

## THE FIRST FACTORIES IN THE BALKAN PROVINCES OF THE OTTOMAN EMPIRE

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The complete bankruptcy of the solemnly proclaimed reforms with which the period of Tanzimat was opened is the reason for complete disregard in historiography of attempts at certain modernizations of industry in the Ottoman Empire. Mention is made only of the efforts of Mithad Pasha to reorganize the Danubian Vilâyet. However insignificant these attempts may be when set against the background of the rapidly developing industries in other states, they should not be overlooked in studying the specific development of industries in the territory of the Ottoman State. Not less than 15 large factories, built on a European model, with imported machinery, were set up in one or two decades with state subsidies.

This activity was not sufficiently understood and consistently implemented by the Turkish rulers. Owing to general ignorance and the rampant corruption and misappropriations among the Turkish ruling clique, a large number of these enterprises ended their existence<sup>1</sup>.

The Broadcloth Mill in Sliven was the first state industrial enterprise in the Balkans. The emergence of the state mill in Sliven marked a new stage in the development of the textile industry: a change from the manufacturing stage to factory production. This process began in

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<sup>1</sup> Seven state factories took part with their products in the Paris Exhibition of 1856: broadcloth (in İzmit), fezes and cotton prints (in Istanbul) cotton textiles (in Zeytunburun), velvet and silk (Hereke), arms (the Tophane in Istanbul and Beykoz), porcelain and glass (Beykoz). Besides, a paper mill was in operation in Smyrna and the broadcloth mill, examined by us, in Sliven. Most of these factories, in the words of the Turkish student of the economic consequences of the Tanzimat reforms, Ö. C. Sarç, "had no success and were compelled to discontinue their activity, since they had become a heavy burden for the state". The case is known of a person, entrusted with the construction of a factory, who completely misappropriated the funds and for years was buying finished merchandise and was presenting it as manufactured in the non-existent enterprise Ö. C. Sarç, "Tanzimat ve Sanayimiz", *Tanzimat I*, İstanbul, 1940, pp. 434-437.

1840's and continued for several decades after the successful experiment with the building of the Sliven mill, the Turkish Government went on with opening of several other mills for broadcloth and other textile products.

The mill in Sliven existed until the end of 19th century also after Bulgaria's Liberation. This prolonged operation of the mill is interesting in many respects and raises numerous problems some of which we should like to draw the reader's attention to in our further exposition. For the sake of comparison we are going to examine the Razgrad state workshop for saltpetre. Besides, we will try to analyze the structure of the first private mill set up in the vicinity of Plovdiv in 1848. In this way one will be able to see the level reached in the development of capitalist relations in the Bulgarian lands which constituted the economically most advanced part of European Turkey at that time.

For these two mills—those at Sliven and Plovdiv—there is a widespread view that the manpower used there consisted of prisoners or of persons forcibly compelled to work<sup>2</sup>. In general, however strange it may seem, the term "working class" even with great reservations, has not yet been applied in the historiographies of the Balkan countries for the epoch of the National Revival, although there is frequent talk of Greek, Bulgarian, Serbian and other bourgeoisies as classes of their own with a number of strata, including the big industrial bourgeoisie. In class analysis of Bulgarian society, for instance, at one pole, are indicated as a rule the "ruined craftsmen", "rural and urban masses turned proletarian", "the lowest strata of society", etc. Mention is made of "workers" also, but only to point out that in some branches the stratification set journeymen and apprentices as "workers" against the masters. Even authors who describe the unfortunate life of numerous apprentices, journeymen and workers in the manufactories, when they characterize the classes and class relations during the Revival

<sup>2</sup> Yide e. g. Zh. Natan, *Economic History*, (in Bulgarian), Sofia, 1957, p. 200, where the author explicitly confirms his view that prisoners were working in the factory of Gumii|gerdan. The importance of this second factory has obviously been underrated by the author, who refers it to the second half of the 19th century despite the fact that it is erroneously indicated in the book that it was founded in 1840.

Period, ignore hired manpower as a new class phenomenon and class force<sup>3, 4</sup>.

For this reason the main attention here will be focused on the elucidation of the nature of the two mills and above all on determination of the nature of manpower used. As V. I. Lenin emphasizes, "the degree of the spread of hired labour is almost of the greatest importance in the problem of the development of capitalism"<sup>5</sup>.

The first true factory in the Bulgarian lands and in the Balkan provinces of the Ottoman Empire was built in Sliven in 1836<sup>6</sup>, a fact the significance of which was correctly appraised by its contemporaries. It was with such enthusiastic words that this event was met in "Obsh-toe Zemleopissanie" (General Geography), published by K. Fotinov in Smyrna, only a few days after the opening of the mill: "This town Sliven has become remarkable because of the broadcloth mill which its citizen the distinguished and praiseworthy, the judicious Mr. Dobri Zhelyazkov put into operation with the aid of the highly skilled G. Atanassio the watchmaker, and let his name be immortal and praise forever to all industrious Bulgarians!"<sup>7</sup>

That this was not empty admiration, caused solely by an upsurge of patriotic feeling, is seen from the impression the mill made on foreign-

<sup>3</sup> See a survey of the views expounded on this problem in N. Todorov, "On the Hired Labour in the Bulgarian Lands about the Middle of the 19th Century", (in Bulg.), *Istoricheski Pregled*, v. XV, 1956, No. 2, p. 3 et seq.

<sup>4</sup> Oya Sencer's monograph entitled *The Working Class in Turkey. Its Birth and Structure* was published in Turkey in 1969. The authoress reviews the development of the working class in Turkey up to World War I. (Oya Sencer, *Türkiye'de İşçi Sınıfı. Doğuşu ve Yapısı*, İstanbul 1969. See Dj. Hakov's notice in *Istoricheski Pregled*, 1969, No. 6).

<sup>6</sup> Y. I. Lenin, *Works*, (in Russian), 4th edition, v. 3, p. 509.

<sup>6</sup> The view that 1834 marked the beginning of factory production in Bulgaria is widespread in Bulgarian historiography. It was then that Dobri Zhelyazkov opened his workshop in Sliven of which the state textile mill is regarded as a natural continuation. These are two different enterprises that are incorrectly linked into one. They are connected by the personality of D. Zhelyazkov, but whereas he was the founder and owner of the specialized workshop with manufactural division of labour, his role in the development of the mill was totally different as we are going to see further. (N. Todorov, "The First State Textile Mill in the Balkans", in *The Genesis of Capitalism in Industry*, (in Russ. Moscow, 1968, pp. 339-352).

<sup>7</sup> K. G. Fotinov, *General Geography in Brief for the Entire World*, (in Bulg.) Smyrna, 1843, p. 87.

ners. Ami Boué, who left the first description of the mill almost immediately after its opening, attached great importance to it as a serious attempt by the Turkish Government to free itself from its dependence on the importation of good-quality fabrics and broadcloth in particular<sup>8</sup>. After two decades Sliven was visited by another traveller, who stayed in this area for a longer time. For him Sliven "is one of the most industrial towns in the whole Ottoman Empire", and "the elegant buildings of the mill remind one of our European comfort"<sup>9</sup>.

The emergence of the first factory in Sliven was not an accidental phenomenon. As early as the 17th century the thick woollen blankets, rugs made of goat's hair and carpets were exported not only to Rume-  
lia but also to the Arab and Persian lands. Merchants from distant parts of the Empire gathered at the Sliven Fair which lasted for about a month. Aprilov had every ground to note about the middle 1830's that "the inhabitants of Sliven (about 20,000) are trading with Asia, Austria and Wallachia; have important woollen products which they dye red and yellow, unknown in other places, even in Europe"<sup>10</sup>. It was precisely these qualities of the Sliven aba that drew the attention of the Turkish Government, which after buying almost in full the broadcloth manufactured in Salonika and a large proportion of the aba of Plovdiv and failing to meet all its needs, entrusted the Sliven Voyvoda to organize the supply of aba for the reorganized Turkish army which required large quantities of material of the same kind and quality for the uniforms of soldiers and officers. In 1827 the Sliven dealers in aba, Todor and Yordan, concluded a contract on behalf of the other Sliven producers with the head of the Military Arsenal in Istanbul for the sewing of 10.000 aba garments<sup>11</sup>. Only a few years later Sliven with Kotel, i.e. the whole Eastern Balkan range got down to supplying the Turkish Government with 60.000 rolls of aba of 18 1/2 kuruş each, which on the insistence of the Porte were increased to 80.000<sup>12</sup>. About

<sup>8</sup> Ami Boué, *La Turquie d'Europe*, Paris, 1840, t. 3, p. 100.

<sup>9</sup> Lettre du Docteur Poyet a la société de géographie, contenant la description du district d'Islimnia." N. Michoff, *Contribution a l'histoire du commerce de la Turquie et de la Bulgarie*, Svichtov, 1950, p. 338.

<sup>10</sup> V. Aprilov, *Dennitsa novobulgarskogo obrazovaniya* (Morning Star of New Bulgarian Education), I, Odessa, 1846, p. 131.

<sup>11</sup> P. Dorev, *Documents on Bulgarian History*, (in Bulg.), v. III, 1940, p. 117.

