



INTERNATIONAL MEDICAL SCIENTIFIC JOURNAL

# **ART OF MEDICINE**

**Art of Medicine International Medical Scientific journal**

Founder and Publisher **Pascual Izquierdo-Egea**  
Published science may 2021 year. Issued Quarterly.  
**Internet address:** <http://artofmedicineimsj.us>  
**E-mail:** [info@artofmedicineimsj.us](mailto:info@artofmedicineimsj.us)  
**11931 Barlow Pl Philadelphia, PA 19116, USA +1 (929) 266-0862**

**CHIEF EDITOR**

**Dr. Pascual Izquierdo-Egea**

**EDITORIAL BOARD**

**Prof. Dr. Francesco Albano**

**Prof. Dr. Tamam Bakchoul**

**Dr. Catherine J. Andersen**

**Prof. Dr. Pierre-Gregoire Guinot**

**Prof. Dr. Sandro Ardizzone**

**Prof. Dr. Rainer Haak**

**Dr. Dmitriy Atochin**

**Prof. Henner Hanssen**

**Prof. Dr. Antonio Aversa**

**Medieval metalworking crafts of Khorezm in the sources.**

**Turganov Baxit Qurbanbaevich**

Nukus State Pedagogical Institute named after Ajiniyaz Associate Professor of  
History Teaching Methods, Candidate of Historical Sciences.

E-mail: turganovbaxit@gmail.com

**Reimbayev Rustem Sarsenbayevich**

Nukus State Pedagogical Institute named after Ajiniyaz. Senior lecturer of the  
Department of methods of teaching history.

**Keranova Aigul Kuandykovna.**

Student of the Historical Faculty of the Nukus State Pedagogical Institute named after  
Ajiniyaz.

**Abstract:** The article studies the history of the medieval metalworking craft of Khorezm on the basis of information from written sources. Iron products were widely used in the economic and social life of Khorezm. Metal raw materials and certain types of weapons were imported from neighboring countries, some of the metal products were used for foreign trade. The process of specialization of some branches of metalworking in Khorezm has begun since the X century. The analysis of the sources indicates to the consistent development of metalworking in Khorezm during the IX-XIV centuries.

**Keywords:** Khorezm, written sources, cities of the Middle Age, metal things, trade relationship, handicraft centers, blacksmith trade, arm equipment trade.

**Introduction.** Medieval Khorezm was famous for its trade and the products of artisans. In the IX-X centuries, the number of settlements and rural settlements increased, the process of development of crafts and trade began in them.

According to the sources of the VIII - X centuries, there is a sharp increase in the number of cities in Khorezm. During the Arab conquest (712) there were only three cities in Khorezm: Kat (al-Fir), Hazarasp and Urgench, at the beginning of the IX century the number of cities is ten, and by the end of the X century it reaches thirty-three [14,180,202].

Valuable information on the handicrafts of Khorezm is contained in sources dating back to the early middle Ages. According to Al-Maqdisi (X century), there were handicraft workshops in the cities of Zarduh, Sadvar, Kat (kIyat) [14,187]. During this period, there is an intensive growth in the production of handicrafts for the market, due to the increase in the number and development of cities. As a result, a wide volume of handicrafts begins to enter the foreign market as a commodity.

In the early middle Ages, the cities of Urgench and Kat played an important role in trade relations with Central Asia, Eastern Europe and nomads. Trade was conducted in about 160 bazaars of Urgench.

In particular, the appearance of outpost cities on the outskirts for the nomads of Khorezm from the X-XI centuries had a positive impact on the development of trade and economic relations and crafts. At that time, trade and craft quarters operated around dozens of outposts of cities, such as the city of Shamakhi (30 ha), Shehrluk (15 ha), Bolshoy Aybuyir (10 ha), Bugrakhan (60 ha), Puljay (60 ha). Archaeological materials in the monuments prove the increase in the number of ceramic, metal, glass and bone objects, as well as the appearance of their new types.

