


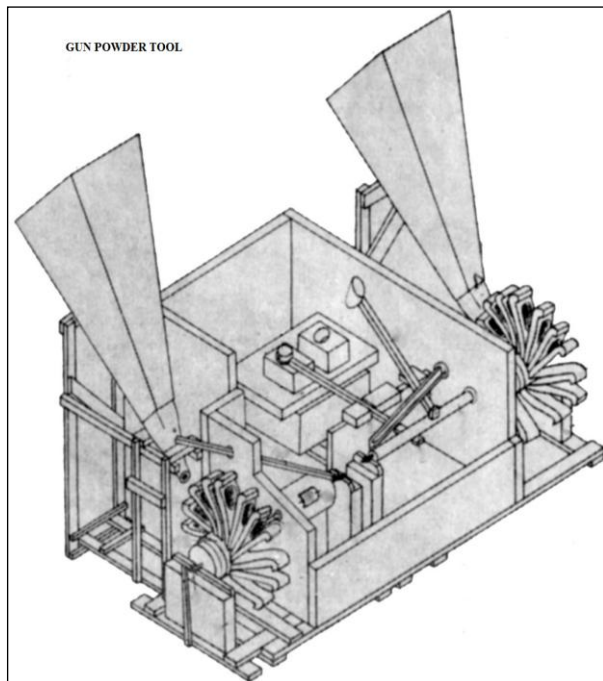
<p><b>Gun powder tools in the village <i>Guri i Bardhë</i> in the province of Mat</b></p>		<p><b>Ethnology-Folklore</b></p> <p><b>Keywords:</b> gunpowder, tools, Roger Bacon, Potassium nitrate KNO<sub>3</sub>, etc.</p>
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<p><b>Abstract</b></p> <p>Mat is known as gunpowder manufacturer and firearms in Albania and other countries in Europe. In Europe the powder is brought from the Arabs. The form of the gunpowder composition was discovered by the English scholar Roger Bacon in 1214. Gunpowder and firearms were used in Albania towers in XIV. <i>Guri i Bardhë</i> village along with other villages around were the producers and the processors of the black powder. From foreigners it is called Albanian brand powder. The gunpowder tools in these villages were 19 altogether. They continued to produce powder until 1939. Mat's powder was traded in Diber, Prizeren, Gjakova, Shkodra, Durres, Tirana and even up to Janine.</p>		

From different studies it is said and known that Mati has been the eldest center of gunpowder production in Albania. The village *Guri i Bardhë* has been the main center including some other villages around that area which also produced gunpowder. In the beginning there were only three gunpowder tools and that later they became more and more based on the demands and needs of the times that came for it. This demand came also from other countries. It's known that the invention of gunpowder had effected on the purposes of wars occurred in the world during all the times.

The fire invention of gunpowder with smoke, based on the testimonies, was in China around the year 618 from which and where they chose the actual elements of ingredients of the black powder with smoke. In the XIIth century in China began the use of guns. The Black powder it was a necessity for the use of the way so that the guns could function. At that time it was a huge demand on a lot of countries of the world. And so the black powder and the fire arms came to our continent from the Arabs. The fire base of powder is Potassium nitrate (KNO<sub>3</sub>) which from the Arabs was called as the black salt. From the beginning of XIVth century, the Europeans got to know better the production of black powder. The fire formula was invented from the English Scientist Roger Bacon in 1214-1285 (*Storia delle armi* vol. 7, Losana 1964 p. 35). The gunpowder was mostly used at the Anglo-France war in the battle of Kres. In 1346, given the data for the use of the gunpowder and firearms by the Feudal-Albanian principalities during the XII-XIIIth centuries, by Gjergj Balsha of Shkodra it appears that gunpowder and firearms were also used till the middle of the XIV century. At that time they were used by the Albanian principalities such as: Tanush Dukagjini (1417), Lek Zaharia (1417), and a few more. Gjergj Kastriot Skenderbeg used it at the battle of Drini in the years 1447-1448. During the wars that took place in the XV century, Albanians not only had a lot of knowledge of the firearms, but they also become producers of them and the gunpowder. The Venetians have had early links with our lands, actually in the village of *Fushat* even in our days are preserved the toponyms such as “the shops of the Venetians” and because since then the Venetians had their stores in this village. From the Petralbes castle, on the beam of the mountain lobe, it was a line of water that came down all the way to the Llaveshaj's house, where there were tools for making gunpowder. At that time there were only three of them.

These were the oldest in Mat and in Albania, being so close with the Petralbas castle, with the Kastriots whom without their help they couldn't even function. The telltales prove that the black gunpowder of Albanian made was produced for the first time in Mat, that's where its name came from "Mat powder" and from the foreigners was called "Powder made in Albania."

In the publishing of the Albanian Academy of Science "The Albanian Ethnography" nr 16, page 224, the year of publication 1989, the Ethnographer and archaeologist Dilaver Kurti wrote: These workshops were located on peak of Mat, at the beam of the Skanderbag castle, Petrlabas in the flow of streams that were branches of the Mat river. The epicentre of this area was exactly the village of *Guri i Bardhë* and later it extended also in Klos with the market that it had in Stragj. Here it was the most important road that departed from Durres to Tirana, Mat, Diber, Kosovo and Macedonia. On this road there were many vacation spots where caravans loaded with goods passed through many bridges. These gunpowders gave much value to each other on this plot of Mat in the XV century and onwards. This craft with gunpowder production plants in Mat was the precursor of the chemical industry in our country. The production of gunpowder in Mat, more concrete at the bottom of Petralbas is produced for more than five centuries. In the village of Llaveshaj, there were made special productions of gunpowder. There the gunpowder was produced in simple workshops using the energy of the water and also with the arm strength. These kind of workshops were named gunpowder tools.