<sup>12</sup> *Ibidem*, pp. 187, 201.

the middle of the century not less than 250,000 okes of wool (320, 513 kg) were made into some 650,000 metres of cloth in Sliven<sup>13</sup>. Every home on an average processed about 10 okes of wool for its own needs and spun or prepared for sale another 20-30 okes a year<sup>14</sup>.

The Sliven Voyvoda was entrusted with the supply of aba for the Turkish army. The Treasury placed funds at his disposal, at the same time ensuring him with the monopolist right to purchase the necessary amount of wool and the aba which had been contracted. From the scarce information we have, we can more readily follow up the misappropriations and violations to which the direct producers were subjected than the way in which the aba made was delivered. The Voyvoda made use of the privileges granted him to buy an oke of wool at 40-50 para and to distribute it among the aba producers at a price higher than the market one<sup>15</sup>. Referring to his monopolist right to supply wool for the state order, he collected a special charge from the aba makers even in the cases where they themselves procured the necessary wool. Besides he paid lower prices for the finished aba -from 14 to 16 kuruş at the most per roll, irrespective of its quality. This enabled him to commit new misappropriations, to select the best aba and to resell it to merchants at 25 kuruş, making up the remainder to the fixed amount of the delivery by cheap aba<sup>16</sup>. He had an effective means against the attempts of producers to get rid of these misappropriations: accusation of smuggling or of failure to fulfil a state order, accompanied by fines and detention of people<sup>17</sup>.

It was precisely in such conditions of intensive production in Sliven for home and foreign markets and particularly for the needs of the army that Dobri Zhelyazkov began his industrial activity. Having left Sliven during the mass emigration of its inhabitants to Russia after the Russo-Turkish War of 1828-1829, D. Zhelyazkov settled down in the Crimea, in Ekaterinoslav, where he was able to observe the developing textile industry. Here he copied the designs of looms, spinning-wheels and carding machines, bought some of them and in 1834, after his return to Sliven, set up a workshop with a carding machine driven by a horse,

<sup>13</sup> N. Michoff, *op. cit.*, p. 338.

<sup>14</sup> S. Tabakov, *History of the Town of Sliven*, (in Bulg. ), v. I, Sofia, 1924, pp. 49-50.

<sup>15</sup> P. Dorev, *op. cit.* pp. 17, 159, 173, 189, 202, 204.

<sup>16</sup> P. Dorev, *op. cit.*, p. 173.

<sup>17</sup> *Ibid.*, pp. 187, 189.

at his home<sup>18</sup>. The local authorities took an interest in his work. This interest was aroused rather by the quality and appearance of the commodity manufactured by him -broadcloth- than by the method of production. The Turkish Government obtained broadcloth for the needs of the court and the officers from Salonika, where Jewish refugees from Spain had organized a considerable production as early as the 16th century. This however, could not, satisfy the high requirements and therefore the expensive broadcloth from Western Europe occupied an important position in Turkey's imports. It was in order to cut down imports that the Turkish Government became interested in D. Zhelyazkov's activity. He was summoned with samples made by him to the Porte. The samples consisted of broadcloth made of local and Spanish wool. They were approved and by a firman D. Zhelyazkov was entrusted with the "weaving and careful making of cloth" according to the samples submitted<sup>19</sup>.

Little is known about the construction and equipment of the mill. Ami Boue provides certain important pieces of information about its appearance, machinery and number of workers, whereas the view that he went to Belgium to supply machinery to equip it originates from the first biographer of D. Zhelyazkov<sup>20</sup>. D. Zhelyazkov himself was owner or at least manager, director, of the mill, and "slandered and persecuted by the local authorities in Sliven, he was expelled from the mill which fell in the hands of inexperienced Turkish administrators and deteriorated"<sup>21</sup>.

Some documents, kept at the Oriental Department of the Cyril and Methodius National Library make possible a more detailed review of the initial period in the work of the mill, its character, the origin and type of the machines and the production process.

What first of all needs elucidation is the question of the place of the mill in the Turkish state system and D. Zhelyazkov's role in its construction and management.

<sup>18</sup> G. S. Kozarov, *Dobri Zhelyazkov Fabrikadjiata (the Manufacturer), the Founder of the Bulgarian Textile Industry*, (in Bulg.), Sofia, 1934, pp. 22-24.

<sup>19</sup> G. S. Kozarov, *op. cit.*, pp. 27-30; P. Dorev, *op. cit.*, p. 203. The firman, granted to D. Zhelyazkov, is one of the most beautiful documents preserved at the Oriental Department of the National Library in Sofia.

<sup>20</sup> G. Kozarov, *op. cit.* p. 31.

<sup>21</sup> Zh. Natan, *Economic History of Bulgaria*, (in Bulg.), Sofia, 1957, p. 200.

D. Zhelyazkov's rights and duties are not clear from the firman issued and granted to him. Satisfaction is expressed in it with the work done so far and it is demanded that he should exercise supervision over the good-quality making of the cloth, notifying the Yoyvoda of Sliven that D. Zhelyazkov was "to transform everything from words into deeds and reveal to the workers such things as they in point of fact do not know"<sup>22</sup>. It may be assumed that the above words refer to the decision of the Turkish Government to open a mill in Sliven, after having been convinced by D. Zhelyazkov that this was possible and that the industrially made broadcloth would be both cheaper and better than the samples submitted.

The first documents by which one may judge D. Zhelyazkov's activity and the structure of the mill itself refer to 1837. They are the report of the inspector specially sent by the Turkish Government, Ovanes, "an expert with knowledge on the questions of the making of woollen cloth" and the report to the Grand Vizier, with a request to allocate funds for the implementation of the proposals made. In these documents it is mentioned on several occasions that all recommendations "have been one by one explained to his Excellency Mehmed Aga and to the chief master Dobri"<sup>23</sup>. In subsequent documents D. Zhelyazkov is again mentioned as "chief master"<sup>24</sup>.

These pieces of information are too fragmentary to delineate clearly the relations between the two persons mentioned, but on one point they are indisputable: that from the very beginning of the mill no information whatever can be discovered about ownership of the mill by D. Zhelyazkov. Perhaps his competence was broad and at the time of the building of the mill he may have in practice performed a number of duties connected with the post of manager, but formally he was not appointed in such a capacity. The trust which D. Zhelyazkov enjoyed before the Porte is indicated by his repeated journeys to Constantinople in order to specify various details concerning the building of the mill and the implementation of the suggestions of the inspector sent there<sup>25</sup>.

<sup>22</sup> G. Kozarov, *op. cit.*, p. 30.

<sup>23</sup> Cyril and Methodius National Library, Oriental Department, sign SI 9/7; OAK 37/42.

<sup>24</sup> *Ibid.*, sign. OAK 18/25; p. Dorev, *op. cit.*, p. 217.

<sup>25</sup> P. Dorev, *op. cit.*, pp. 203, 217, 240.

In 1839 he was summoned again "so as to specify in a definite manner the conditions and regulations about the functioning of this mill"<sup>26</sup>, though always in his capacity as "chief master of the newly opened broadcloth mill in Sliven", i.e. as chief technologist, engineer and organizer of this big enterprise. The final answer to this question is given by the following facts. In connexion with the planned extension and improvement of the mill, together with the proposal to the Porte for the granting of the necessary credits, Niyazi Pasha was proposed as manager of the mill, a member of the State Council, while D. Zhelyazkov, the "chief master", was to be awarded an order for glorification and gratitude and a high salary be fixed for him<sup>27</sup>. In the course of about two decades managers in succession were in 1842/1843 Mustafa Kâni Bey, kapucibaşı, in 1845 müdür (manager) of the mill was Ali Rıza, and after them Kâni Bey, Salah Bey, Derviş Bey, Esseid Mehmed, Salih, Said Bey<sup>28</sup>. They were not simply officials as could be thought at first glance, although in a few cases they were simultaneously appointed also as kaymakams of Sliven (Niyazi Pasha, Derviş Bey). The mill was granted them by auction, as is noted on two occasions in the documents. The inspection of the accounts and the transfer of the mill with its stock were carried out with a detailed inventory with the mediation of the local administrative meclis (council) and the court where all accounts were certified and were sent to the financial authorities in Constantinople. There they were entered into the books and orders were issued for granting additional credits if such were needed for the replacement of machinery and tools, for the supply of more wool or for the introduction of some improvements, the sums being taken from the tax returns of different sancaks and the budget of the military service, to which the manufactured aba was directed<sup>29</sup>. The sum against which the mill was ceded is not indicated, nor can one find the profit derived by the managers.

D. Zhelyazkov was only "chief master or director" of the mill. What importance the Turkish Government attached to this post maybe

<sup>26</sup> *Ibid.*, p. 240.

<sup>27</sup> CMNL, Orient, Dept., sign. OAK 18/25.

<sup>28</sup> CMNL, Orient, Dept., sign. OAK 37/65; OAK 36/89; OAK 36/9; fuloi 138, archive unit 236; f. 138, a. u. 51; f. 138, a. u. 58, p. 2, f. 112, a. u. 338.

