

УДК 621:658 + 623(09)

Zlatoust Armory: From «a German Fabrication» to Manufacture

Svetlana N. Kulikovskih*

South-Ural State University,
76 Lenin's, Chelyabinsk, 454080 Russia ¹

Received 14.08.2009, received in revised form 21.08.2009, accepted 28.08.2009

At the beginning of XIX century with the purpose of increasing amount of made Russian fire-arms and enhancing its quality already working armories in Tula, Sestroretsk and Izhevsk were exempted from manufacture of side arms. At Zlatoust iron factory on the Urals the construction of special factory «affair of the white weapon» began. Its arrangement at Zlatoust factory was promoted by a number of objective reasons. One of which the activity in Zlatoust private factory on manufacturing of «German» products or «a German fabrication». After some time the Armory, strategically important enterprise of Russia, has received the status of the state enterprise. The foreign experts invited from the known weapon centers of the Western Europe, in treaty provisions took «in training» local workers. It promoted not only the development of new manufacture, but has brought to Ural bases of the European culture and art that has influenced formation of bases Zlatoust school of art metal treatment. In the first half of XIX century from small private «a German fabrication» at Zlatoust state factory the powerful weapon manufacture which has brought the world popularity to the Ural Armory and glory to its masters has grown.

Keywords: blades manufacture, craftsmen and experts, blade and ornamented side arms, art, school

Zlatoust armory, which official opening was held in 1815, became an original point of a support on which strongly there is «building» of modern weapon art of the Urals. The manufacture new to the Urals region – weapon has arisen not on an empty place. To the moment of official opening at Zlatoust Armory a special factory of an affair of white weapon in Russia already there had been a wide experience and traditions. The Urals was not the ancestor of the Russian cold front and decorated weapon, but became the continuer of already stated remarkable traditions (Pavlovskij, 1975, 79).

For the first time the theme about Zlatoust manufacture was opened the public in P.P.Svin'in's

in the first third of XIX century, by the publisher of «Russian notes», the author of a series of articles about Zlatoust armory and its production, the eyewitness and the contemporary, not only has presented the important historical material, but also has supplied the publication with statistical tables of production (Svin'in, 1825, 1826). In Russian historiography of XX century researchers paid the greatest attention to the analysis of questions of technology, engineering and ways of decorating steel blades, creativity of gun makers and artists – engravers of the Ural factory, their works promoted the formation of the image of the universal enterprise and maintenance of attention to a historical heritage of its craftsmen (Denisova,

* Corresponding author E-mail address: zlat-susu@yandex.ru

¹ © Siberian Federal University. All rights reserved

1947; Glinkin, 1967; Pavlovskij, 1975; Abolskaya, 1986). The Russian historiography of last decades was enriched with new documentary certificates, diligence of historians – arms researchers lift the big layer of a history of the Urals factory and blades art, new historic facts (Miller, 2000; Sukhanov, 2000, 2002, 2004; Kulinskij, 1994, 2005). Unknown materials of Zlatoust archive funds are entered into a scientific, archival sources central fund stores and museums, in particular, the Military – historical museum of artillery. Expansion of geography of resettlement of foreigners to Russia has allowed to involve earlier unknown to us sources published abroad. The question is not only the special literature of researching character (Müller, Köllig, 1981; Schöbel, 1983), but also about publications of German historians of 1930th (Wehersberg A., 1930; Busch L., 1939). The revealed materials deepen the data of questions connected to resettlement of the West-European gun makers and experts to Zlatoust, considerably expand time and territorial frameworks of research, inform the actuality of considered problem.

The idea of creation of the specialized domestic weapon centre has arisen at the end of XVIII century. In 1807 Alexander I immediately has enjoined the Senate «to start construction of a factory and at the same time to invite private factory owners to prepare and hand over in state treasury fund the weapon» (Burmakin, 1912, 240). By this time at Zlatoust factory steel, a material necessary for manufacturing side arms was already produced (Kulinskij, 1994, 159).

It is remarkable, that from 1798 to 1811 last owner of Zlatoust iron and a steel factory became the Moscow merchant of 1-st guild who have accepted the Russian citizenship, Andrey Andreevich Knauf. Then he rented some more factories at G.A.Stroganova's column and at broken I.P.Osokina. A.Knauf has decided to carry out «technical modernization of the acquired Urals

factories and to start his own weapon business» (Nekhlyudov, 2002, 283). As «the official Report of the Moscow first guild merchant» Knauf says, he «had a demand in people knowing tool and other works of art»¹. To solve this problem the smart owner invited «from Izhevsk Armory to Zlatoust» foreign craftsmen with their families who had lived in Izhevsk. Basically, there were his compatriots, natives of Germany. From 52 persons arrived to Zlatoust only nineteen could work in «a German fabrication»².

