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## ARTICLES OF KOLYVAN GRINDING FACTORY IN THE FERSMAN MINERALOGICAL MUSEUM OF THE RUSSIAN ACADEMY OF SCIENCE

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Brief history of decorative stone discovery and stonecutting development on Altai. Description of articles of Kolyvan grinding factory in the Museum's collection  
10 color photos, 8 references.

The history of stonecutting art in Russia is rather original. Having arisen millenia after European and East arts, it has achieved amazing level in a short term since the 17<sup>th</sup> – 18<sup>th</sup> centuries. Such later development is related to the delayed formation of Russia as a united state and, respectively, to late interest to underground resources and their use.

At all their love to luxury, the Moscow sovereigns for a long time were compelled to be content with imported foreign-made jewels bought from East merchants going by the Great Silk Way far to the south from the boundaries of that time Russia. Respectively, the processing of jewels was absent. It was only reduced to fastening of bright gems to czar and church clothes and utensils.

However, it should be noted that soft stone in Russia was processed from the remote time and till association of isolated princedoms into a united state. It was compact soft white limestone – a widespread building material. Palaces, monasteries, temples, defensive walls and towers were erected from this stone. It was used not only as building material. Carving was very popular to ornament buildings. Remarkable monuments of architecture of many ancient cities of Russia (12<sup>th</sup> – 18<sup>th</sup> centuries) amaze till now with stone lacy patterns sometimes almost entirely covering walls (Vladimir, Yaroslavl, Rostov Great, Suzdal, ...).

Gradually brick replaced white stone as building material, but limestone for a long time was the unique natural material serving for dressing of buildings. Carved columns, platbands, kokoshniks, mythical creatures, vegetative ornament and other intricate details were traditionally made of this pliable to cutting trim stone. However, with time this art began to come to naught and by the

moment of stonecutting industry development in Russia it was forgotten.

Interest to patterned stones and their processing began to be clearly shown in Russia from the middle of the 17<sup>th</sup> century during the reign of the first sovereign from Romanovs' family – Michael (1613 – 1642). The foreign experts were invited for this purpose and they even tried to organize prospecting for jewels in vicinities of Moscow and Tver (Valishevsky, 1911).

Prospecting in the central part of Russia had no success, but interest to earth riches of the country has not died away. In 1668 (Martynova, 1973) appeared authentic data on occurrences of rock crystal, blue topaz, amethyst, red tourmaline, and beryl in the Urals Mountains (near the Murzinka jail). But these were meanwhile only individual signals. A regular mining yet was absent and availability of decorative stones in Russia was not known at all.

Reforms of Peter the Great, which basically changed the life of Russia, have caused a close attention to the development of mineral riches of the country. Metals were necessary for the army and fleet. Construction of cities, and especially of the new capital on boggy banks of the Neva River, required huge quantities of building stone. Sharp shortage of it at erection of St. Petersburg has resulted in 1714 in the interdiction on stone construction in Russia and everyone coming to the place of the future capital should bring stones about him. Interiors of the first palaces were filled with foreign marble and European articles.

This could not last long. In 1717, Peter the Great has established the Berg-Collegium to organize prospecting for and extraction of national ores and stones. Gradually national

deposits of various metals, hard building materials, and later decorative stone were discovered and developed.

The development of stone-processing craft was rather complicated. Firstly, Russian masters only squared a stone and foreigners were called for more skilful work. Scales of works were negligible. It did not match grandiose projects in any way. There were no capacities to process not only stone, even glass.

Right at the end of the reign, in 1722, Peter issued the Decree on creation of the first in Russia state grinding mill intended for «sawing and polishing of marble and other stones» and polishing of glass in Peterhof (Budanov, 1980). It was burned down in 1731 and in 1735, under the Decree of Empress Anna, it was restored already for grinding and polishing «of diverse found in the country jasper and other stones...».