<sup>29</sup> CMNL, Orient. Dept., sign. f. 138, a. u. 51; f. 112, a. u. 338; OAK 18/25.



seen from the rate of his salary. It was fixed at 2,500 kuruş<sup>30</sup>. In order to have a more accurate idea of this sum, it would not be superfluous to say that its size corresponded to the salary of the Kaymakam of Sliven<sup>31</sup>.

The sum received by D. Zhelyazkov constituted a small capital if one takes into consideration that it amounted to about 30,000 kuruş a year, the same as the annual profits of a medium Bulgarian trade enterprise<sup>32</sup>.

In the Istanbul archives the Turkish researcher Mehmed Genç has discovered the Turkish translation of a statement of Dobri Zhelyazkov of April 8, 1840 perhaps the only preserved document that has come from the hands of D. Zhelyazkov<sup>33</sup>.

The Turkish translator has used the word "director" to determine the post held by D. Zhelyazkov. Here is the relevant text after the document: "In connexion with the improvement of the broadcloth mill situated in Sliven, which has your august support and assistance and the director of which I am, I take the liberty of setting forth in detail before you the need for some materials ... I, your obedient servant, as a traveller visited Germany and the various regions of Russia, carefully examined the broadcloth mills there and decided after their model to set up a small mill in my motherland and in the course of ten years have put in work and made every effort so as to collect the knowledge necessary for this, being aware that a lot of thought should be given to this ..." It is seen from the above text that D. Zhelyazkov had for years been giving consideration to his idea of founding a mill and had realized it after solid preparations.

The document also contains some other data on the beginning of Dobri Zhelyazkov's factory activity, the broadcloth manufactured during the Forties and the conditions in which Dobri Zhelyazkov regarded effective industrial activity possible. Most telling in this respect are the following words: "In general the founders of such useful mills in Europe for their own exploitation request definite rights and privileges,

<sup>30</sup> CMNL, Orient. Dept., OAK 18/25.

<sup>31</sup> CMNL, sign. SI 6/6.

<sup>32</sup> Cf. N. Todorov, "On the Hired Labour in the Bulgarian Lands about the Middle of the 19th Century", *Istoricheski Pregled*, v. XV, No. 2, pp. 15-16.

<sup>33</sup> M. Genç was kind to place this valuable document at my disposal, for which I express my great gratitude to him.

for 8 and 10 and 12 years providing that no other person is allowed to set up such a mill; the states to which they are subordinated, acting with foresight, grant certain privileges to these persons. Had I enjoyed such privileges, I would have freed myself of the initial losses."

Another round of questions which may receive some elucidation refer to the general appearance of the mill and the basic stages in its construction. Ami Boue, who was the first to describe the mill after its putting into operation, reports that the main building was a two-storey one with 24 windows on each floor. Besides, there was a room for senior staff and buildings where the smithy, forge, foundry, carpentry shop, dye-house and the mechanic's shop were situated<sup>34</sup>.

The successful construction of the mill, the favourable appraisal given to its work by the inspector specially sent to the mill and the good quality of the broadcloth it was making encouraged the local authorities and, as is understood from other documents, D. Zhelyazkov as well, to come out with a proposal for building an extension to the mill as early as 1839. As a matter of fact this was a request for building a second, still larger mill<sup>35</sup>. Information concerning the new building and the other premises to it may be extracted from the correspondence that was started in this connexion<sup>36</sup>.

The new factory building was 102 arshins long, 20 wide and 14 high<sup>37</sup>. The wall was 1 arshin and 10 inches thick and in its foundation had a  $V_2$  arshin wide border. It was built in stone and mortar, and it had been decided in advance that it was to have one-hundred windows with iron bars<sup>38</sup>.

Premises for administrative purposes, for the manager and the chief master in all likelihood, were envisaged to be built on the left

<sup>34</sup> A. Boue, *op. ext.*, p. 101.

<sup>36</sup> CMNL, Oriental Dept., sign. OAK 18/25; fi. 138, a. u. 57; OAK 36/8.

<sup>36</sup> *Ibid.*, sign. OAK 36/8.

<sup>37</sup> One arshin equals 68 cm.

<sup>38</sup> These dimensions are in full agreement with the building of the mill which has been preserved to this day with its external appearance unchanged. The individual halls of the building were partitioned when the mill was turned into a prison early in the 20th century. At present the same building is used as a museum of the history of textile production in Bulgaria, and part of the prisoners' cells have been preserved for inspection by visitors. The first building was destroyed by fire after the Liberation, restored on the old foundations and for several decades now it has been housing a secondary textile school.

side of the mill, since they consisted of two "European" rooms, a coffee room, a bathroom and toilet and a few other rooms the designation of which is not described. For the workers and journeymen and for offices were allocated 5 rooms with dimensions: length 37 arshins, width 10 and height 4. The kitchen occupied an area 10 arshins long, 5 wide and  $3\frac{1}{2}$  high.

A verandah, the upper part of which rested on posts, but with a door and staircase, was 32 arshins long, 10 wide and 4 high.

The smithy and the foundry together were 18 arshins long, 6 wide and 3 high. The dye-house was 16 arshins long, 12 wide and 3 high. All these premises were enclosed in a wall 408 arshins long, 3 wide and  $4\frac{1}{2}$  high. According to G. Kozarov's calculations, made in 1901, the courtyard of the mill had an area of about 15,5000 square metres with a built-up floor space of 3,920 square metres<sup>39</sup>.

It is to be regretted that the funds granted for the building are not indicated, nor were we able to find the register where the expenses incurred on the supply of building materials and the payment of wages to the building workers had been entered. The general view is that the factory was built by forced labour. Separate references to sums spent on the building make us view this claim with some reservation. It may be assumed that, if not fully, a certain not small volume of the labour used, was paid for. Grounds for such an inference are supplied by an account submitted for the building of a drying-shop of January 19, 1843.<sup>40</sup>

Its construction cost 80,000 kuruş and its equipment 59,000 kuruş, or 139,000 kuruş in all. This really big sum could be partly explained by seeing what the drying-shop was like. It was a truly solid building with three storeys, of which the first was designed for winter drying with a large stove, the middle floor was used as a weaving section and the top floor for wool drying. In spite of this the sum spent seemed too high even to the manager of the mill, Mustafa Kani, who tried to justify it in the following manner: "In view of the fact that the price of timber and manpower has gone up in comparison with last year and the ground proved stony, despite all efforts, the sum spent on the building exceeded the estimate."<sup>41</sup>

<sup>39</sup> G. Kozarov, *op. cit.*, p. 49.

<sup>40</sup> 2MNL, Orient. Dept., f. 138., a. u. 53, p. 4.

<sup>41</sup> *Ibid.*

Even if we assume that the true reason of the increased expenses were perhaps misappropriations, although at the end of the document Mustafa Kâni considers himself obliged to add that "there are no misappropriations", we cannot but pay attention to the arguments of the manager: among the causes making the building more expensive, which could be accepted as plausible by the superior financial authorities, primary importance is attached to the rise in the cost of labour. The fact mentioned that the ground proved to be rocky speaks of the same, i.e. that it was necessary to apply a larger volume of manpower which naturally used more funds. Had the building been done by forced labour, the work would have continued without any instructions from above until the completion of the project. The indicated passage of the document unambiguously speaks of the use of paid labour in the building of the mill.

As has already been mentioned, we possess no information about the various items of expenditure on the construction and equipment of the mill. The total sum to which the construction of the second factory building amounted is indicated in the accounts of Mutafa Kâni Bey. By the sum of 1,051,531 kuruş spent "on the construction of the building mentioned together with the expenditure on the purchase of the necessary equipment" he accounts for the 1,047,007 kuruş and 11 para received from the Turnovo tax-collectors and kaymakam's offices for 1841 and 1842. The balance of 4,524 kuruş and 9 para is entered in the books as a debt of the state to be refunded<sup>42</sup>.

The size of this sum had been already fixed in the report requesting an extension to the mill. About one million kuruş were envisaged there for the building, the necessary installations and other expenditure (unspecified) and for wool. In order not to add this quite sizable credit as supplementary expenditure for the state treasury, it was decided to cut down by 1,500,000 kuruş the budget of the military department from the funds allocated for clothing<sup>43</sup>. We give these sums because they are the only indication where by one can possibly judge, and only in the most general way, about the state expenditure on clothing of the regular army and planned profits the state hoped to realize by the construction of the Sliven mill, avoiding the mediation of merchants in supply of broadcloth from abroad.

<sup>42</sup> CMNL, Orient. Dept., sign. OAK 18 25,

<sup>43</sup> *Ibid.*

Much fuller is the information about the provision with machinery of the first building and about the technological process in it<sup>44</sup>. The wool was carded by a carder and was then teased on the first 4 carding machines. Three of them were "made in Russia and purchased there", and the fourth had also been brought from there earlier by D. Zhelyazkov. The yarn was twisted on 7 coarse spinning machines and 12 fine spinning machines. The first seven machines had 60 spindles each. Two of them were imported from Russia and the other five were made by Sliven mechanics after the models supplied. Of the other 12 spinning machines, nine had 60 spindles each, two had 40 and one had 20 spindles. It was this last one that D. Zhelyazkov himself had brought from Russia. Two other 60-spindle machines were also ordered in Russia and the remaining ones were made after them. Besides there were another eight spinning machines about the origin of which nothing is said. The machines which belonged to D. Zhelyazkov and were installed in the mill were evaluated at 20,000 kuruş, entered as a debt of the state to him. It is not known whether the state intended to refund the sum. The failure to settle this debt was perhaps the reason for D. Zhelyazkov's complaints.