Newcomers were diligent and hardworking. About efficiency of foreign experts at factory of «German» products certifies «The remark on sale of German hand-made articles of present year (1813 – S.K.) in Makarjevo fair» made by the inspector of «a German fabrication» Gavril Zahk. He gives rather extensive list of the most demanded and well sold goods among which are specified: steel for knives and steel saws, different types of knives. Foreign toolmakers made the big assortment of scissors: garden, tailors, ladies', for paper, canvas, wool. Necessary tools for footwear and carpenter works were delivered to the market. Zlatoust Germans surprised buyers with the various tiny tools for «watch and gold craftsmen», also anvils for «silver works»³.

To A.Knauf, the third and last owner, belongs a merit of supply Zlatoust factory with experts and skilled craftsmen, representatives of some European states who had to adjust manufacturing of a cold steel on «German of manners». However, in 1811 «eternal rent» of the last owner was finished, Zlatoust factory from private possession was handed to the state with establishing Zlatoust state mountain district. The Armory, being a component of Zlatoust plant and mountain district, submitted to Department of mountain and hydrochloric affairs (since 1863 – mountain Department) of the Ministry of Finance. The new page in a history of the Russian arms manufacture from now on begins.

The project about «creating» in Russia the arms enterprise as per the sample of Solingen factory and establishing the specialized factory at Zlatoust state plant is developed and submitted in 1811 for «the Highest approval» by the Minister of Finance to whom factory belonged⁴. For Russia time has come to get the new enterprise.

However the military actions begun by the army of Napoleon against Russia, have stopped the plans. The construction of the factory of white weapon affair at the Urals has started only after victorious end of Patriotic war of 1812 and final victory over the French army in 1814. Bergrat Alexander Eversman has taken the trouble to renew contracts with gun makers of well-known arms centers of Europe and to sign new «conditions» for their resettlement to the Urals. From the point of view of attracting to the Urals factory the West-European immigrants and the organization of the specialized arms centers Zlatoust had advantage because by the moment of the official opening Armory in 1815 here has already developed big German community (Kulikovskih, 2006, 34). Negotiations with craftsmen and artists of Solingen factory have passed successfully, terms signed in Lennepe in 1814 have opened before the West-European gun makers the borders of Russia (Busch, Die Heimat, 1939, 25-26).

For the organization of special manufacture the Russian government invites foreign gun makers and experts, «having accepted in respect that advantage which should take place from developing in Russia arts via invited from Solingen craftsmen to make the white arms and different domestic things of steel» which would not be worse than known samples, «made in Solingen as the most famous place in Europe, under the superiority of institutions of this sort <...>»⁵. Initial plans of the government «by inviting» gun makers from Solingen were limited only «strong landing in Russia of their arts», and the factory

«in all continuation of this term was forced to be the school»⁶ which only would promote development on Russian ground the traditions of the European arms art. In other words, the factory organized at the Urals as it was supposed, first of all, should prepare the workers and teach Russians, distributing experience of the advanced centers. As we see, projecting activity of the new enterprise at the Urals, the Russian government considered Zlatoust armory as specific school, from which activity a certain result and benefit was expected, namely, that «the art of known in Europe arms factory by resettlement of masters to Russia remained in it for ever»⁷. The «Best» craftsmen in that case could be, certainly, only overseas.

It is pertinent to notice, that craftsmen of Solingen even before were differed by greater mobility. So, when in XVI-XVII centuries the demand on Spanish blades has increased, many craftsmen have gone to Spain where adopted the experience and craft in workshops of Toledo (Lents, 1908, 38.). The West-European Renaissance has given to Solingen men inquisitiveness, aspiration to find and occupy more advantage grounds. In 1661 they were moved in the area of Ruhr, then in 1740 Fridrih Great has brought blades craftsmen to Eberswalde near Berlin. Ten years earlier, in 1730 Solingen craftsmen have built up in Alsace, the French city of craftsmen Klingental' (Grotkamp-Schepers, Joerißen, 1997, 70). In XVII century of the craftsmen of Solingen have gone on coast of foggy Albion. So, Johan Kindt and Johannes Hoppe, having arrived in 1629 in Hounslow, nowadays London, have involved the English workers in arrangement of a manufactory on production of blades (Grotkamp-Schepers, Joerißen, 1997, 71).

