

**CONSTRUCTION MATERIALS, CONSTRUCTION METHODS
IN THE BELARUSIAN DNEIPER REGION**

KATSIARYNA NAVUMAVA, VLADIMIR OVSEYCHIK
Polotsk State University, Belarus

Traditional materials which were used for building of inhabited and economic constructions in the Dnieper region are considered. The analysis of the main receptions by means of which construction was carried out is given.

Introduction. Wooden construction since ancient times was considered as one of the most important crafts. Existed many masters, experts capable build a log hut. But peasants most often counted only on the forces. To buy a ready blockhouse, to employ workers to construction it was expensive. Therefore preparation of materials for construction, even peasants carried out construction of the base, a blockhouse, overlapping and a covering. But usually involved experts to joiner's operation and a laying of furnaces. At construction of any construction it was very important to plan all construction process since together with it, in parallel, it was necessary to perform a set of agricultural works. In order that in short terms to perform large volume of works (and it concerned not only constructions), it was accepted to help with the Belarusian villages to all to someone to one. Women and teenagers took part in work even. They performed not really hard work: dug clay, prepared a moss.

Ready constructions differed in a big variety, everyone built in own way. And here works of experts usually differed from each other a little. But, despite it, building never was monotonous, and internal space identical. In each separate case the amount of works executed by experts and peasants was various, views and tastes differed. Places for construction always were different, unique, too.

Choice and preparation of construction materials. Wood was the most widespread construction material in the territory of Belarus. At the end of 17-18 centuries the territory of Belarus more than on a half was covered with the woods [1, p. 266]. In spite of the fact that constantly felled trees, woodiness of Belarus remained rather high.

Wood for a blockhouse was prepared in advance, in the winter when all wood juice departed in a root. At the same time chose those trees from which never took the resin. The material prepared in the winter had more resistant and hardy wood. Log huts from such wood could stay 100-150 years.

The wood at the age of more than 80 years was in the most great demand. Most often at construction used a fir-tree or a pine. Did a base, the lower wreaths of a blockhouse, and also separate elements of an oak: thresholds, window sills, etc. Oak wood very resistant and durable therefore was always in demand. But at the same time its massiveness and hardness demanded great efforts when processing. The log huts entirely constructed of an oak in the Dnieper region almost did not meet.

It was forbidden to use in construction the trees which are tumbled down by a storm: was considered that the log hut from such logs will be destroyed by sooner or later. Also it was impossible to build log huts of a dead wood. The dry tree was opposed green, and people believed that in such construction nothing live will get accustomed. But for building of economic constructions on the contrary recommended to use dry trees since there will be no mice, and hay will be protected from moisture. For the same reasons it was allowed to build barns and barns of trees to which the lightning got, but at construction of log huts and sheds it was not admissible. It was strictly forbidden to use in construction trees which grew at the cemetery, near church.

The aspen was considered as a bad tree therefore to build log huts and sheds of an aspen it was not recommended. This rule did not extend to buildings in which hay was stored. But, already at the end of 19 beginning of 20 centuries did not follow this rule any more. In inhabited and economic constructions the alder and an aspen was widely applied. Perhaps solid calculation and a practicality were more important.

Materials in construction used homogeneous (one breed of wood, at one time preparations, etc.). In important elements (rafters, support, beams) wood with defects was not used. Did not use a combination in designs of one type of different breeds of wood. For example, krokva of roofs did only of a fir-tree or only of a pine. Poles which pressed the top layer of a straw roof did only of young birches. An exception is the lower wreath of a blockhouse which carried out a base role. It was usually done of stronger wood, than a blockhouse, and often bigger diameter. Together with improvement of functional characteristics, it did a construction steady visually.

At construction of constructions tried to use a square form in planning. It helped to facilitate material preparation since for a blockhouse logs of one length were required.

Construction receptions. Joiner's skill united a set of receptions: trimming, split, cut, gouging, drilling, etc. Possession of these receptions and ability to apply them in different works defined not only skill of one person, but also the general level, local style.

Before beginning construction of any buildings, it was necessary to decide on the place of construction. Special attention was paid to the choice of the place for construction of housing. At the same time leaned as on purely rational reasons (character of soil, proximity of a reservoir, a surrounding landscape, the neighbourhood, etc.), and on centuries-old traditions. It was not allowed to construct the house on crossing roads, on the abandoned roads, on the place where there was a bath earlier. Preference was given to earlier made habitable tried places where already once there was a house in which life was peace and happy [2, p. 77].

Country estates were close, and it did not allow to carry out construction works directly in the yard. Therefore blockhouses cut somewhere on an empty seat, or directly in the wood. After the blockhouse was ready, each log was marked with certain signs, the blockhouse was sorted, transported on the site and anew collected. In transit logs of walls each log was marked with a notch. In each wreath from the lower log to top on one notch there was more. That is count was kept from below up. Notches did at end faces of logs, but tags and about a blockhouse corner met.

If there was a lot of place, free for construction, the blockhouse was cut from several parts – on 4-5 wreaths. It allowed to facilitate work since it was not necessary to lift logs on big height. After shrinkage blockhouses sorted and gathered already on the base. Despite uniformity of many elements, everyone was individual. Everyone was made only for that place on which was established. Therefore often elements adjusted already in installation time.

Designs of roofs adjusted not on the earth, and above, directly on the put-up walls. But farms and subrafter frames for big and high constructions collected on the earth. That is, while one builders put up walls, nearby collected a roof design, the sizes of the plan were already known. Then the design aimed, understood and rose upward. And already gathered on the put-up walls according to notches. It allowed to make work easier since designs had the considerable sizes and weight.

Separate elements and building constructions steadily fastened by means of a chisel and drills as iron nails were not used. The axe of different types was the main tool, everyone was adapted for these or those works. The ordinary axe, a splitting axe which split logs into flat boards, axewith the wide edge ground on the one hand for a hew of logs and others. The joiner's saw was known in the 14th century, but was especially widely applied from 19 century. Then even more often used also a longitudinal saw by means of which split logs and bars. Sawing of boards is frequent it was allocated in separate trade, and sawyers went from one settlement to another and offered the services. But in rich estates since 18 century there were already sawmills.

Conclusion. Thus, construction of housing was surrounded with various deep and steady traditions which helped to make a right choice of the place for construction, not to be mistaken with construction materials and time of work and since. They were formed throughout many generations, and bear with themselves centuries-old experience. But, at the same time, peasants were guided also by practical reasons. Strict calculation allowed to find the most optimum methods and ways of construction. Being imposed at each other traditional customs and a practicality allowed to build taking into account functional mission of rooms, their relationship in the general ensemble of domestic building, and also with the environment.

REFERENCES

1. Лакотка, А. І. Беларусь : у 8 т. / А. І. Лакотка ; рэдкал.: В. К. Бандарчык, М. Ф. Піліпенка, А. І. Лакотка. – Мінск : Тэхналогія, 1997. – Т. 2 : Дойлідства. – 391 с.
2. Цітоў, В. С. Этнаграфічная спадчына. Беларусь. Традыцыйна-бытавая культура : вучэб.-метад. дапам / В. С. Цітоў . – Мінск : Беларусь, 1997. – 207 с.