But Peterhof, being close to the capital, was very far from those places, where numerous deposits of marble and colored stones were discovered in the 18<sup>th</sup> century. And all these occurred on the «Stone» as the Urals were referred to at that time. There, in vicinities of already operating iron and copper factories, new and new stones were discovered. Almost simultaneously with the works at the Peterhof factory, in 1726, at Iset state-owned factory, stone processing was also begun. First only soft material was worked here, though by that time some hard stones — chalcedony and quartz — also were found. The further explosive development of mining on the Urals, discovery of deposits of various colored stones — precious, industrial, building — has resulted in opening in 1751 of an independent stone-processing enterprise — the Ekaterinburg state-owned grinding factory.

At the same time, development of mineral riches in Russia also occurred far to the east of the Urals. At the end of the century, systematic study of Altai begins. Copper and silver ores were discovered, Lokot' copper and silver factory was constructed (1782 — 1784) on the Aley River. Interest to the region grew and, under the Decree of the Impress Katherine the Great, the intensive prospecting for «not only ores, but any sort of useful stones and minerals» began in vicinities of the factory.

In 1786, according to imperial commission, nine groups have gone for prospecting. One of them was headed by the doctor of Lokot factory Peter Ivanovich Shangin. This amazing person, who studied botany, cartography, ethnography and many other things in addition to medicine, has taken a great interest in stones

and as the award, he «had the luck» to survey upper reaches of the Charysh River and to get to the Korgon creek. Chalcedony and topaz were found, but the most important was the fact that jaspers and multi-colored porphyries, breccias, marbles were discovered (Rodionov, 1988, 2002). The Shangin's group discovered almost all well-known rocks of Altai. Later, only Revnev jasper (1789) and Beloretsk quartzite (1806) were discovered.

The samples sent to St. Petersburg hit the taste. Mining of porphyry began near the Lokot and the decision was made to build a grinding mill nearby «for manufacture of columns, vases, tables, fireplaces and others similar sings». In 1787 it has produced the first vase of one arshin in diameter (arshin — 71.12 cm) of black Lokot porphyry (Rodionov, 1988, 2002). But possibilities of Lokot factory were limited. It mainly produced small goods and if there were large articulated, they were turned «on the round table», i.e. on a lathe. They were monolithic, smooth, without carved ornaments. The Lokot was located far from the majority of the discovered deposits of ornamental stones of Altai. In 1800, the order of the Cabinet of His Imperial Majesty has come from St. Petersburg — «to close Kolyvan silver and copper factory and to arrange a grinding factory instead of it». It was open in 1802. The new factory in the first half of 19<sup>th</sup> century produced large, even huge articles. By complexity, skill, art value they differ very much from Lokot articles (Budanov, 1980).

The history of Kolyvan factory is tragic. During the 19<sup>th</sup> century, having gone through intensive development, having made huge quantity of unsurpassed (in the global scale) masterpieces, by the end of century it appeared almost forgotten, and its surprising highly skilled masters unclaimed. The unique enterprise, which had and has no analogues in Russia or in the world, suddenly appeared outside of the sphere of interests of customers and owners. In the remarkable books of geologist-writer A. Rodionov «On wings of the craft» (1988) and «Kolyvan stonecutting» (2002) joyful and sad events of its history are fascinatingly described, as well as destinies of many unusual people, who discovered mineral treasures of the Altai and by improbable work mined and processed them.

We shall touch only a few moments from the interesting past of the factory, as it seems to us, by describing its articles stored in the Fersman Mineralogical Museum of the Russian Academy of Science.

∇ From the Russian for «elbow» — an abrupt bend of a river

One distinctive feature of Kolyvan was that stonecutting art has arisen here literally on an empty place. If on the Urals even before opening of state workshop there were local skilled stonecutters and interest to colored stone and its handicraft processing was usual, stone on Altai never associated in minds with subjects of art. Therefore, it would seem that its builders and the more so masters — stonecutters should be (at list might be) foreigners, as well as under Peter the Great, who taught the craft to Peterhof masters and then have played some role in the development of stonecutting in Ekaterinburg. Russian masters constructed the Kolyvan factory and stonecutters were exclusively local. Only right at the beginning of organization of stonecutting on Altai — in 1786 — the St. Petersburg has sent some Peterhof masters to the Lokot factory. Moreover, there was no tradition of extraction and art processing of decorative stone on Altai.