In XIX century, movable by search of the best conditions in life and privileges, despite of difficulties of moving, Solingen craftsmen have left to Russia. Similar historic fact has surprised

German researchers of the middle of XX century. Miners of Germany have emigrated during last two centuries, for example, in Northern or South America, and it was natural, but the fact, that sometimes for western Europeans Russia can become «the purpose of their aspirations», was, in their opinion, strange step of their compatriots (Westdeutsche Neue Presse, 1953. 10 January).

In the first days of July, 1815 was issued Position of Committee of ministers about the establishing of Armory according to which all projects about management of Zlatoust factories and Armory «in all force and details» are left at the authority of the Committee⁸. Official opening of Zlatoust Armory was held «by the Highest approval in the 15 day of December, 1815» (Kulikovskikh, 2006, 41).

Russia has not accidentally paid attention to Solingen. Industrial region of the Western Europe where within centuries manufacture of a cold steel and knives has been developed, and the great amount of armories, which history coincided in due course crusades, was concentrated, provided almost all Europe with remarkable blades. In XVI – XVIII centuries blades craftsmen, whose surnames we will meet in Zlatoust: Wilhelm Wehersberg, Wilhelm Kirhgof, Peter Gottfried Hoppe and others. (Kulinskij, 2000, 38-39).

Favorable conditions of resettlement to Russia were given to foreign experts, for what they were obliged «to teach Russian people without any reserve and diligently» to make them «in this subject modern and best craftsmen» (Kulikovskikh, 1996, 184). Almost forty families, having left the native center, came to the Urals for establishing «Solingen factory» of blades and knives. Among them there were blade smiths, polishers, hammerers, specialists on hardening and gilding blades (Solinger Tageblatt, 1938. 9 August. S. 61).

In the forwarded list to each worker the estimation of his skill was given. For example,

Daniel Oliger, the specialist on sharpening knives, is considered as one of the best workers. The same characteristics was given to the etcher Wilhelm Melchior and Fridrich Wehersberg, whereas about Peter Wehersberg, the blade smith, it is written that «he is jumping from one thing to another» (Zeitschrift des Bergischen Geschichtsvereins, 1939, 68-71). The similar remark was more an exception, as many from arrived in 1814 were really «good workers». Some of them, as for example, the smith on swords Daniel Vol'ferts, worker on swords Johann Sneider, the specialist on hardening Fridrich Kirkhov, the specialist on knives Johann Galbah and others (Solinger Tageblatt, 1938. 9 August. S. 61) for long decades have connected their destiny and lives of the descendants with Russia and Zlatoust.

Being in Luebeck «His imperial majesty vice-consul Charles fon – Shletser» has willingly taken up «request to deliver from Germany skilful workers» which, it is necessary to notice, some years was engaged «with delivery to Russian both state, and private factories workers» (Stolpyanskiy, 1925, 91). Without his attention there were also experts of Solingen, his compatriots to whose departure to the Urals he also promoted (Kulikovskikh, 2003, 96-97).

According to the seventh clause of Contract of January, 1, 1814 on resettlement to Russia foreign masters «have no right, and their children not hired to work to leave factory before each of them will not train even one person in such a manner that he will be capable to take a place of the master» (Busch, Die Heimat, 1939, 25). As the arrived foreigners have got practically in the native environment the specified item, probably, has been forgotten on the occasion of pleasure of finding the roof, permanent and well paid work. Only under pressure of new director of the Armory of Anton Furman in December, 1817 German specialists have started urgently to performance the specified item of «the term».

Representing even in the spring 1816 to the office of the Armory «The offers on the necessary constructions and available to be made in the current year»⁹, the first director Alexander Eversman took into account all given circumstances. But thus he did not forget and about items, before signed by his compatriots, namely about the item concerning training to «the arts» of local workers. Therefore in «The offers ...», offering «some smithies for the necessary tools», A.Eversman though and between times, but marks, «as the main goal of this institution – to train Russian craftsmen» in each smithy it is necessary to establish two forges instead of one. In his opinion, the it is more convenient, as all smithies would be in «continuous continuation one next to another» and besides training master can observe the pupil, «without leaving his own work»¹⁰. Making the given offer, the director of the Armory believed a problem of training Russian to be solved, and the compatriots from the further performance of «the term» can be free.