The sum of 211,500 kuruş was paid for the equipment supplied from Russia and at the inspection of the mill for supplementing the machines available, further machinery worth 36,000 kuruş was ordered<sup>45</sup>. The machines were driven either by water or manually.

Various types of machinery and equipment worth about 50,000 kuruş were imported from England in the late Forties. Unfortunately we have no information about these except that they were packed in 13 crates<sup>46</sup>. Later the mill was equipped with Jacquard looms but we know neither the date nor their number.

The inspector sent from Istanbul, who entered in an inventory of the machines, at the same time compared the method of production at the Sliven mill with the method of production at the English mills that he had visited so as to become familiar with textile manufacturing. In his report he noted that the mill had been built to an English plant but "lacks some installations". On account of this and for certain imperfect manipulations, the broadcloth made was rough,

<sup>44</sup> *Ibid.*

<sup>45</sup> CMNL, Orient. Dept., sign. OAK 37/42.

<sup>46</sup> *Ibid*sign. SI 6/8.

coarse and insufficiently covered with nap. In his view this was mainly due to the poor quality of the wool.

At the Sliven mill the wool received was subjected to manual willowing so as to discard dry excrements and very rough hairs. This was not enough, though. It was necessary to organize a supply of good-quality wool to the mill by sending for this purpose employees of the mill to purchase wool in places where sheep of a good breed were raised. After this preliminary selection, the wool should be divided into three grades for three kinds of broadcloth, setting aside the finest as fabric for the officers and the remainder for the soldiers. The remaining part of this wool, falling outside these three grades, should be used for making carpets and rugs or for sale. Even after such supply of wool, the broadcloth manufactured would be no match for English broadcloth because that was made of Spanish wool. The conclusion drawn by the inspector was that Spanish sheep should be imported and that in three or four years crossbreeding would result in production of Spanish type wool.

The process of scouring of the already graded wool is described in considerable detail. The wool was kept in a mixture of urine and manure for 24 hours after which it was washed in running water and by pressing the wool put in a bag, the water was drained off and then was handled manually and beaten with a stick. The dyeing of the wool, however, was incorrectly done before its thorough cleaning.

The wool processed in this way was then carded. The carding machine used in the mill was inconvenient. It allowed the elimination of impurities but did not make the wool fluffy. It was for this reason that the inspector recommended the construction of a new carding-machine to drawings taken from an English model. This would render unnecessary the manual carding of the wool.

In order to impart greater elasticity and smoothness to the wool, in the next manipulations it was oiled. The oiled wool was rapidly drawn into slivers.

The combing-machines were similar to those seen in England. They had no shortcomings. They functioned well, although instead of steam children's labour was used to drive them. The sole defect in spinning was the strong twisting of the thread as a result of which the yarn was thick and later the broadcloth was not smooth and the

weft was visible. The thread, therefore, had to be fine and not twisted. This really speaks of a great power of observation, because per cm of warp 12 twists were made and 6-7 for the weft. Besides, it was necessary to reduce the amount of wool put into the carding machine to 130 drams for the ordinary and to 80-90 drams for the curly wool.

The fundamental defect of the weaving department, where the looms operated "as they should", was the loose weaving. The reeds with 3200 heddles should be increased to more than 4,400 heddles; close weaving produced a smoother cloth.

The final recommendations refer to the shrinking of broadcloth, its fulling and various manipulations outside the premises of the mill.

Except a few remarks on the use of children's labour, nothing is said about the power used in this otherwise detailed report. Mention is made only of the large wheel on the southern side of the newly constructed building, when information is supplied about the dimension of the different rooms. The water passed by underground channels through the basement of the mill. At the time of the Liberation, the wheel had a diameter of 8 metres. The driving mechanism of the first factory building functioned completely independently, also with a "large wheel", which put in motion the machines for teasing.

One cannot judge whether all the recommendations were taken into consideration, but the same year the former Voyvoda of Sliven and D. Zhelyazkov were summoned to Istanbul. The question of the further functioning of the mill was submitted to the Supreme council, which decreed that 200,000 kuruş be granted to the "chief master" and assistance be given to him in the supply of wool<sup>47</sup>. This sum was in fact spent on equipment for the mill, because in an account of the sums and inventory of the mill, transferred by the late director Kâni Bey to Ali Rıza, it is referred in the section "received as capital - 200,000 by transfer from D. Zhelyazkov, 200,000 by cession from the Sliven kaza (district)"<sup>48</sup>.

The recommendations for ensuring high-grade wool to the mill were also taken into account. In 1837, 150,000 kuruş were granted for the purchase of good local wool "because the above-described question of Spanish wool belongs to the questions, the necessity of which

<sup>47</sup> P. Dorev, *op. cit.*, p. 240.

<sup>48</sup> CMNL, Orient. Dept., f. 138, a. u. 51.

is to be discussed in the future"; 8,000 okes from Adrianople and Dymotika and their environs, 12,000 okes from the Silistra sancak, Babas-eski, Balchik and from other places<sup>49</sup>. A special person was entrusted with the purchase of wool. In Sliven one of the biggest inns, "Taş Han", in the centre of the town, was converted into a store-house for the finished aba and wool. For the repairs 5,349 kuruş were paid<sup>50</sup>.

An irade in 1842, however, ordered that the broadcloth for officers' uniforms should be made with Spanish wool at the Sliven mill<sup>51</sup>. From an undated document which should be referred to the middle of the 19th century, it is seen that in fact the mill had accpiired a flock of sheep which produced Spanish wool in sufficient amounts. The number of sheep, which were owned by the state and were designed for the mill, amounted to 8,956 sheep of a Spanish type, 9,119 ordinary white sheep and 748 black sheep<sup>52</sup>. This flock was adequate to meet the requirements of the mill. As we have seen, in the initial period of its existence, this mill used about 20,000 okes of wool. Funds for such a quantity of wool were allocated. After the reconstruction of the mill its capacity was in point of fact doubled, in 1842 the amount of the Spanish wool used alone amounted to 20, 351 okes<sup>53</sup>. A flock of 9,000 Merino-like sheep with an average yield of 5-6 okes per sheep could easily meet the above requirements of the mill, besides forming an annual stock of some 10,000 okes of wool.

The amount of the wool used makes it possible to estimate the volume of the mill's output in the Forties with greater certainty. We have information for 1851 only: that year 48,696 1/2 arshins of broadcloth were delivered to the store-house<sup>54</sup>. The amount of 50,000 arshins of broadcloth was fixed as the obligatory delivery of Said Bey when he took over the mill in 1850.<sup>55</sup> For a width of 60-70 cm as the cloth made then had, about 400-450 grammes of fully processed wool was necessary for 1 metre of aba and not less than 300-320 grammes for broadcloth. From 20,000 okes of wool, of which more than one-third

<sup>49</sup> *Ibid.*, sign. OAK 37/42.

<sup>50</sup> P. Dorev, *op. cit.*, p. 250.

<sup>51</sup> P. Dorev, p. 267.

<sup>52</sup> CMNL, Orient. Dept., f. 138, a. u. 62.

<sup>53</sup> *Ibid.*, f. 138, a. u. 62.

<sup>54</sup> *Ibid.*, f. 138, a. u. 58, p. 2.

<sup>55</sup> CMNL, sign. OAK 36/9.



was discarded at the first grading, so that less than half of it could remain in the process of production, about 50,000 arshins of broadcloth could be produced. This rough calculation comes only to confirm that the annual production of broadcloth from the first establishment of the mill did not drop below 50,000 arshins, while in 1850's increased output included the manufacture of several types of broadcloth, of which the best grade with Spanish wool alone amounted to 50,000 arshins<sup>56</sup>.

The fragmentary pieces of information do not allow the drawing of more definitive conclusions as to the value of the aba and broadcloth produced. Even information about the price of one arshin of broadcloth are contradictory. In 1847 the price of one arshin of broadcloth of the newly founded mill in Izmid was fixed at 24 kuruş. The departments concerned drew up a report by which they requested that the price of the Izmid broadcloth be equalized with the price of the broadcloth of the Sliven mill at 21 kuruş<sup>57</sup>. In 1851 in the detailed account where the total amount of the broadcloth produced is entered, its price on reaching the store-house is calculated at 17 kuruş the arshin, and the "cost" price at 16 kuruş and 39 1/2 para<sup>58</sup>. One could assume that the excess from 17 to 24 kuruş represented the sum which was entered as revenue of the treasury, after which the whole account with revenue and expenditure was entered in the book-keeping service of the army by the treasury and the account had to be paid to the mill and the treasury<sup>59</sup>.