And one more circumstance was typical of Kolyvan factory. From the very beginning of its existence, the enterprise was of the art industry. Building stones were not processed nor ground here. And, in contrast to Peterhof and Ekaterinburg, Kolyvan from the first steps began to process hard stone and in the most rational way.

The variety of the Altai ornamental stones is insignificant. These were only porphyries, jaspers and compact quartz (quartzite). However, each of these rocks has various colors. Porphyry has dark red, gray-violet, green, black varieties. Some of them (red, green) are very similar to rocks extracted yet in antique times in Egypt (red) and on Peloponnesus (green), which decorated palaces and temples of ancient Egyptians, and then Romans. Because of this similarity, the Altai rocks were also referred to as «antique» (Fersman, 1959). In the 18<sup>th</sup> century, porphyries and jasper of Altai were not distinguished. All stones were considered jasper, though even externally these rocks are easily recognized. In the 19<sup>th</sup> century the inventories of Kolyvan articles precisely and correctly designated the rock.

The jasper, hard rock, during all the history of mankind was used for small hand-made articles (amulets, ornaments, signets). Only in the 18<sup>th</sup> century, after the discovery of large jasper deposits on the Urals and on Altai, it began to be used for large decorative articles.

Altai jaspers are also various. The most well known among them is Revnev jasper (after the Revnevaya Mountain). Most often the reference to the Altai jasper means this jasper —

gray-green with spots and strips of greenish-gray and dark green color, named green-wavy from the very beginning. Basing on the pattern, wavy, banded and brocaded varieties are distinguished. Their mineral composition is similar and color intensity and pattern are only related to the prevalence of dark (epidote, actinolite, magnetite) or light (quartz, feldspars, etc.) minerals and their distribution (Barsanov, Yakovleva, 1978).

Besides the Revnev jasper, other varieties are rather widely known — Goltsov (greenish or bluish-gray) and Ridder (brecciated fabric with gray and pink irregular fragments in light-green cement). Very unusual jasper is the Korgon «coin» jasper. As a matter of fact, it is a dark gray quartz porphyry with inclusion of albite spherulites (Barsanov, Yakovleva, 1978), similar to small coins. The name was invented by Shangin, who has discovered it at Small Korgon. Articles of this rock are more rare than that of mentioned before. And one more variety of Altai jasper is the «dendrite» jasper. It almost entirely consists of fine grains of quartz, with occasional grains of topaz and magnetite. According to such composition, it has unusual for jaspers white or slightly yellowish color. On the light background black (presumably, organic matter) and brown (apparently, iron oxide) dendrites are well visible (Barsanov, Yakovleva, 1978). Its bodies are located along the Khair-Kumir creek (tributary of Charysh). Articles of it are not commonly known. Red jasper is known on Altai, but it is not very popular.

It is necessary to note that from petrographic perspective the Altai jaspers are a group of rocks of very different composition and genesis. Their common features are only fine grain and good polishing properties (Barsanov, Yakovleva, 1978).

One more remarkable Altai decorative stone is widely known — the Beloretsk quartzite (belorechite). Pure white, pink, yellow, inequigranular, locally semitransparent stone is good both for rather large articles and for small things. As unlike porphyries and jaspers, articles of which, but rare exceptions, were only produced at the Kolyvan factory, the Beloretsk quartzite was also used by other stonecutting workshops, state and private.

It is interesting that the attention to Altai among customers from St.-Petersburg was shown not only regarding articles of new rocks. Because of begun in the middle of the 18<sup>th</sup> century «general mineralogical illness» (the expression of the Berg-Collegium President P.A. Soimonov) people in capital were

also interested in Altai rocks, which varieties totaled in more than one hundred and half. The letter from St. Petersburg wrote: «His Imperial Majesty would kindly like to get samples of all porphyries, jaspers and others stones each time in two collections». Samples were also necessary for educational institutions of St. Petersburg. The Cabinet ordered 10 collections of 130 samples at once. Soimov yet writes to Altai from St. Petersburg: «Here, all heads are infatuate with our porphyries. And that is why there is no any day without foreign application for delivery of samples for their courts...». He also asked to send material for the President of Academy of Science Ekatherine R. Dashkova: «The Princess has tortured me with the requirement of samples...» (Rodionov, 1988, 2002).