It is remarkable, that foreign experts accepted for training «crafts» the best pupils among whom, for example, there were representatives of families of hereditary Urals metallurgists and gun makers. Probably, because of this circumstance the training proceeded only one month, namely, from December, 1, to January, 1, 1818. So, at «marks: comprehension – diligence – good, behavior – good», senior master Iogann Germes allowed «to Egor Svertelov to work as the collective master», and Evdokim Shvetsov, having on «comprehension – satisfactory», has remained «to work as an assistant in a forge»¹¹.

During period of beginning the production at the Armory the only specialists in ornamentation of the blades only father and son Schaafy were officially admitted. In the homeland, in Solingen, they were known as experts «of ornamentation of blades with inscriptions and pictures with gold and silver» and they arrived to Russia as

«the first in the art of gilding» (Glinkin, 1967, 4). According to «Lists of arms masters with the indication which work to be done», made at the beginning of 1816, it is specified sixty names of foreign masters, in particular, it is marked, that son Ljudvig Schaaf is engaged «with blades etching», and father Nikolay Schaaf – the expert of gilding, also specialist in gilding and silvering appears to be Shmits, Peter Kolfgauz, blades forging and hilts – Iakov Berger, in casting of green copper – Peter Vaterkamf¹².

The foreign experts who have located in Zlatoust, did not want to open secrets of arms, however the number of Russian specialists «well trained» monthly increasing. So, by January, 1, 1819 there were 125 people, in the next year – 200 specialists, «who are not worse in art than foreigners»¹³, moreover, «pupils work not worse than the teachers and without their slightest help»¹⁴.

Representatives of Zlatoust Armory not only have tested influence of foreign experts, but also actively introduced new technologies in the process of manufacturing and ornamentation of cold steel. So, Ivan Bushuev especially «has become famous for his art in blades gilding», he is not only «has adopted it in perfection from Schaaf <...>, but has even improved this» (Svin'in, 1826, 244). Undoubtedly, the innovation shown by leading master, the artist – engraver and gun maker I.N. Bushuev, has influenced the further development of such phenomenon in the Urals and Russian art as Zlatoust school of the author's cold decorated arms and art of metal treatment as a whole. Application of new to gun makers of Zlatoust, «different» from German masters, drawing with a brush, new ways of etching, forging sources of which came deep into centuries of the European cultural tradition of metal treatment, it is possible to consider as certification of indissolubility of Russian and world art traditions.

The manner of ornamenting blades Schaafs brought to Russia. They owned the technique of etching, engraving and gilding. Knowing the basic ways and technology of blade ornamentation Schaafs undoubtedly were good handicraftsmen. Activity of Wilhelm Nikolaus Schaaf and his elder son Ljudvig till 1818 can be determined (but it is only conditional) as the first stage in development of the Ural arms art. The given period is the shortest, but the basis of technique in manufacturing and art blades ornamentation in Zlatoust was incorporated. Then natural process of interference of two global cultures began, and formation of a creative power of local masters of plastic arts (Kulikovskih, 2006, 72-73) began.

Arm manufacturing at the Urals factory gathered force. Artistic properties of products and rates of production have increased. From March to June, 1818 «pupils» of foreign experts have decorated 300 sabers and swords, whereas «teachers» within two previous years – a little more than 100 blades (Bokov, 1913, 524). The new enterprise «at duties» to be a school remained those only during 1815 and 1816¹⁵, that in many respects explains that special position with which foreign masters in Zlatoust armory had. Exclusiveness of their stay at the Urals factory consisted in free visiting factory and an opportunity to work in the workshops located at the house, having thus, according to the staff managing positions, high salaries and certain privileges.

Followed in 1817 «change of purpose» of factories which consist in «adding» to the enterprise duty also repair the side arms, has caused transformation «factories from simple school into working institution»¹⁶. These transformations demanded from Department of mountain and hydrochloric and administration of Zlatoust armory additional efforts and works on erection of new structures, strict division of works and operations on manufacture of the arms. It became vital introduction of «Rules on

department of decorated arms», made in 1818 by new director of the Armory A.F. Furman¹⁷.

In factory settlement foreign experts had lived in two big streets which received the appropriate names kept till 1920th : Big German and Small German streets (An der Grenze Asiens stehen bergische Fachwerkhäuser // Westdeutsche Neue Presse, 1953. 14 Januar). It is pertinent to notice, that foreign masters though «were registered» in the Armory, but made all works in the workshops arranged in court yard of their houses. However, according to P.P. Anosov's true remark, such «an image of constructions could not be <...> comprised with the purpose of the institution» (Anosov, 1954, 175). Work of foreigners and volume of the work executed by them was not almost supervised. Exclusiveness of their stay at the Urals factory consisted in free visiting factory as all foreign experts were under protection and trusteeship of director Alexander Eversman.