We have failed to find information about the workers' composition in the Turkish documents of the Oriental Department of the National Library. A few references in Ami Boue and other travellers of the second half of the 19th century and in the Turkish sources nevertheless indicate the total number of workers and the regime at the mill.

<sup>56</sup> F. Kanitz in the Seventies writes that the mill used 120,000 okes of wool. F. Kanitz, *La Bulgarie danubienne et le Balkan*, Paris, 1862, pp. 353-354 (while in a consular report 250,000 okes of wool are mentioned), Michoff, *op. cit.*, p. 610. (The difference may be due to the different criteria in determining the amount of wool in the one case unwashed, unscoured, and in the other wool that has already been through the initial processing and grading).

<sup>57</sup> P. Dorev, *op. cit.*, Op. 299.

<sup>58</sup> CMNL, Orient, Dept., f. 138, a. u. 58, p. 2.

<sup>59</sup> *Ibid.*, f. 138, a. u. 236.

In the early Forties, 80 Bulgarian workers and two foremen, in all likelihood Czechs from Moravia, were employed at the state mill<sup>60</sup>. This number, indicated by Ami Boue, refers only to the workers in the factory premises, but is insufficient for the machines enumerated when one takes into account that a carding-machine required three persons, a combing-machine one and that at least four persons were needed for handling 80 spindles, ten persons or so for the loom and an impressive group for different auxiliary operations about the machines. Besides, many people were engaged in scouring and sorting the wool or in ironing and dyeing the finished output, as well as auxiliary technical staff<sup>61</sup>. It is mentioned in a Turkish document that every spinning-wheel which twisted the thread was driven by two children. Six such spinning-wheels were mounted at the opening of the mill and the seventh had just arrived and its installation was forthcoming<sup>62</sup>.

Without indicating the rate of wages, eye-witnesses who had visited Sliven in the Sixties and the Seventies wrote that the mill employed 400 workers who handled 250,000 okes of wool a year<sup>63</sup>, or that it employed 330 women workers, while the looms were operated by men chiefly<sup>64</sup>.

According to information from local people some of whom had worked in the mill prior to the Liberation, the first workers received uniforms and wore specially made metallic badges on their fur caps. Later these distinctive signs were discarded and the workers of the state mill were not distinguished in any way from the workers of other factories<sup>65</sup>.

From these pieces of information it becomes evident without any trace of doubt that the workers did not consist of servicemen or of forced labour and that working conditions, in the most general terms, did not differ from those in any other private capitalist factory or manufactory, i.e. hired labour was exploited and even children were used as manpower.

<sup>60</sup> A. Boue, *op. cit.*, p. 101.

<sup>61</sup> *Ibid.*

<sup>62</sup> CMNL, Orient. Dept., sign. 9/7.

<sup>63</sup> N. Michoff, *op. cit.*, p. 610.

<sup>64</sup> F. Kanitz, *op. cit.*, p. 354.

<sup>65</sup> G. Kozarov, *op. cit.*, p. 34.

Without being able to indicate the origin of the workers, we will point out only that the mill, at first as a private capitalist, and later as a state enterprise, was opened in a town, one of the most characteristic features of which, according to all the foreigners who had visited Sliven prior to the opening of the mill, was the making of textiles<sup>66</sup>. Even after the opening of the mill at the end of the Fifties, about 2,000 looms, that were intensively operated, were operating in the town<sup>67</sup>.

In other words the mill emerged, as the contemporaries correctly write, "in one of the most industrialized towns of the whole Empire". This assessment of Sliven in the middle of the 19th century was shared by practically all contemporary observers<sup>68</sup>. It does not mean at all, however, that the town was the centre of some developed factory production. It only shows that at that time important productions were in fact represented in the town and that their output exceeded the local framework and was given the widest public and state recognition.

The mill appeared as the regular result of the economic development of an inhabited locality in which all necessary conditions existed for the emergence of higher forms of capitalist production: sufficient opportunities for finding hired labour, presence of capital at least at a rate allowing the beginning of factory activity, considerable technical progress for the making and repairing of a number of technical installations and absence of opposition or of blunted reaction on the part of strong craftsmen's organizations. All these conditions were present in Sliven in 1830's.

Concerning the question in which we are directly interested, the sources mentioned do not supply moie information, with the exception of another piece of information about the average rate of wages. An ordinary worker received 75 francs a year on the average, or according to the rate of exchange then, about 500 kuruş, a sum which was not much higher than the pay received by carpet weavers - 35 kuruş a month<sup>69</sup>. The only mention of payment of the factory workers in the Turkish documents is the rounded-off sum of 14,301 kuruş for 1842-

<sup>66</sup> See the descriptions of Eneholm, Pouqueville and other foreigners about Sliven in N. Michoff, *Contribution à l'histoire du commerce*, III, 1950, pp. 80, 236.

<sup>67</sup> N. Michoff, *op. cit.*, p. 338.

<sup>68</sup> "Lettre du Docteur Poyet a la société de géographie, contenant la description district d'Islimnia," N. Michoff, *op. cit.*, p. 345.

<sup>69</sup> A. Boué, *op. cit.*, pp. 101, 103.

"debt to the factory workers"<sup>70</sup>. One cannot understand for how many people and for what a period of time this sum had collected, but the term used by the book-keeper, "factory workers", speaks in itself of the nature of the manpower used.

The favourable comments on this mill which was all the time improving its machinery and production, and the absence of any hints of some special regime for the workers show that not only in its external appearance and equipment but also in its technical and organizational structure, the Sliven mill did not differ from the contemporary European enterprises. It was not accidental that one of the travellers noted: "Its elegant buildings remind one of our European comfort"<sup>71</sup>. The enterprise met the contemporary requirements for factory industry and exploitation of manpower.

In order to reject any possible hesitation about the nature of the manpower used at the mill as a state enterprise, we will adduce comparative data on another state enterprise which was, moreover, of a military designation. It is the workshop for saltpetre in Razgrad, described in the documents as a factory.

It seems that fairly early the Razgrad area had specialized in the preparation of saltpetre. Already at the end of the 18th century saltpetre for melting was sent from other parts of the country to Razgrad and Shoumen<sup>72</sup>. In the 1830's about 100,000 - 200,000 okes of saltpetre were annually produced in the Razgrad area. The Turkish Government took an interest in this production and instructed the local authorities to check on the above figures and to ensure the delivery from one-fifth to one-tenth of the saltpetre produced for the needs of the state gunpowder store-house<sup>73</sup>. Soon after, in 1840, the Government already ordered the entire output of saltpetre in the Razgrad and Yarna areas to be sent to Istanbul, forbidding its sale to private merchants<sup>74</sup>. Only two or three years later the state opened a saltpetre factory in Razgrad. The sample received at the end of 1843 was approved in the capital and satisfaction with the activity of the "factory" was expressed<sup>75</sup>.

<sup>70</sup> CMNL, Orient. Dept., sign. OAK 36/39.

<sup>71</sup> N. Michoff, *op. cit.*, p. 359.

<sup>72</sup> I. Batakliiev, *The Town of Tatar-Pazardjik*, (in Bulg.), Sofia, 1923, pp. 166-167.

<sup>73</sup> P. Dorev, *Documents on Bulgarian History*, (in Bulg.), v. III, p. 242.

<sup>74</sup> *Ibid.*, p. 258.

<sup>75</sup> P. Dorev, *op. cit.*, p. 282.

The enterprise continued its successful activity until the Liberation, which is witnessed by several instructions for speeding up production, for sending the finished saltpetre and for rendering assistance to the enterprise<sup>76</sup>. The workshop, together with its 10 cauldrons, is described in detail with a diagram enclosed by A. Yavashov in the History of Razgrad<sup>77</sup>.

Several Turkish documents concerning the initial activity of the enterprise reveal the character of the manpower used in it<sup>78</sup>. Of the charges and taxes collected in 1843 in the kazas of Rousse, Shoumen, Djoumya (Turgovishte), Silistra, Hursovo, Machine and Babadağ, 191,146 kuruş and 12 para were set aside so as to meet the expenditure on the purchase of saltpetre, its melting and shipment for Istanbul. Of this sum 161,409 kuruş and 37 para were paid to the Silistra craftsmen for the 34,674  $\times \frac{1}{2}$  okes of saltpetre supplied, the transport of the saltpetre in 364 crates to Istanbul cost 7,852 kuruş, and 21,884 kuruş and 15 para were left for paying the wages of the personnel of the workshop and for covering the expenses on wood for burning and other petty expenses.

The last sum was paid out by months in the following manner :

October	1843	4668 kur.	25
November	"	5545 "	15
December	"	3908 "	30
January	1844	4538 "	25
February	"	3233 "	

The receipt attached to the same document shows the still more detailed distribution of these sums and the rate of the various wages at the enterprise. Of the kuruş spent in the month of November, one part -2,585 kuruş and 15 para- represented the cost of the burned wood, candles, lining of the saltpetre crates, etc., and the remaining kuruş represented the wages paid. The montlily wages of the personnel of the state workshop for saltpetre in Razgrad in 1843 were as follows :

*Monthly wages at the state saltpetre workshop in Razgrad in 1843*

Senior official	1,000	kuruş
Clerk	250	
Overseer	750	
Twelve workers at 80 kuruş	960	"

<sup>76</sup> CMNL, Orient. Dept., sign. Tn 32/37, Rs 80/5, si 1/66, etc.