In the following 19<sup>th</sup> century, collections of Altai colored stones were also popular and highly appreciated. They were even used as diplomatic gifts (Rodionov, 1988, 2002). From the memoirs of the principal master of the Faberge Company F.P. Birbaum it is known that this so glorified company has ordered a collection of Altai rocks from Kolyvan (Faberge, Gorynya etc., 1997).

But the factory was certainly famous not for samples, but for the magnificent articles.

One of remarkable features of Altai deposits is that almost all rocks found there could be mined out in huge blocks enabling to cut out grandiose integral articles. Various colored stones of the Urals did not give large monoliths and were frequently fractured. The only exception is greenish-gray monophonic and compact jasper from the Kalkan Lake, of which very large vases of fantastic beauty were made.

The Kolyvan factory began to roughly develop right after the opening. There were strong preconditions for this. Stonecutters came here from the workshop of Lokot factory. They had flair and quite professional skills of artistic stone processing. The factory was headed by its practical founder – the former manager of Lokot shop, the gifted artist and technician, hereditary stonemason Phillip Vasil'evich Strizhkov.

Numerous orders came from the Cabinet and, with rare exceptions, for very large articles capable to decorate huge halls of new imperial palaces. The material for work was mined nearby. It was difficult and dangerous to mine it in mountain conditions, but the factory did not depend on deliveries from other regions of the country. The work went uninterrupted at day and night. Because of huge

sizes of extracted blocks and ordered articles, and also because of poor road conditions, the material was dressed on-site and only then it was delivered to the factory. Usually this was only possible in the winter.

The victory over Napoleon has caused a powerful rise of spiritual forces in Russia. Patriotic sentiments find expression in solemn, heroic shape of works of art of that time. Especially brightly it was manifested in architecture. New majestic palaces and temples were erected. And this, in turn, entailed a burst of interest to large forms of stonemasonry art. The Kolyvan factory is famous for just such works. It delivers unceasingly to St. Petersburg vases, bowls, tables, columns, and so forth. Huge articles with great precautions were transported both by land and water. At this particular time (1820-1843), the enormous (big diameter 5 m, height 2.6 m, weight approximately 10 tons) «Vase-Empress» – a miracle of stonemasonry craft both in size and quality of processing – was manufactured from the Revnev jasper. With greatest precautions, thousands of kilometers of a difficult way were overcome and the vase was transported unhurt to St. Petersburg.

In the middle of the 19<sup>th</sup> century (1840 – 1850), the New Hermitage was under construction. And again the Kolyvan factory has many orders from St.-Petersburg, and unceasingly rotated shafts of machines and master were declined over articles with drawings, measuring devices; cut, polish, heal natural defects of stone and endlessly verifying accuracy of forms and quality of furnish.

In 1851, articles of Kolyvan factory were exhibited at the World Fair in London. Size and beauty of them amazed the public, which knew nothing about Siberian stonemasons. The commissioner-appraiser wrote: « ... dimensions and weight of these masses are those that I should confess – I do not know other similar pieces. I do not think even that so complicated and so well finished products were ever manufactured from times of Greeks and Romans» (Budanov, 1980). The participation in the London exhibition resulted for the Kolyvan factory in the Patent of Exhibition and the second grade medal. This was the world recognition. Then the factory successfully participated in other international and Russian exhibitions and received awards.

In second half of the 19<sup>th</sup> century, the interest of the Cabinet of His Imperial Majesty to large articles of stonemasons faded out. Their articles have already filled halls of palaces. Besides, the serfdom cancellation in 1861 has

caused a significant rise in labor price. The factory staff was reduced. The orders became lesser and lesser and not all ordered things were put in the overfull halls. Many of them were stored in warehouses of the Cabinet. By the end of century, on the World Fair arranged by Americans in Chicago (1893), the Kolyvan factory has shown nothing new. Only old things from warehouses of the Cabinet were sent there.