The works of the authors - Ibn Rust (X century), Al-Maqdisi (X century), Az-Zamakhshari (XII century), al-qUrashi (early XIII century), Zakariya al-Qazwini (XIII century), Muhammad an-Nasawi (early XIII century) Ibn Battuta (XIV century) contain some information about the Khorezm metalworking crafts.

In Khorezm since the X century there have been specialized branches of metalworking craft, some metal products were exported. It is reported by al-Maqdisi (985) that in Khorezm "... castles, intricate bows were made and exhibited for foreign trade, boats were built and equipped" [14,202].

In the 10th century, 42 types of goods were exported from Khorezm to the countries of the East, of which 27 types were brought from Bulgaria. At that time, metallurgy and metalworking were developed in Volga Bulgaria. Swords, bows, daggers, armor and copper were brought to Khorezm from Bulgaria [14,202]. In particular, Bulgarian swords and armor were exported to the countries of the East through Khorezm.

Ambassador Ibn Fadlan (921-922), who traveled to Bulgaria along the Volga, also noted that iron raw materials came to Khorezm through trade with the Turkic peoples [10,55,57]. According to his report, there was a Khorezm blacksmith named Takin al-Turki in Khorezm. He was engaged in the iron trade in the country of the infidels (Volga Bulgaria - T.K.B.).

The information of Ibn Fadlan (922) and al-Maqdisi (985) confirm that iron, copper raw materials and weapons came to Khorezm from Volga Bulgaria as a result of trade and economic ties.

Iron objects were widely used in the medieval economic life of Khorezm. The gates of the castles were covered with iron, and stone-throwing machines stood above the gates.

There was a suspension bridge "ramp" in front of the castle gate, which was raised at night and lowered again during the day. Sources note that in the early medieval settlements of Aykhan there was a stone machine "manjanak" above the gate, and in Nuzvar and Zamakhshar there were iron gates and suspension bridges [14, 187-188].

In Khorezm since the X century, metal products such as locks, saddles and horse harnesses were made in specialized industries and exported during the Mongol period for foreign trade [21,3].

According to the Arab authors of An Nuweiri, ibn Abda-Zahra, and such products continued to be produced in Khorezm in the XIII-XIV centuries. Khorezm saddles and bridles with gold and silver notches were especially famous in the

Golden Horde period. Such products were sold in Muslim countries and were highly valued in foreign trade [16,60,100,152].

Especially during the reign of the Anushtakins (1097-1231), the economy, trade and craft were highly developed in Khorezm. At that time, about 400 cities of Khorezm had mutual trade and economic integration.

Urgench has become a major trade and craft center of the East. The area of the city occupied an area of 1000 hectares and numbered thousands of trade and craft workshops. The development of crafts is also observed in other cities of Khorezm, the process of craft specialization has been strengthened.

During this period, as a result of close trade and economic ties with the states of the East, there is an increase in the range of metal products made by Khorezm craftsmen and an increase in their quality.

In the work "Mukaddimat ul-adab" by the Khorezm scholar Az-Zamakhshari (1075-1144), a number of terms concerning tools, weapons, household utensils, as well as the names of individual specialized crafts are noted: jewelers (oltunchi), coppersmiths (kulachi), lock makers (kulfchi) and terms of some tools of craftsmen [11,93].

The listed indirect data allow us to assume that in addition to the manufacture of various products from copper, bronze, iron, metalworking artisans at that time produced steel products and used steel swords, scissors, which were complex metals.

Among the authors, al-qUrashi (beginning of the XIII century) notes that there are about 50 specialized crafts in Khorezm, and Zakaria al-Qazwini (XIII century) writes that the inhabitants of Gurganj (Kunya-Urgench) are "skilled artisans", especially blacksmiths, carpenters, etc., who have achieved perfection in their craft [1,520].

According to the manuscript of the "Tariff of Shahru Khorezm", before the Mongols (beginning of the XIII century) there were three thousand and thirteen caravanserais in Khorezm, and each had a thousand cells. There were seventeen

hundred bazaars. If someone needed a kumach or silk fabric, then he could satisfy all his needs.

There were one thousand three hundred blacksmiths, one thousand five hundred shoe shops, one thousand three hundred shoe shops, one thousand three hundred salt shops, one thousand two hundred coppersmiths' shops, one thousand three hundred grocery stores [5,151-153].