The foreigners who have lived in Zlatoust factory, unfortunately, have not made independent creative community as we can see a little bit later at local representatives of the Armory. Besides, almost all natives of Europe were at the head of shops or sites of the enterprise. So, in shop of etching and gilding which was supervised by Wilhelm Nikolaus Schaaf, a young talented people from local «craftsmen children» who will define shortly a direction of development of the Urals arms art were concentrated, and will be true founders of local school of metal art treatment.

Blades of an initial stage of activity of Armory generally already decorated Russian with pupils of Solingens who, unfortunately, still long time had no right to sign the products created by them (Kulikovskih, 2006, vol. 4).

The new period begins from 1818 in a history Zlatoust Arms manufacture. By the beginning of 1820th Russia has received the capable factory of side arms production, the demand for which production was great.

For a history ten years, as a time interval, is a scanty piece. However in activity of such enterprise as Zlatoust armory ten years are rather important and significant. Private «German fabrication», organized by smart German, has involved his compatriots at which participation the basis of development of metal working at the Urals factory was incorporated. During transformations connected with transfer of Zlatoust factory to a state department, arms manufacture was oriented on output of qualitative blades according to a sample of factory in Solingen.

Moving the experts of blades from Europe to the Urals can be considered as international phenomenon. It promoted not only to formation of new manufacture, but has brought the bases of West-European culture that has influenced the development of artistic traditions of Zlatoust school of arms art and art metal treatment and certainly to mutual enrichment of cultural traditions of peoples. The process of transition from handicraft manufactures to industrial began at the factory, in South Ural gathered force new and unique in the sort the state enterprise.

References

- B.V.Pavlovskij, *Arts and crafts of industrial Ural* (Moscow, 1975). – (in Russian).
- P.P. Svin'in, *Zlatoustovsky a factory*, Domestic a note (St.Petersburg, 1825, № 22, 23; 1826, № 26). – (in Russian).
- M.M.Denisova, *Art the weapon of XIX century Zlatoust armory*, Works of the State Historical museum (Moscow, 1947), vol. 18, 207-251. – (in Russian).
- M.D. Glinkin, *Zlatoust an engraving on steel* (Chelyabinsk, 1967). – (in Russian).
- T.I. Abolskaya, *Zlatoust the artistic arms* (Leningrad, 1986). – (in Russian).
- Juri A. Miller, *Stahl. Glanz. Gold* (Münster: Ardey-Verlag, 2000). – (in German).
- I.P. Sukhanov, *Artistic arms. Masterpieces of the Navy museum of Russia* (St.Petersburg, 2000). – (in Russian).
- I.P. Sukhanov, *Weapon relics of the Russian fleet. From a collection of the Central naval museum Russia* (St.Petersburg, 2002). – (in Russian).
- I.P.Sukhanov, *Masterpieces of blades* (St.Petersburg, 2004). – (in Russian).
- A.N. Kulinskij, *Russian a cold steel of military, sea and civil grades of 1800-1917 years: the Determinant* (St. Petersburg, 1994). – (in Russian).
- A.N. Kulinskij, *Russian cold steel* (St.Petersburg, 2005). – (in Russian).
- H. Müller, H. Köllig, *Europäische Hieb- und Stichwaffen aus der Sammlung des Museums für Deutsche Geschichte* (Berlin, 1981). – (in German).
- J.Schöbel, *Prunkwaffen. Waffen und Rüstungen aus dem Historischen Museum Dresden* (Berlin, 1983). – (in German).
- A. Wehersberg, *Solinger Klingen-und Messerhandwerker in Rußland, zunächst in Slatoust, Die Heimat* (Solingen, 1930, 14 Februar). – (in German).
- L. Busch, *Neue Beiträge zur Geschichte der Solinger Auswanderung nach Rußland im zweiten Jahrzehnt des 19. Jahrhunderts*, Die Heimat Beilage zum «Solinger Tageblatt» (Solingen, 1939), 25-26, 37-38. – (in German).
- A.S. Burmakin, *Historical data on introduction of manufacturing of a cold steel in Zlatoust factory German masters*, Mountain magazine (St.Petersburg, 1912), vol. 4, volume 10-11, 240 – 267. – (in Russian).