20<sup>th</sup> century was unsuccessful for the Kolyvan factory. World wars and revolutionary breaking have played its adverse role. The factory, which has brought the world glory to Russian Siberian stonecutting art, was deserted and almost was not used by the state under the destination. The Kolyvan factory repeatedly passed from one agency to another. It produced rollers, abrasive bars, facing slabs, and from time to time — small articles for daily use and souvenirs.

In the post-war time, some large vases were produced, but they appeared to be very expensive. Their manufacture was stopped. The hope for renewal of unique manufacture has only appeared now. But it is not known when it will come true.

Durability of the Altai stones and dimensions of articles of Kolyvan factory have protected many of them from damage and destruction. A significant amount of small vases, candelabrum, fireplaces and other articles decorates till now halls of museums and interiors of institution.

After the October revolution, a part of articles from stores of imperial palaces and apartments of supreme aristocracy was transferred to museums and other public organizations. Among them was the Mineralogical Museum, where these things draw attention by beauty of stone and quality of finishing.

It should be noted that attribution stone articles of even well-known factories is frequently rather difficult as they often bear no marks such as brands or hallmarks almost always available on metal things. This also refers to Kolyvan factory articles. The factory in different years had different rules of article registration. In the first half of the 19<sup>th</sup> century articles were not marked and if they were not noted in the log of made things with a detailed description and indication of sizes, the subsequent identity establishing of the listed article with the examined one is practically impossible. Only in 1853, the Cabinet by the circular of December 8 has ordered that «... the name of factory, date of beginning and termination of articles shall be indicated by cutting letters

on plinths of vases, bowls, candelabrum and pedestals, as well as the name of master, who managed the work».

At identification of manufacturing time of some of our things we have met the mentioned above difficulties. So, the Museum displays two smooth jug-like vases of Revnev jasper. Both consist of three mounted parts. A flat round profiled basis supports slightly flattened spherical body passing into a narrow open throat extending up. The boundary of the throat with the body is underlined by a thin vertical belt (Photo 6, 8). Vases are completely identical by size and form and only differ in jasper patterns. One of them is made of wavy jasper, another — of brocade variety. In difference to precise graphic pattern of wavy jasper, capricious outlines of dark and light spots of green tone in brocade jasper create an impression of a fantastic dynamical pattern.

An attempt to identify our vases under inventories of the «Books of stone articles manufactured at the Kolyvan grinding factory and sent to Saint Petersburg to the Cabinet of His Imperial Majesty since 1786» (Rodionov, 2002) had no success.

It is necessary to tell that the jug-like form of these vases does not correspond to the style of articles produced by the factory. The overwhelming majority of vases were of classical (or close to it) forms, which sketches made by outstanding architects of that time (Rossi, Quarenghi, Galberg, Voronikhin, etc.) were sent from St. Petersburg. Therefore, it was not possible to compare even approximately our vases with known ones. Descriptions of several jug-like vases mentioned in the «Book ...» do not coincide with ours.

As things began to be signed since the 1850s, it is possible to assume that these vases were made earlier. May be for this reason the researcher of stonecutting art on Altai Sergai M. Budanov believed that they were made in the 1840s (Budanov, 1980). In 2002, A. Rodionov has published the book «Kolyvan stonecutting», which illustrations include the contour of vase of Revnev jasper in a jug form, presented by Alexander III to Turkish sultan Severet-bashaw in 1880. It practically coincides with the contour of Museum's vases. The slightly changed proportions could be explained that in the process of manufacture Kolyvan masters corrected their form, which happened more than once as proportions of separate parts in the sketch and in a ready large stone thing are perceived differently. The body of the presented vase, in contrast to ours, is covered by helicoid grooves. This,

together with the form, even more corresponds to the «east» style of an article. In a private conversation, A. Rodionov has stated the assumption that our vases are of 1870s. The issue has remained unclear.

Vases are shown in the Museum on pedestals of red Korgon porphyry as round smooth columns with carved spoons in the wider top part, supported on the base of a complicated form. On one of pedestals it is engraved «Kolyv. shlifov. fabrica (Kolyvan grinding factory). 1896».

