

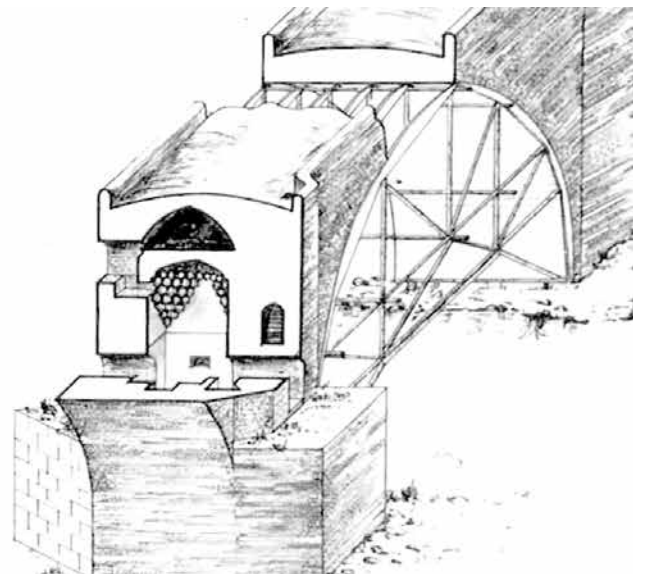
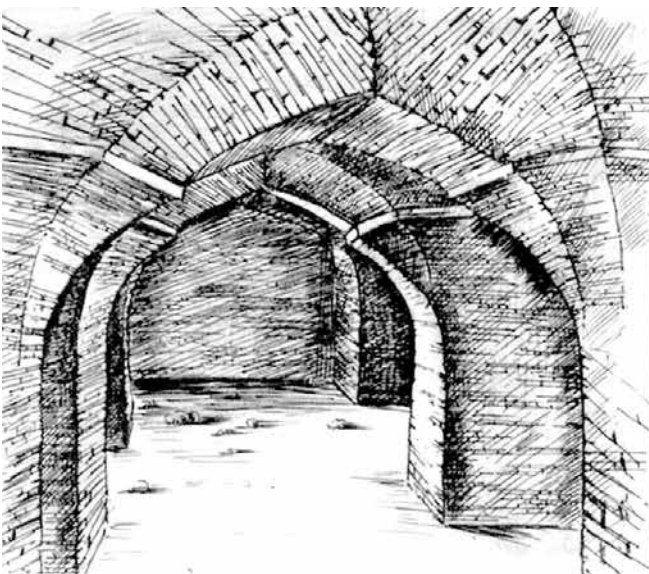
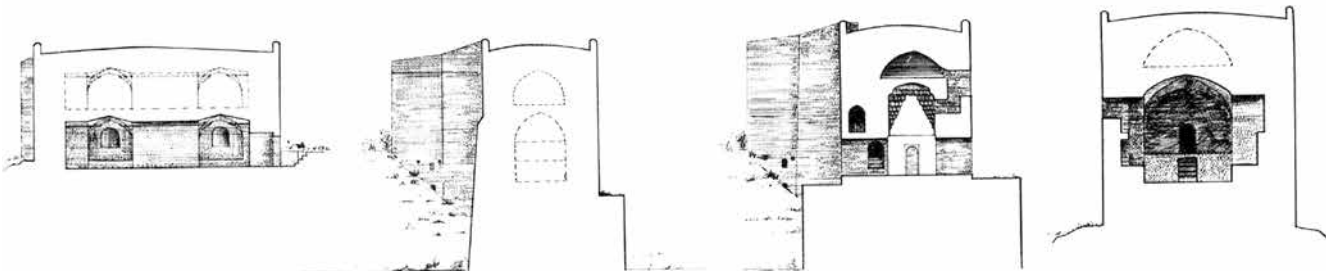
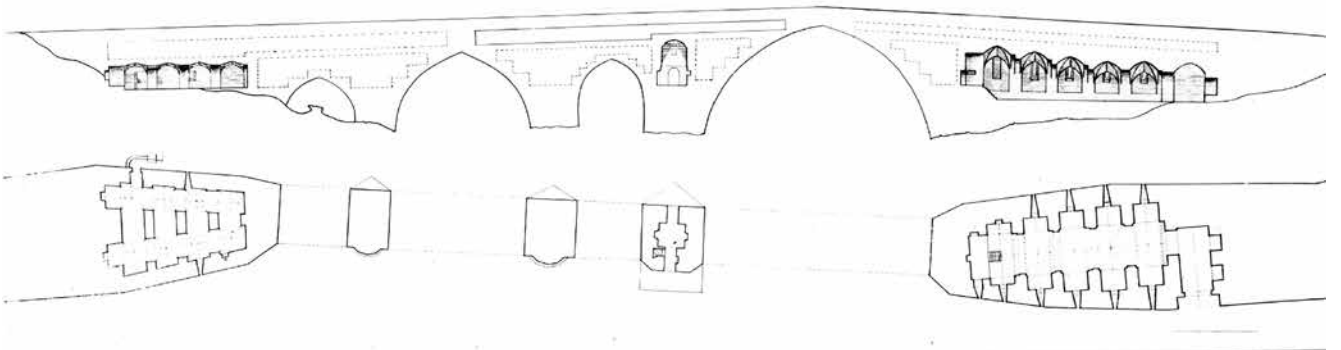
# “Red Bridge” on Khamchay River that survived centuries

One of the fascinating monuments of Azerbaijani medieval architecture is the bridge over the Khamchay River (transliterated in Azerbaijani as Tepedoy). The “Red Bridge”, which is also called “Sinih Korpu”, is located along the Gazakh-Tbilisi highway in the vicinity of the Shikhli village of the Gazakh district, two kilometers away from Khamchay’s inflow into the

Kura River. There is no other structure among numerous monuments of bridge construction in the South Caucasus region that would attract so many travelers and researchers. Travelers’ diaries contain admiring descriptions of this remarkable bridge. A.S. Griboyedov described it in his travel notes as well.