<sup>77</sup> A. Yavashov, *Razgrad*(in Bulg.), 1930, pp. 126-128.

<sup>78</sup> CMNL, Orient. Dept., sign. Rg 8/2.

Here is also the list of the names of the twelve workers : Ahmed, Hassan, Emin, Omer, Osman, Abdu, Mustafa, Arif, Mustafa, Hussein, Omer, Süleyman.

Several conclusions may be drawn from these data. Above all it is seen that there existed a certain distribution of the functions and even coordination of the activities between the individual producers of saltpetre, united in a guild, and the state workshop. The latter accepted for final processing, i.e. for melting and preparing pure saltpetre, the saltpetre purchased by the craftsmen which had already undergone an initial processing.

In the second place, there is no doubt that the enterprise was developed on capitalist principles. The manpower used consisted of hired workers who received fixed wages at the rate of 80 kuruş a month. The fact that the funds for paying the workers were taken from the budget of the Silistra eyalet has no bearing at all on the method of hiring and paying labour.

Besides, what impresses one is that the entire personnel of the workshop consisted of Turks. This indicates that the stratification, typical of Bulgarian society, was accompanied by an analogous process among the Turkish population. The causes of the intensified offer of hired manpower covered broad strata of society, regardless of their nationality, irrespective of ruled or ruling nationality.

\* # \*

The private textile mill, founded ten years after the Sliven one in the vicinity of Plovdiv by the Gümüşgerdan brothers, is particularly interesting for study, because it is a vivid proof of the differentiation that took place in the late 18th century and the early 19th century among the small commodity producers. Its founders emerged from the small aba producers in Plovdiv. The mill continued to operate as a thriving capitalist enterprise until the Liberation.

The location of the mill was aptly selected, not far from Plovdiv: in the proximity of the Rhodopes, where the deep Dermen Dere river is flowing, in the neighbourhood of the well-appointed farm of the Gümüşgerdan family. As is seen from the annual balance-sheet of the firm, the first building of the mill was erected in 1847<sup>79</sup>.

<sup>79</sup> Central State Historical Archives, f. 161, register 27, p. 155.

Machines were ordered in Austria, and two specialists came from that country to mount them. For the assembly, which under the contract was to last from 42 to 50 days, it was agreed to pay 400 kuruş per person, and for the other repair jobs, wages of 10 kuruş<sup>80</sup>. One of the fitters remained later on salary to train the local master workers to operate the machines<sup>81</sup>.

It cannot be understood from the documents what the first machines were like. That among them was an imported spinning machine with 64 spindles is clear from the order which as early as the next year the Gümüşgerdans placed in Plovdiv with local mechanics to construct a second spinning-machine after the model of the first.

The contract concluded for this purpose with the Plovdiv master mechanic Atanas Milousis (Atanas Miloushev) enumerated the conditions which the machine should meet: to work smoothly and to be easy to operate as the Viennese machine so that even the smallest irregularity might be avoided. The machine had to be completed and delivered within 51 days. In the event of failure to complete it within the agreed period or if it was more difficult to work with than the Viennese one, the master mechanic was obliged to return the advanced sum with a 2 per cent interest. The sum of 1,000 kuruş was envisaged to be paid for the construction together with the material used<sup>82</sup>.

Early in 1853 the Gümüşgerdans overhauled and enlarged the mill. In the Sixties new machines were imported: a press for the cutting of aba from Brno and spinning machines from Vienna. A second building was erected then to the mill; it was used as a store-house and for administrative purposes<sup>83</sup>.

In the basement of the mill the wool was sorted, and the finished cloth was packed in rolls and bales. The eight carding-machines of the "Brün" system were installed on the ground, first floor. The next floor housed the spinning machines: 12 for fine yarn and 2 with 64 spindles each for thick yarn. The 14 mechanical looms were also installed on

<sup>80</sup> *Ibid.*, reg. 51, pp. 97-98, 139-140.

<sup>81</sup> *Ibid.*, German documents "Kontrakt" of November 30, 1848, reg. 51, pp. 7-8, 35-36, 15 9-160, etc.

<sup>82</sup> *Ibid.*, f. 161, Ib4, contract of October 10, 1849.

<sup>83</sup> CSHA, f. 161, Contract for the reconstruction of the mill of 1853, invoices for the machines purchased Ib4, Ib5.

the same floor<sup>84</sup>. Outside the engine room there was a wooden driving wheel with a diameter of 6 metres. By means of two cog-wheels and a whole system of transmissions located on the ground floor and a vertical axle the movement was transmitted also to the next floor. The minimal capacity of the channel that fed this engine and the two fulling wheels with water was 25 H.P. even in the months of July and August. Such was the technical aspect of this mill in the Sixties, but we have every reason to believe that it was not much different before, excluding the replacement of the weaving looms with mechanical ones in the Sixties.

Besides, the mill had several departments connected with the preparatory and final stages of the production process: dyeing, carding and fulling. The absence of precise information, however, does not allow us to judge to what extent these departments were auxiliary to the mill and whether they played an independent role in the scattered manufacture organized by the Gumüşgerdans. In any case, the dyeing department, the fulling-mill, etc. were brought into being because of the needs of the manufacture. It was precisely they that served as the starting point in the establishment of the mill. It was on account of them that in the village of Dermen Dere were concentrated large amounts of aba made elsewhere, which several times exceeded the amount made at the mill.

The capacity of the mill, or rather the expected production at its establishment may be judged by Gumüşgerdan's reply to the Yali of Plovdiv of July 16, 1848. In his letter Mihalaki Gumüşgerdan thanks for the greetings extended to him and promises to fulfil the Yali's instruction to make 100,000 arshins of coarse woollen cloth for the army of the total of 400,000 arshins, the supply of which Giimuşgerdan had undertaken<sup>85</sup>. Taking into consideration that a weaver on a hand loom in a 14-16 hour working day turned out 6-8 on an average, or 10 arshins of cloth at the most, one can calculate that a mechanical weaving loom could turn out at least 4 or 5 times as much, particularly if operated by several workers in different shifts, i.e. about 25-30 arshins of cloth would be produced a day, or about 9,000 arshins of cloth in 10 months.

<sup>84</sup> CSHA, f. 161, 1b1, Documents in French "Description".

<sup>85</sup> CSHA, f. 161. Documents in Turkish. Letter to the Yali of 13 Recebi 1264 (June 16, 1848).



From some pieces of information it can be seen what the mill was producing 2 or 3 years after its establishment but prior to its thorough reconstruction in 1853, when a new building was erected in it<sup>86</sup>. Here are the data on the factory-made aba<sup>87</sup>.

Year	Delivered wool (okes)	Price per oke (kuruş)	Aba sold (rolls)	Price per 1 roll (kuruş)
1851	6097.2	8	2064	33 %
1853	8759	from 7 <sup>1</sup> / <sub>2</sub> to 12 <sup>1</sup> / <sub>2</sub>	1849	45

These figures do not reveal the entire production of the mill. They indicate only the amount of that part of the wool that was turned into aba and the number of the rolls of aba sold. Besides this, during these years the mill was producing coarse woollen cloth of which shepherd's cloaks were made, as well as several hundred rolls of lining<sup>88</sup>. We have no accurate data on their quantities.

During the second half of the 19th century, after the reconstruction of the mill, it seems that its output doubled. In six months of 1862 alone 2,025 rolls of aba were produced<sup>89</sup>.

We have given the above figures not only because they give a certain true idea of the aba produced at the mill. Compared with other figures, they make it possible for us to calculate the rate of profit extracted by the Gümüşgerdans. For the wool bought in 1833 and brought into the mill 18,559.32 kuruş were paid. In drawing up the balance-sheet precisely for this consignment of wool so as to level the book-keeping operation, a profit of 22,507.63 kuruş was added<sup>90</sup>. The profit rate of the Gümüşgerdans, therefore, amounted to 22.5 per cent. For that time this rate was not too high, but it fluctuated within the range of profits obtained about the middle of the century by the well-known merchant firms of Minçoğlu—24 per cent, the Tupchilesh-

<sup>86</sup> *Ibid.*, Ib4, Contract for the repair of the mill of April 10, 1953, see also the receipts for the sums received.

<sup>87</sup> *Ibid.*, reg. 104, pp. 44, 47, 70-71.

<sup>88</sup> CSHA, f. 161, reg. 136, pp. 23, 24, 38, etc.

<sup>89</sup> *Ibid.*, reg. 327, pp. 34-.

<sup>90</sup> *Ibid.*, f. 161, reg. 104.

tovs— 30 per cent<sup>91</sup>. The lowest possible level of exploitation was 120 per cent, if one accepts that all the sum spent outside the money paid for the wool, was paid for manpower. Part of the funds went, however, for the supply of other materials, for amortization, so that the rate of exploitation was much higher.