If to consider the 40s years of 19<sup>th</sup> century as the date of manufacture of jug-like vases, the following them by time articles are fireplaces from the same Revnev jasper.

In 1840 – 1850, the New Hermitage was under construction. For it, Count L.A. Perovsky, being at that time the Head of the Cabinet, has ordered from the Kolyvan factory sixteen fireplaces of different rocks among other things. Under the Order of the Cabinet dated March 22, 1856 #2149, twelve of them were made by 1869, but only one was installed. The others were stored in a warehouse and two of them in the 20s years of 20<sup>th</sup> century were transferred to our collection (Photo 10).

Fireplaces are made from Revnev wavy jasper and are identical by the general composition, color, decoration, and size. Their decoration is extremely simple – low flat structures of separate parts, rounded tie-rods on the front and lateral walls, fastening of top board corners and pilaster extremities. The unique small carved ornament is located in the center of the front board. It is a vegetative motive in a medallion of a complex form, on which sides egg-like elements emerge on a smooth surface. The fireplace composition of laconic forms is enlivened by a combination of direct and curvilinear details of decor. The presence of large polished smooth planes does not break, but emphasizes beauty of stone increasing art effect of articles.

Fireplaces were manufactured at different time. This could explain some insignificant differences in their carved ornaments and in the degree of finishing of internal parts. The top boards of fireplaces bear texts with indication of place and time of their manufacture. The earlier one – «Kolyvan grinding factory. Processing began on March 8, 1861. Finished on February 24, 1863. The Manager – Court Counsellor Zlobin» (Photo 9). The second was manufactured since 1866 till 1869. The mentioned earlier «Book of manufactured articles» includes these fireplaces, the cost of ear-

lier one was 3,486 roubles and that of later 7,607 roubles.

Two more large signed articles of Kolyvan factory are shown in the Mineralogical Museum. These are a big pier-glass from gray-violet porphyry (Photo 5) and a vase from the same material on a gray-green porphyric pedestal. They were also ordered by the Imperial Cabinet. The order has come from the Cabinet under #1769 of June 22, 1871.

The pier-glass consists of four interconnected details: the basic middle part being a frame of a big oval mirror; rounded carved plate above; a flat horizontal table-top and carved pedestal with a rectangular mirror (Fig. 4). A pier-glass is made of fine-grained monophonic, having almost no pattern porphyry. Articles from such material were usually generously decorated with carving. The pier glass is not an exception. Its ideally smooth polished surface contrasts with the raised carving basically located above the mirror, on pedestal legs and also on the front side of table-top and pilasters. The most raised is the cartouche in the central part of the semi-circle top detail. Inside it, a flat surface of stone remained not ground (probably, under the plan of the artist, there should be a plug-in detail). The high cartouche topography is counterbalanced by relief terminations of lateral pilasters of the middle part of the pier-glass and convex carved details above it. Carved flowers come out of planes of pilasters and medallions. In the data of the «Book of manufactured articles...», the pier-glass cost was 40,180 roubles.

At the left in the bottom part of pedestal, the date of manufacturing of the article is engraved – 1871 – 1874.

The mentioned above porphyric vase on a pedestal from the same order of the Cabinet rather differs from the majority of Kolyvan articles preserved to our time (Photo 3). Its form is nontraditional and disproportionate. Heavy, extending downward, as though melted body is supported by a low strongly profiled leg with a wide basis. The bottom, the heaviest part of body, is ornamented by carved concave spoons. Its central part bears two oval cartouches. The high open extending up throat somehow counterbalances the heavy bottom of the body. Handles going from body shoulders to the top of the throat balance all the composition. They are tracery, strongly bent, decorated by prominent carved flowers, which tie them to the middle part of the throat. As this vase is also made of monophonic material, it abounds in carved ornaments on all its parts – these are both vegetative motives and

geometrical ornament with ovals, small bolls, spoons and so forth. All these numerous details alternate with large enough smooth polished sites of the vase surface.

