entrances, a lobby, a luggage compartment,







Pic. 18. Kazansky railway station.



Pic.19. Paveletsky railway station.



Pic. 20. Vindavsky (now Rizhsky) railway station.

halls for the public, ticket offices, a telegraph office, a pharmacy, and a buffet that all needed to be situated closer to the public halls. In the centre there is a high, extensive operating room that separated the first- and second-class rooms from the third-class room.

A brick building was built on a rubble foundation with two main storeys and with a third storey situated above the domed part of the building and with attics above the side protruding parts. The length of the station building was 83,7 m. The outer walls were 2,5 bricks thick: a fair margin of safety for a low building. The outer surface of walls was faced with special bricks, the plinth was faced with cut stone, the vestibule and cornices in the halls had stucco decorations. There was solidity in everything.

Office premises, a place for gendarmes, ceremonial royal rooms and exits to platforms were concentrated along the facade of the station from the side of railway tracks.

A funeral train with the body of V. I. Lenin arrived at the station on January 23, 1924. In 1979–1980 to the left of the railway station the pavilion-museum «Funeral train of V. I. Lenin» was built. From 1941 to 1992, the square in front of the station was called Leninskaya in memory of this event. In the mid-1920s, the station itself was called Leninsky.

In the 1980s a general reconstruction was carried out. The thoroughly renovated Paveletsky railway station was opened on November 3, 1987. The style of the previous building was preserved. The new railway station exceeded the old one by six times in volume and by four times in terms of capacity and has become much more convenient. Now it can receive, serve and accommodate in its halls about 10 thousand people per hour, this is the level of a very large transport interchange hub.

Rizhsky railway station (before 1930 it had been called Vindavsky railway station, until the mid-1930s its name was Baltiisky railway station, until 1946 it was called Rzhevsky railway station) (Pic. 20) was built in 1897–1901 during construction of Moscow–Vindavo–Rybinsk railway. The project was authored by St. Petersburg architect S. A. Brzhozovsky, the

author of Vitebsky railway station in St. Petersburg.

Due to the low load of Rizhsky railway station, in the early 2000s, it was proposed to close it, transfer suburban trains to other stations and eliminate the tracks. The plan has never been implemented.

On July 31, 2004, an exposition site of the Museum of the history of development of rolling stock of Moscow Railway was opened near the Rizhsky railway station. The site features locomotives and wagons.

Railway stations are large public buildings that are important for the city and the country. Often, it is from them that visitors get their first impression of the city, and sometimes of the whole country. Therefore, such structures must meet the high requirements of the architectural composition. Old Russian train stations not only meet these requirements. They can be confidently called architectural masterpieces.

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