E.G. Neklyudov, *Foreigner at private factories of Ural in the beginning of XIX century*, the Fourth Tatischev readings: Theses of reports and messages / (Ekaterinburg: the Russian Academy of Science, 2002), 281–286. – (in Russian).

S.N. Kulikovskih, *Zlatoust school of the author's cold decorated weapon. Becoming and development (1815 – 1860)* (Chelyabinsk, 2006). – (in Russian).

E. Lents, *The imperial Hermitage. The index of branch of Middle Ages and Renaissance. Assembly of the weapon* (St. Petersburg, 1908), Part 1. – (in Russian).

B. Grotkamp-Schepers, P. Joerßen, *Deutsches Klingmuseum Solingen* (Köln. 1997). – (in German).

Westdeutsche Neue Presse, 1953. 10 Januar. – (in German).

A.N. Kulinskij, *A cold steel of the German states: the Directory* (St.Petersburg, 2000). – (in Russian).

S.N. Kulikovskih, *Zlatoust engraving on steel, Russia and the Western Europe: interaction of industrial cultures. 1700 – 1950. Reports of participants of the International scientific conference* (Ekaterinburg, 1996), vol. 1, 184-190. – (in Russian and in English).

Solinger Tageblatt, 1938. 9 August. – S. 61. – (in German).

Zeitschrift des Bergischen Geschichtsvereins. 67 Band, Jahrgang 1939, 68-71. – (in German).

P.N. Stolpyanskiy, *Life and a life of the Petersburg factory. 1704-1914* (Leningrad, 1925). – (in Russian).

S.N. Kulikovskih, *Art metal of Zlatoust XIX – the beginnings XXI century: synthesis of technology and art*, The First Bushuev readings (Chelyabinsk, 2003), 95-98. – (in Russian).

P.P. Svin'in, *Zlatoustovsky a factory, Domestic a note* (St.Petersburg, 1826) vol. № 26, 229-245. – (in Russian).

B. Bokov, *German smiths in Zlatoust factory* (St.Petersburg, 1913), № 11-12. C. 289–295, 353–362, 519–529, 602–615. – (in Russian).

An der Grenze Asiens stehen bergische Fachwerkhäuser, Westdeutsche Neue Presse Solingen, 1953, 14 Januar. – (in German)

P.P. Anosov, *The collected works* (Moskow, 1954). – (in Russian).

S.N. Kulikovskih, *Blades with «figures» of first third XIX in./ Culture and art in monuments and researches* (Chelyabinsk, 2006), vol.4, 152-160. – (in Russian).

Sources

Abbreviations:

AVIMA – Archive of the Military – historical museum of artillery, engineering armies and armies of communication (connection);

ZGAO – Archival department of administration of Zlatoust;

RGIA – Russian state historical archive.

1. ZGAO. Ф. И19. Оп.1. Д. 4. Materials about foreign experts. 1811. Л. 48

2. ZGAO. Ф. И19. Оп. 1. Д. 4. Л. 28-30 about.

3. ZGAO. Ф. И19. Оп. 1. Д. 4. Л. 342-342 about.

4. AVIMA. Ф. 3. Оп. 5/2. Д.1402. Л. 36. About production of the white arms at Zlatoust armory. 1817.

5. AVIMA. Ф.3. Оп.5/7. Д.1. Л. 139 An extract from Magazine of Committee of ministers. July of 3-rd day 1815.
6. AVIMA. Ф. 3. Оп. 5/2. Д. 1402. Л. 37.
7. AVIMA. Ф. 3. Оп. 5/2. Д. 1402. Л. 37.
8. AVIMA. Ф. 3. Оп.5/7. Д.1. Л. 139 An extract from Magazine of Committee of ministers. July of 3-rd day 1815.
9. ZGAO. Ф. И24. Оп.1. Д. 40. Л.23-37 about.
10. ZGAO. Ф. И24. Оп.1. Д. 40. Л. 27.
11. ZGAO. Ф. И24. Оп. 1. Д. 90. Л. 17-18.
12. ZGAO. Ф. И24. Оп.1. Д. 8. Л. 56-57.
13. AVIMA. Ф. 3. Оп. 5/2. Д. 1402. Л. 37 about.
14. RGIA. Ф. 37. Оп. 11. Д. 124. Л. 11. 1816.
15. AVIMA. Ф. 3. Оп. 5/2. Д. 1402. Л. 36 about-37
16. AVIMA. Ф. 3. Оп. 5/2. Д. 1402. Л. 37
17. ZGAO. Ф. И24. Оп. 1. Д. 101.