Sources indicate that the blacksmith and copper workshops in Khorezm at that time were not inferior to other industries.

Products made of precious metals, such as gold and silver, were brought to Khorezm mainly from the countries of the East by trade and embassy caravans. For example, among the gifts and gifts sent to Khorezm Shah by Genghis Khan in 1216, there were Chinese goods. Among them was pure gold, which looked like a camel's hump, brought on a separate chariot. The caravan of 500 camels sent by Genghis Khan in 1218 under the leadership of Bahauddin ar-Razi also contained gold, silver, precious metals and many other goods [4,164-165].

During the Anushtakin period, gunsmithing was one of the most developed industries. The number of troops of Khorezm at that time, their military achievements- a logical basis for the development of the arms industry. In 1218, Khorezm Shah organized a general review of the troops, which was attended by "about 150 thousand mounted soldiers in addition to foot soldiers, which numbered up to 100 thousand more." This is confirmed by the registers of the Khorezm Shah's military divan, in which 400 thousand horsemen on horses and camels participated in the campaign to Baghdad [4.89]. In the state of Anushtakinov, "Divan al-ard" was in charge of military ribbons (iqta'), all types of salaries and payments to soldiers of all ranks, as well as control and registration of troops and their weapons.

In the state of Anushtakins, blacksmiths produced military equipment in addition to conventional weapons. Muhammad an-Nasawi (beginning of the XIII century) noted that in the army of the Khorezmshahs, in addition to conventional weapons - swords, spears, bows and arrows, maces and pikes – the Khorezmshahs' troops were

armed with catapults (mandanjik), siege engines (dabbabat), crossbow (tir-charkh), turtle (turtle), i.e. movable towers (mataris), battering rams (jamalukat), siege ladder (salalim) and other military vehicles [2,156,231].

According to the reports of al-Khorezmi, al-Maqdisi (X century), the Persian poet al-Lohuri (XI century), metal parts were widely used in the construction of military equipment [6,218]. In particular, al-Maqdisi (X century) notes that manjanak uses metal structures called "halka" or "al-halka" [6,215-221].

It should be noted that metal structures in the construction of suspension bridges, iron gates, mandrels and military equipment were made by specialized blacksmiths.

Active participation of gunsmiths and blacksmiths in national military companies lasted until the late middle Ages. According to the documents of the Khiva khans, the army was followed by riflemen, carpenters, blacksmiths, infantrymen, cleaners and boatmen [7,91].

The armies had gunsmiths and blacksmiths who repaired and supplied the army with weapons and equipment like swords, daggers, bows, spears, shields, armor, chain mail, helmets, horse equipment.

In Khorezm, the production of bows and arrows, swords, spears and other weapons in the traditional style continued in the late middle Ages [8,178]. Gunsmiths have long been a specialized industry, and the sale of weapons in the markets of Khorezm was organized until the last quarter of the XIX century [9,304].

During the Anushtakin period, trade and crafts were highly developed in the cities of Khorezm. Yakut al-Hamawi (1219) states: "... I was here in 616 (1219-1220). Almost all cities of Khorezm have markets rich in goods and shops, and villages without markets are rare " [12,2021; 14,419].

In Mirza Ulugbek's work "Tarikh arba ulus" he wrote that "the Mongol army killed 100 thousand people after the conquest of Urgench, and 100 thousand artisans were expelled to Mongolia" [3,329].



A similar message was sent to Muhammad al-Nasawi, secretary of Jalaladdin Manguberdi. According to the work, after the Mongol conquest of Khorezm, the captives were divided into separate groups. One hundred thousand artisans were separated from them and taken to their lands.... [19,129].

Perhaps the figures in the sources are exaggerated, but these data show that at that time Urgench (the beginning of the XIII century) was a major center of crafts in the East, among which the metalworking crafts industry is undoubtedly developed.

Despite the fact that the Mongol invasion caused great damage to cities, in the second half of the XIII century a new center of agricultural and urban culture was formed in the west of Khorezm. Economic and cultural life in cities has been revived in a new way.