The earliest information about workers hired at the Gümüşgerdan mill refer to 1847. The following had taken up work "at the machines": Ivan of Panagyurishte at 300 kuruş a year; Boiko Kourtev, also of Panagyurishte, fuller -750 kuruş a year; Ivan of Sliven, carder; Panayot Peshtimaldjiyata, weaver, 5 kuruş wage; Dimiter Massourdjiyata, 5 kuruş wage; Atanas Kalemджиyata, 60 kuruş a month; Ivan Hastardjiyata and Petur Lazarov (both lining weavers)- the one at a 7 kuruş wage and the other at 400 kuruş a year, etc<sup>92</sup>. A little later -in 1848 and 1849- Haralambi Kalemjimaya, at 350 kuruş a year joined work,

Workers and wages at the Gümüşgerdans in 1847.

Month	Hired workers	Total paid kuruş	Average per worker ku
January	38	2040.30	50
February	38	1328.20	44
March	44	3627.10	82
April	42	3290.—	78
May	28	1017.—	36
June	55	3244.—	58
July	40	2424.—	60
August	44	2508.—	57
Semptembe	36	2684.—	75
Octobe	53	3958.—	75
November	42	4849.—	117
December <sup>95</sup>		3786.—	

<sup>91</sup> H. Gandev, "On the Development of Industrial Capitalism in This Country during the National Revival Period", (in Bulg.), *Istoriches i Pragled*, X, 1954, No. 4, p. 105.

<sup>92</sup> The receipts for work done or the account books from which we have drawn this information are general for all hired workers. It was only a few years later that separate accounts were started solely for the workers of the mill. S CSHA, f. 161, reg. 51, pp. 7-8, 11-12, 13-4, 19-20, 27-28, 59-60, 65-66, 145-146, 253-254, etc. See also the receipts preserved.

as well as Avram Dolapchiyata at 100 kuruş a month, together with his child, Petur of Melnik "at the machines" as from January 1849 at 400 kuruş, his pay being increased to 600 kuruş in the month of May of the same year<sup>93</sup>.

This information cannot reveal the workers' composition at the mill, but it makes possible to see the rate of the wages of factory workers. If we compare these wages with those of the other hired labour on the farms of the Gümüşgerdans, we obtain the picture<sup>94</sup> as shown in the Table in p. 340.

From these data it may be concluded that the average monthly wages for hired workers at the Gümüşgerdans was 75 kuruş, the most frequent being the cases of wages between 55 and 75 kuruş. There was no difference between these wages and the wages of factory workers also taken as an average value. If one follows up the true rate of the wages of the different categories of workers, however fragmentary the information it will be seen that the majority of the workers at the mill received from 60 to 80 kuruş a month on an average, or from 600 to 800 kuruş annually. Only the specialist who came from Austria and was retained to work received 2,640 kuruş a year, a sum which was three times as much as the average wages of a factory worker.

Among the other hired labour working on the farms of the Gümüşgerdans wages similar to those of the workers at the mill from 600-800 kuruş upwards, were received only by skilled masters, such as dyers, abamakers and millers. The wages of all the others fluctuated: for shepherds and carters from 100 to 400 kuruş a year; for carpenters, gardeners and woodcutters from 400 to 600 kuruş. The wages of reapers and unskilled labourers used as farm-hands were in the range from 2<sup>1</sup>/<sub>a</sub> to 3 kuruş a day. The same wages were paid for work in the vineyards<sup>96</sup>. The lower pay of those employed to work "at the machine", 300 and 400 kuruş, is explained with the fact that this work was regarded as light and was in all likelihood entrusted to minors and often to children<sup>97</sup>.

<sup>93</sup> *Ibid.*, reg. 85, pp. 35, 42, 75; 16, 62.

<sup>94</sup> CSHA, f. 161, reg. 42, pp. 58-72.

<sup>95</sup> *Ibid.*, reg. 51, pp. 1-49, 281-282.

<sup>96</sup> CSHA, f. 161, reg. 177, pp. 8a, 22a.

<sup>97</sup> In the report already quoted for improving work in the Sliven mill, after laying stress on the advantages of the steam engine, it is pointed out that the spinning wheels driven by children did not work badly either. CMNL, Orient. Dept., sign. SI 9/7.

Before trying to compare these wages with some current market prices so as to determine approximately the living standards of the workers of that time, we will make another very telling comparison.

The salaries of certain employees of the postal administration of the same years provide an interesting base for comparison with the wages of the workers of the mills in Sliven, of Gümüşgerdan and the state enterprise in Razgrad. Thus in 1844, in the Sliven district, the following monthly salaries were paid<sup>98</sup>:

*Salaries of Turkish officials in Sliven in 1844*

Kaymakam 2,500 kur. (35-50 times as much as the average wage of a factory worker)

Accountant 500 kur. (7-10 times)

Secretary 400 kur. (6-8 times)

Ordinary clerk 150 kur. (2-3 times)

Postal official 150 kur. (2-3 times)

Postman 75 kur. (equal to one month's wage of a factory worker)

Such were the salaries not only in Sliven, but also in Yambol and even of the postal officials in the village of Ichera. In this village the postman received 80 kuruş a month, probably because his rounds involved more walking.

The comparison made between these salaries and the wages of the workers is very characteristic because it reveals the generally low level of the workers' wages. The average rate of the monthly wages of master specialists and skilled workers in the manufacture and mill of the Gümüşgerdans corresponded to the lowest paid job, that of a postman. The ordinary clerk and secretary received a pay from 2 to 6-8 times higher than that of the workers. Even the person called from abroad, who was employed as technical manager of the Gümüşgerdan mill, received 220 kuruş a month, or two times less than the salary of the secretary of the kaymakam's office. At the same time a district governor received in a month as much as the manager of an enterprise received in a whole year.

A true idea of the real purchasing power of the workers' wages will be obtained if we follow up the prices of the most important goods.

<sup>98</sup> CMNL, Orient, Dept., sign. SI 6/6,

In the early Fifties of the 19th century in Plovdiv and more particularly in the area where the Gumiişgerdans were predominant, the prices were as follows":

*Prices of staple commodities in the early Fifties in the Plovdiv area*

Commodity	Price per oke in kuruş
bread	1.20
wheat	1
rice	2.25-3.50
meat	2 - 4
dried meat, saucages	4
butter	7
soap	5
apples	1
candles	7 <sup>1</sup> / <sub>2</sub>
nails	6 <sup>1</sup> / <sub>2</sub>

For the shoes supplied to the workers, the Gümüşgerdans deducted from 15 to 20 kuruş. Only the shoes of the specialist Andon Germanetsa (the German) cost more - 35 kuruş. He also received 3 shirts at 20 kuruş each. One pair of moccasins sold at 3,5 kuruş<sup>100</sup>. A sheep could be bought for 36 - 38 kuruş, and a horse for 200 kuruş<sup>101</sup>. These data have been extracted from dozens of cases referring to the price of staple commodities and sold at grocer's shops where workers as a rule were shopping.

The monthly wages of a worker, of those who were comparatively better paid, receiving 70-80 kuruş a month, could buy only bread, a little dried meat and some other foodstuffs which were not enough even to feed a medium family, let alone the wages of 2-3 kuruş a day which doomed the workers to chronic hunger. It was for this reason that the supply of food to the workers was most often provided for.

Here we will append the extremely interesting data, collected by the French mining engineer Le Play in 1848 and 1849 when he visited

<sup>99</sup> CSHA, f. 161, reg. 177, pp. 9, 11, 11a, 13, 13a, 31. From the archives of Naiden Gerov, edited by T. Panchev, Sofia, 1914, p. 33.

<sup>100</sup> CSHA, rf. 161, reg. 177, pp. 11a, 13a, 22a; reg. 122, p. 13; reff. 51, pp. 35-36.

<sup>101</sup> *Ibid.*, f. 161, reg. 27, op. 59.

Samokov and gathered information about the family budget of a Bulgarian iron-smith, employed at the local iron-foundries<sup>102</sup>. This material was used by H. Vladov in his monograph on household budgets, from where we also take the basic excerpts<sup>103</sup>.

After describing the population of Samokov as consisting chiefly of workers attached to the various workshops and enterprises, and also of farm labourers connected with the cultivation of the land of the big Turkish land-owners, Le Play writes: "On principle the workers are attached to the owners of the enterprise voluntarily and for a fixed period of time, but in fact they are people engaged for life. They are actually attached to the employers by some debt, often hereditary, in the presence of which a worker cannot change his employer before paying his debt."

The civil status of the family is then described. It belonged to the race of Bulgarian Slavs and originated from a stock that had worked for many generations in iron-foundry workshop and consisted of 5 members.

- |   |        |
|---|--------|
| 1. Georgi S., head of the family, married for 13 years, | age 37 |
| 2. Sophia T., his wife,                                 | age 32 |
| 3. Stanko S., the eldest son                            | age 12 |
| 4. Mariora S.   | age 10 |
| 5. Dimitur S., second son                               | age 4  |

The family professed the Greek Orthodox faith, but religious instruction and religious sentiment were weak. The children did not attend school and could not write or read.