The vase was ordered together with a pedestal. It is reflected in the «Book of manufactures articles ...». The pedestal of rather light greenish-gray porphyry is a column on a wide profiled basis. The top is narrower than the base. It is profiled too and is decorated with concave spoons. The trunk of the column bears four pilasters with carved vegetative and geometrical motives.

By the time of creation of this vase, high classics, fashionable in the first half of the 19<sup>th</sup> century, began to be replaced by new trends. Even large stonecutting articles were decorated by florid details with numerous slots and openwork handles taken from saw cut window platbands of wooden architecture of that time. The highest skill of stonecutters was used for creation of masterly made articles, but of low art taste (Budanov, 1980). The vase with a pedestal was finished in 1875 and cost 25,294 roubles. At the end of 1875, as the «Book of manufactures stone articles...» testifies, it was sent to St. Petersburg. And there it had the same destiny as the majority of the above fireplaces. The overfilled imperial palaces have not found a room for it. It has also got to a warehouse. However, this was not the end of its history. In 1893, in honor to the 400<sup>th</sup> anniversary of America discovery by Columbus, among other actions, the World Fair of stonecutting articles was arranged in Chicago. The Kolyvan factory had received the invitation to the exhibition only three months prior to the opening. There was no time to make some article corresponding to the scale of the event. Then the articles stored in warehouses were remembered. This vase on a pedestal, one more vase of Korgon porphyry and a marble vase were sent over the ocean. Our vase, as is visible in a photo in the Exhibition Report, occupied the central place of the exposition. Kolyvan factory has received a bronze medal for these articles.

As follows from inscriptions on our articles and from records in the mentioned «Book...», the largest articles — the vase with tracery handles, its pedestal, the pier glass, fireplaces, and probably vases-jugs — were made by the Kolyvan factory in the period since 1861 till 1875, when Ivan Aleksandrovich Zlobin was the manager (1855 through 1885). He was formed architect and was the first class artist. He made a lot of drawings for various articles, including, probably, projects of the vase and

the pier glass of gray-violet porphyry (Budanov, 1980).

In addition to the mentioned large articles, the Museum has two small vases of dark-green Goltsov jasper and three of red Korgon porphyry.

These articles were transferred to the Museum in 1923 by the Museum of the City of Leningrad, which received them from imperial warehouses. The vases of Goltsov jasper decorated the Stroganov palace in St. Petersburg. After the October revolution, the Stroganov Palace-museum was organized there, afterwards liquidated. In 1926 these articles came to our Museum from this Palace-museum.

The vases are entirely identical. Wide, almost spherical body it is cut off by a wide, closed throat narrowed in the middle. The body is based upon a round leg with a prominent ring, supported on a smooth square base (Photo 1). These vases only differ in the pattern of stone.

Two vases of Korgon porphyry have a similar egg-like form. The first is based upon a square base of black marble. The short narrow throat was obviously closed by a cover now absent. The stone body of the second vase is fixed on a complicated ormolu base and has a bronze top (Photo 4). Different technologies were used for manufacturing bronze details — molding, pressure, engraving, gilding. Considering known works of Kolyvan factory, bronze details were made in another workshop. These vases were transferred to the Museum from the Hermitage in 1926.

The last art article of Kolyvan factory stored in the Museum is a small vase-bowl of the red Korgon porphyry, which came from State Museum Fund in 1927 (Photo 2). Earlier it was in the interior of Shuvalovs' private residence in St. Petersburg, which after the revolution was also used as a museum. After its closing in 1925, remarkable collections of painting and applied art were transferred to other museums.

And one more interesting showpiece from Kolyvan is stored in the museum. Not being a work of art, it nevertheless gives presentation of beauty and variety of the Altai ornamental stones. This is a collection of small (6 x 4.5 cm) rectangular polished plates, those «samples», which were popular still at the end of the 18<sup>th</sup> century (Photo 7). Unfortunately, there is no data, where from they have come to the Museum. Time of receipt is not known either. The corresponding columns in the inventory book are not filled. This is probably a collection, which was ordered from Altai by Faberge, or a collection of

some high-ranking amateur of stone, from which palace it has got to the Museum in the 1920s. Many exhibits, which have got to the Museum at that time, have no description of history and wait for the researchers.

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