As part of the Golden Horde, the lands of northwestern Khorezm became one of the strong economic bases, and then the politically influential region of the Golden Horde. In Khorezm, from the middle of the XIII century, such settlements as Urgench, Mizdakhkan, Sharlik, Shamakhi, Janik-kala were restored.

This is due to the fact that - "Urgench, which was necessary as a source of invaluable wealth for the khans of the Golden Horde, rose again from the ashes and became a major center of trade and crafts" [17,309].

The traveler Plano Carpini stopped in Khorezm in 1246 on a trip to Mongolia. In his memoirs, he talks about the wealth of the markets of the city of Ornas (uRgench), which is rich and has a large population [15,46,209]. The Arab cosmographer Shamsiddin ad-dImishki (1256-1327) wrote that "the Khorezm region covers sixty thousand villages", which indicates the revival of economic and cultural life in Khorezm shortly after the Mongol invasion [18,30].

And in the information of the traveler Ibn Battut (1333) Khorezm and its capital the city of Urgench at that time as a major economic and cultural center [12,47]. According to his work, it is mentioned that the Urgench market was so crowded that "he could not move back or forward" Ibn Battuta writes about Urgench: "It is the largest, most significant and beautiful city of the Turks, having

glorious markets, spacious streets, numerous buildings (mosques, madrasahs, khanaks). In the city, life boils from a large number of people, it looks like an undulating sea" [12,48].

During this period in Khorezm, gold and silver vessels were used in the decoration of palaces and houses of officials, as well as in hospitality [12, 48]. Ibn Battuta (1333) describing the house of Abu Hafis Umar, the judge of Urgench, said: "This is a beautiful and spacious room, ... silver vessels filled with gilding were placed on each of the rows of shelves. This is how the residents of the country usually decorate their homes" [12,59-60]. Continuing, he writes: "They brought other trays. The peeled pomegranate fruits were served in gold and silver dishes, with golden spoons."

Silver and bronze spoons with gilding are also known according to local archaeological data of the XII-XIV centuries.

The tradition of covering jewelry, various dishes, weapons and other objects with gold and silver by Khorezm craftsmen continued in the XIII and XIV centuries.

According to an-Nuweiri and ibn Abd-Zahr (XIII-XIV centuries), the following items exported from Khorezm are noted: "locks, saddles, horse harness, etc." [16,60,100,152]. These authors noted that the products of Khorezm coiners, for example saddles and horse harness, using gold and silver, were exported from Khorezm to the countries of the East.

In the second half of the XIV century, according to Ibn Arabshah, Khorezm (uRgench) was "... one of the largest cities in the region" [18,102]. The rich bazaars of the city attracted many trade caravans. Various handicrafts were sold in the bazaars, in particular, weapons for war and hunting, jewelry, ceramics and stone-cutting products, carpets and fabrics.

Sources also describe Khorezm as a silver-rich state. According to Ibn Arabshah, during Timur's second campaign in Khorezm, a merchant named Hassan Suriy left the city to meet Temur and ask him to stop the war and give him loot in return. Timur asks him to give two hundred mules (donkeys) as a burden of silver and

hand them over to his treasury as a coin. However, Hussein Suriij persuaded Timur to persuade him to ask for a quarter of what he asked for (silver). Hassan Suriij separates the necessary wealth from his property and then weighs (silver) [13,88].

For comparison, when the Sassanid ruler Feruz (459-484) was captured by the Ephthalites, it was decided to release him in exchange for 30 mules of silver coins, but there were only 20 mules in the Sassanid treasury (a mixed type of donkey and horse).

Blog Daria foreign trade that in the Middle Ages Khorezm had sufficient reserves of silver. This is due to the fact that from the early Middle Ages to the late Middle Ages, silver coins and ingots, silver vessels of Eastern countries such as Central Asia, China, India, Iran, were among the goods exported to the markets of Eastern Europe through Khorezm merchants. In particular, in 1749, merchants of Khiva and Bukhara exported 3 batches of silver products weighing 15 pounds 10 pounds through Orenburg to Astrakhan [20,118].