After there were made gunpowder tools from the people of Llavesh in the village of *Fshat*, there were also made more gunpowder tools around other villages, too. There were also gunpowder tools that were made from Reci, Kaceli, Halili and Bebja families in Dars. Thus, Klosi became the oldest, the most important, and the largest gunpowder production centre, and it also stands as the oldest background of the Albanian resistance because at the territory of Klos there was produced

the powder for the belt guns and arm guns, also for the hunting guns, and for breaking of the stones, etc. From the beginning of the XVth century until the destruction of the Shefqet Durgut Pasha's army where he destroyed all the gunpowder tools that were in Mat, except one which belonged to Hysen Hasan Llaveshi and which functioned until 1939 when Albania was occupied from Italy in the beginning of the second world war.

The production of the gunpowder in the area of the village of *Guri i Bardhë* and villages around it, it was a nationwide pride. With the destruction of the gunpowder tools from the army of Durgut Pasha in the 1911, they were turned into mills or Valenca. Almost every family from Mat had tools of gunpowder which were of a big help for the Kastriots. Llavesh's family continued with uninterrupted production of gunpowder till 1939. It's been verified that the tools of gunpowder in Mat and in Albania have functioned from the beginning of the XVth century being build from the folks of these places. The first substance for the production of the gunpowder was Potassium nitrate (KNO<sub>3</sub>) which was brought from Italians that were coming to Durres. The lands of Llavesh's family stretched across the border of their village and all the way to Bebaj of Klos. Almost all the generations of those villages around white plains have produced and sold gunpowder. The most important thing of these gunpowder tools is the fact that Albania being continuously attacked from different countries was producing gunpowder to defend and liberate themselves. The gunpowder tools were build near the water from where the lands were watered. Their creation was simple and they were built them by special gunpowder tool craftsmen, mostly from wood with the exception of metallic shafts and from the lime stones in order not to happen any problems of explosions from the collisions or compressions. The wooden element that was used were chosen to be moisture resistant when such tools were built. The ingredients of black gun powder (with smoke) are Potassium nitrate KNO<sub>3</sub> 75%, Sulphide 10% and coal 15% was prepared from the willow branches.

### Uses of Gunpowder

Potassium nitrate is the main source of acidifying and reducing electrification during its production as well as during its transportation and usage. Potassium nitrate was consistently imported from Italy. Even sulphide was partially imported from abroad while a part was produced in the country. The coal was prepared in the country from the birch tree, poplar and hazelnut tree. The coal from the birch tree was prepared from the birch tree branches, one year old. This was important because if these branches were not fresh and young, the gun smoke couldn't be burnt well and as a result of the throat of the weapon only the sparks would come out. While the hazelnut coal is more qualitative but it was more difficult to obtain because it was a rare tree. For the preparation of coal from the branches of the willow, their skin was removed, they were left to be dried and then were cut, so only then they would become coal. All these processes for the production of the gun smoke in the gunpowder tool was done by only one person that was called the gunpowder toolsman. This person, after he would weight them and separate them in 3 ingredients depending on the percentage that was needed, then he would crumble them all together and would weight them on seven ochs. After its mixture and its soaking with water in the stratum,

the beating process started, as it was said in the native language, and such a process continued for 24h. During the beating process by the gunpowder toolsman were taken measures for fire protection by cheeking for the plunging of the gunpowder. In these cases were disposed certain amounts of water. After this process, the gun powder was taken and opened in sheets, so it could be dried. After the drying of the gunpowder it continues the process of the sedimentation which is the most tedious and the most important.

The Sieves are 3 altogether. The first sieve, Seredonia the second and the third sieve. The sieves were big and deep and with round wooden circles. The wooden circles were tightened tightly with carefully pinched connectors and then the holes for the sieve of the gun powder with different dimensions. Into the sieve together with the gun powder were deposited 5-6 limestones, with the size of a walnut grain during which the backing process was completed and the gun powder was cut to the point that the granules of gun powder would leak from the sieve through its holes. From the first sieve the large grains were extracted, in the Seradane sieve were separated the powders and in the third sieve were treated the regular granules of the gun powder which were packed in the bags of buckram and stored in safe places without humidity and out of the risk of fire. Powders with large granules were recycled or sold in that condition and used for blasting. While the remake of the gun powder was greatly improved and the quality of its grain from monolites was brilliant. The possibility of electrification during transport was greatly reduced and the combustion process was improved, which once it was of a big importance. The trading of the gun powder was made directly related to the user or to the traders who came from Kruja and from other places to buy gun powder. The gun powder from Mat was traded in the whole north and mid of Albania. The trading of the gun powder also took place and was also sold on the market of Dibra, Prizren, Gjakova, Shkodra, Durres, Elbasan, Tirana, in one part of Macedonia and up to Janina and elsewhere. Even Ali Pashe Tepelena for the production of gun powder in Janina took manufacturers from Mat. During the trading of gun powder in other cities or other countries, especially Greece the gun powder was sent at the place from the producers themselves. In cases where the powder was sent by the charter beforehand it was used to be signed the contract between the producer of the powder and the buyer.

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