The great economic and political significance of the









bridge in the Middle Ages was due to the fact that it was traversed by ancient caravan routes, which linked such major cultural centers as Barda, Ganja, Shamkir and Tbilisi. It is also beyond doubt that the advantageous location of this structure was a source of considerable revenue for the local feudal lords, who capitalized on the duties levied from camel caravans crossing the bridge.

History has not retained either the name of the ordering customer or the name of the architect who fulfilled this task so skillfully. No documentary evidence of the date of construction is available either. However, researchers have concluded that the structure dates back to the 12<sup>th</sup> century. This conclusion is illustrated by its architectural design, which is very similar in terms of style to a number of bridges built in Azerbaijan's territory in the same period. Although there is actually no other structure as the "Red Bridge" in the history of bridge construction in the South Caucasus and adjacent areas, it is similar in terms of style to the medieval bridges located in Khudafarin, Ganja, Maragheh and Ardabil.

The bridge has been repaired repeatedly through-

out its existence. According to Georgian written sources, the bridge was refurbished during the reign of Tsar Rostam in 1632-1658. Referring to this data, some scholars argued that it had been constructed by Georgian architects. However, the architectural appearance of the "Red Bridge" with its characteristic pointed arches, one-of-the-kind shapes and peculiar construction techniques convincingly links it to the works of Azerbaijani architecture. The bridge's affiliation with Azerbaijan was confirmed by the joint Azerbaijani-Georgian commission on border demarcation between the two countries after gaining independence. The bridge was last overhauled in 1958-1959. The skills of medieval architects were so remarkable that the bridge, having endured the test of time, withstood centuries and is still used nowadays according to its intended purpose. Prior to 1998, a major highway that linked Baku and Tbilisi ran through the bridge. Afterwards, the traffic was routed via a new wide bridge that was built nearby under the TRACECA program.

The "Red Bridge" is an engineering structure with a very expressive architectural appearance. This was



achieved by a resilient shape of huge arches, massive pillars, as well as a strong and rhythmic set of inlets. The extraordinary dimensions of the structure are also amazing. The 175-meter-long bridge has four large passages with alternating sizes (8.2m, 16.1m, 8m and 26.1 m). The height of the largest arch is 14.45 meters. The width of the bridge is 12.4m in the entrance part and 4.3m in the middle section. The most extensive passage of the "Red Bridge" (26.1m) is the largest arched span in the heritage of Azerbaijani construction design, which is grounds to list the monument in the Gazakh district among unique engineering structures.

Both sides of the bridge that are connected to the shore and form sloping ramps were used as caravanserai for rest and overnight caravans, which have arrived at the busy crossing since the ancient times. The architect used the space in the middle of the bridge as an observation point. The creation of spacious premises inside significantly facilitated the design of the structure and ensured its durability. Moreover, arch-shaped longitudinal gallery-gaps were created in the internal part to simplify the design and save the material used.

Both caravanserais possess peculiar conveniences and design features. Total space of the caravanserai located on the right bank is 116 square meters. Its design was created in compliance with the overall shape of the bridge itself. Arched domes converging at one point in the shape of a star form a ceiling structure. The technique of brick-laying was skillfully used during their construction.

The width of the entrance to the premises is 1.05 m. Most likely, this dimension was taken as a module for constructing the bridge, but it is necessary to further look into this issue. There are window openings and "bukhars", i.e. fireplaces, in the walls. The windows are open without fillings, in accordance with southern climatic conditions. The window apertures inside are wider than their outer part, which improves lighting.

The caravanserai located on the left bank has a peculiar advantage in terms of the construction design. The area of its premises totals 166 square meters. It is taller than the caravanserai built on the right bank and its height is 6 meters. Sleeping "booths" were built into its walls, which were apparently also used by merchants for trading. That area is relatively brighter as there are 10 window openings facilitating lighting there. The window openings are oriented westward and eastward, therefore, sunrays permeate inside directly, which reduces humidity in the premises.



Total space of the premises is divided into two parts. The bridging is comprised of transverse arches. On one side of the premises, the floor level was raised by 1.5 meters. "Suites" for well-to-do visitors were probably located there. The entrance to the caravanserai has an accentuated architectural style.

The building of the observation post, which is located in the middle section of the bridge, has a square shape and is open on both sides along the river currents. The caravans approaching from both banks were easily seen from there. In the room's corners, stalactite arcs were used for transitions from the squares to the round-shaped dome. The stalactites are very simplistic but used with a refined taste. A spiral staircase leads to the observation post from the bridge deck.

The structure was named "Red Bridge" due to the color of its material. The main material used to construct it was dark-red brick sized 22x22x4.5 cm. The





laying was carried out with the use of gyazh and lime solutions. As for hydraulic additives, the solution contains cinder and crushed brick. They say milk or most likely, "ayran", was also added to the solution. Bricks and rocks were used while building the bases and coarse-grained sand was used in the solution. The spots where the massive supports contacted water were thoroughly faced with stones.

Another title of this bridge, "Sinigh Korpu" ("Broken Bridge"), is widespread among Azerbaijanis as well. Evidently, the existing bridge was built in the 12<sup>th</sup> century after a more ancient one collapsed, and the ruins of the previous structure remained to date 95 meters away from it downstream.

The "Red Bridge" occupies a worthy place among the engineering structures and is one of the unique monuments of Azerbaijani architecture. 🌸

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