In the Middle Ages in Khorezm there was a profession of "Kumushchi" working with silver. This is evidenced by the export of silver products from Khorezm (VI-VIII centuries), seats covered with a layer of silver, horse harness (IX-XIV centuries), silver processing of weapons and household utensils.

These sources indicate that in the Middle Ages, the metalworking industry developed in Khorezm, some metal products were exported. In the IX-X centuries, there were industries specializing in the metalworking craft industry.

This proves that the tools, weapons and equipment, coppersmith, jewelry, necessary for the national economy, were mainly made by local craftsmen. The production of weapons and equipment by artisans continued until the late Middle Ages.

In general, the active participation of Khorezm in foreign trade in the IX-XIV centuries was one of the factors that influenced the growth of urbanization and the development of the crafts industry.

## References

1. Al-Qazwini Zakariya. Asar al-bilad wa akhbar alibad. -Beirut, 1960.
2. An-Nasawi Muhammad. Biography of Sultan Jala ad-Din Mankburny / Translated from the Arabic by Z.M. Buniyatov. - Baku, 1973.
3. Amedmedov B. Tarikhdan saboklar. -tOshkent, Shkituvchi, 1994.
4. Buniyatov Z.M. The state of Khorazmshakhov - Anushteginidov. -M.: Nauka, 1986. -248 p.
5. Buniyatov Z.M. Selected compositions in three volumes. The states of the Khorezmshahs of the Anushteginids 1097-1231 -BOKU. Elm, 1999.
6. Belinitsky A.M., Marshak B.I. The oldest image of a siege engine in Central Asia // Culture of the East. Antiquity and the Early Middle Ages. -L.: 1978. -PP.215-221
7. Gulboev N.N. Khiva honligi kучarbiy kuchlari tashkent tuzilmasi //kHorazm tarikhi zamonaviy tadkikotlarda. -tOshkent-uRgench. 2018. -p.89-93
8. Jenkinson A. Travel in Central Asia in 1558-1560. // English travelers in the Moscow state in the XVI century. - M.: 1937.
9. Zhelyabuzhsky E. Essays on the conquest of Khiva. - M.: 1875.
10. Ibn Fadlan - Ibn Fadlan's journey to the Volga/ Trans. and comment. edited by I.Y.Krachkovsky. -M.-L.: Publishing House of the USSR Academy of Sciences, 1939.
11. IbroimImov S. Fargona shevalaring kasb-uнаunar leksikasi. -tOshkent, 1958. Gild. II-III.
12. IbroimImov N. Ibn Battuta va uning Srta Osiega saeatiyati. -tOshkent, 1993.
13. Ibn arabshox. Ajoib Al-Makdur fi tarihi Taimur (Temur tarikhida taqdir ajoibotlari). 1 whale. - tOshkent. Menat. 1992.
14. Materials on the history of Turkmens and Turkmenistan. - M.-L., 1939. T.I. - 519 p.
15. Plano Carpini Giovanni. The History of the Mongols / Per. A.I. Maleina. - V. Book: Plano Karpina J. The History of the Mongols. Rubruk G. Journey to the Eastern countries. -M.: 1957.
16. Tiesenhausen V.G. Collection of materials related to the history of the Golden Horde. -St. Petersburg: 1884.
17. Tolstov S.P. In the footsteps of the ancient Khorezm civilization. - M.: USSR Academy of Sciences, 1948. -378 p.
18. Uvatov U. Donolardan saboklar. - tOshkent. Abdullah Kodiriy. 1994.
19. Khrapachevsky R.P. The Golden Horde in the sources. Volume I. Arabic and Persian sources. - M.: 2003.
20. Yukht A.I. Trade of Khiva and Bukhara with Russia through Astrakhan (20-40s of the XVIII century)// Late feudal city of Central Asia. -tAshkent. 1990.-pp.115-122.
21. Yakubovsky A.Yu. Feudal society of Central Asia and its trade with Eastern Europe in the X-XV centuries. // Materials on the history of the Uzbek, Tajik, Turkmen SSR. Part I. -M-L., 1932. - pp. 1-60.