He found health to be good. The population looked healthy and for treatment resorted to folk medicine. "The workers of the iron-foundry as a rule are looked after by a physician, practising in Samokov, at the employer's expense."

<sup>102</sup> Le Play, a French mining engineer and reformist, reported extensive observations on the living conditions of workers in a number of European countries in the middle of the 19th Century. Cf. A. Daux et F. le Play, *Les Ouvriers Européens. Etudes sur les travaux, la vie domestique et la Condition Morale des Populations Ouvrières de VEurope*. 2nd Edition. Ch. VI "Forgeron Bulgare des Usines à fer de Sarnavorno", pp. 231-271.

<sup>103</sup> Hristo Vladov, *Analysis of Household Budgets with a View to Predicting Consumers' Demand*, (in Bulg.), Sofia, 1966.

The observations on the material position and way of life of the workers are most interesting. They establish among other things that the poorest workers here lived better than the workers in the richest workers' settlements in the Western countries who at that time received wages 10 times higher than those of the Samokov iron-smiths.

Here are some more detailed data on the means of subsistence of the family.

*Property (furniture and clothes excluded)*

Buildings (house with garden, all on 12 ares) . . . . .	181.60 fr.
Funds . . . . .	136.30 fr.
of which; cash and money loaned without interest . . . . .	68.20 fr.
Silver coins, necklace of the wife . . . . .	68.10 fr.
Livestock (cow-64 fr., 6 hens and 3 turkeys-10 fr.) . . . . .	74.00 fr.
Tools for work in the garden, etc. . . . .	21.50 fr.
(The tools for working the fields are supplied by the land-owner).	
Total value of the property . . . . .	413.30 fr.

*Debts*

To the employer . . . . .	104.40 fr.
(originating from an old debt contracted at the time of the wedding amounting to 261 francs)	
To various tradesmen . . . . .	35.20 fr.

*Income*

The family of the worker received a large part of their wages in kind in the form of foodstuffs, etc. The head of the family was employed in the workshop of Rashid Bey, and the other members of the family cultivated land owned by the same Turk.

After describing the working conditions and some details which are otherwise of essential importance but which we do not quote here, the *family budget* is given.

Sources of revenue from property

Total . . . . .	413.30 francs
Received in kind . . . . .	66.48 "
Income from the house . . . . .	7.00 "
Income from the garden . . . . .	2.00 "
Income from livestock and others . . . . .	4.44 "

Work done by the members of the family :

The head of the family worked during the year 170 days for the employer at the foundry and 40 days farm work; his wife did 15 days of farm work; during the remaining days of the year the members of the family worked in the household: the husband 44 days, the wife 315 days and the children, 56 work days.

Income from labour :

	<i>in kind</i>	<i>in cash</i>
The father. . . . .	72.6	192.92 francs
All members together. . . . .	.114.64	192.95 "
Additional benefits from the enterprise ..		
Total income. . . . .	210.87	236.58 "
Annual expenditure budget		
Expenditure on food		

Data on the type of food, kilogrammes of food consumed price per kg and total expenditure on a given type of food.

Consumption :

Cereals. . . . .	924 kg
Fats. . . . .	38 kg
Dairy products. . . . .	351 kg
Meat and fish. . . . .	172 kg
Vegetables and fruit. . . . .	448 kg
All amounting to the total value of . . . . .	99.74 fr.
Expenditure on the home. . . . .	16.07 fr.
Expenditure on cloths. . . . .	62.09 fr.
Expenditure on moral needs (chiefly religious), illness and health. . . . .	31.69 fr.
(including 14.00 for the church and 2.26 for a physician, paid by the employer)	
Other expenditure	
Savings for the year. . . . .	14.55 fr.
Taxes. . . . .	5.50 fr.

Interest for the employer - 5 per cent on the debt

Interest on the purchases on credit - 20 per cent on what is due for the year.



The terms on which the workers were hired at the Gümüşgerdan mill can be seen from the following contract, signed by three weavers on October 5, 1848. After general indications concerning obligations, there follow specific terms, written in Greek:<sup>104</sup>

1. The undersigned join work as master weavers. At times when there is no work, they shall be obliged to do whatever they are ordered.

2. They declare that they shall work diligently and do the job assigned to them. If they violate their duties and cause loss to their master, they shall have no right to complain of the consequences or to leave.

3. Their pay shall amount to 70 kuruş monthly. They must not quit their work without a well-founded reason that compels the masters to release them.

4. Food shall be at the expense of the master. They shall eat what is given to all workers. If they do not like it, they may have their meals outside at their own expense.

5. Holidays shall be the same for everybody. It shall not be allowed for some to celebrate while others work. In the winter they shall work also in the evening by light.

6. They may not go to some other place without the permission of their masters or their deputies.

This document constitutes a typical contract between an employer and hired workers. It reveals a number of aspects of the position of the workers in one of the first textile mills of the Balkan Peninsula. Above all one is impressed by the striving of the Gümüşgerdans to ensure the uninterrupted exploitation of the manpower hired by them. The explicitly introduced terms to do any kind of work indicate that the capitalist Gümüşgerdan brothers were not sufficiently sure that they could secure the regular fulfilment of all stages of the production process to the same degree. In the case of accidental stoppage of the machines they wanted to retain the possibility to transfer labour to do work in other units of the production process. Wool, for instance, which came in big consignments, required a lot of work for its washing and cleaning of all admixtures and fat, sorting and teasing. In order to carry out these operations more quickly, particularly when they

<sup>104</sup> CSHA, f. 161, Contract signed by H. Teodossi, Nistour Nidyuv and Kinou Kacouv on October 5, 1848.

tolerated no postponement, it was possible sometimes to transfer workers also from other sections.

At the same time no less categorically was fixed the obligation of the weavers to do the job entrusted to them. The Giimiişgerdans wanted to have strictly specialized workers who had mastered, with a minimal loss of time, the section of the production process assigned to them. This required prolonged stay in the same place. In the same sense was also the provision not to transfer them to some other job without the permission of the masters or their deputies. The capitalist enterprise of the Gumuşgerdans revealed the great opportunities of the application of the labour of a dyer, weaver or spinner outside the mill. It was against the arbitrary quitting of work that the above stipulation was directed.

One is impressed by the several provisions in the contract whereby the capitalist brothers tried to regulate the leaving of the mill. The workers could not arbitrarily quit their work, even if they were materially damaged, if the loss was caused through their fault. Retaining their right to release the workers for well-grounded reasons, the employers ensured themselves against arbitrary quitting of the mill. This was not imposed by the shortage of manpower. The several dozens of hired hands in addition to the factory workers employed by Gümüişgerdan speak sufficiently in favour of the presence of a reliable stock from which they could fill up needs that could suddenly arise. In this case they also wanted in general to avoid leaving which always disturbed production. Together with this they were trying to keep longer the new category of workers -skilled workers- who had mastered an operation to perfection. It was not accidental that one of the two technicians called from Austria was retained so as to train the workers in operating the machines, with a pay several times higher than the wages of the other workers. In the books his account was kept with the characteristic indication of "Andonios the German fabricator".

The obligation of all workers to celebrate holidays at the same time also indicates the same striving for ensuring an uninterrupted and normal functioning of the entire production.

The length of the working day was not agreed upon. It is clear that it did not give rise to objection. Work continued according to the generally accepted rules in the country from darkness to darkness.

The working day, however, must have been rather prolonged if consent in advance was necessary to work in the winter by light.

An important condition, reflected in the contract, was the giving of food as an element of the pay. As has already been indicated, wages were so low that it was difficult for the workers to feed their families on them. Besides, the majority of the hired workers at the mill and in the different sections of the manufacture, as is to be seen further on, contrary to the generally accepted view, were persons who had come from distant places where they had left families and parents who depend<sup>3d</sup> on the few kuruş earned by their husbands and sons.

The circumstances set forth had been carefully taken into consideration by the Gümüşgerdans who retained the subsistence wages, but gave free meals to the workers in their enterprise so as to retain them and to demand maximum effort of them in production. Ensuring the food was an important material stimulus which played an essential role in securing a flow of labour to the mill and manufacture. Besides, the mill was situated not even in the village, but at some distance from it, and it is known what difficult problem it is to find food in a village even against money. On the other hand, the setting up of a common kitchen and the supply of the necessary foodstuffs did not present a difficulty for the Gümüşgerdans, nor did it involve any particular expenditure. The Gümüşgerdans possessed several farms in the village of Dermen Dere and in its surroundings they had flour-mills and oil-presses and large herds of cattle and flocks of sheep.

These data suffice to see that in this particular case it was a question of a group of hired workers, who took up work with the Gümüşgerdans not through compulsion, but as a result of freely established contractual relations. They were persons, hired for specific work at the mill (or outside it) who received pay in the form of wages or salaries. The contract in writing, concluded on hiring labour is a telling proof of the phenomenon that had become customary in the purchase of manpower by contract. It is a characteristic element in the capitalist system of management and speaks of an advanced organization and of considerable experience in hiring labour in the Gümüşgerdans.

Without being able to speak of the bringing up of generations of factory workers, the fact deserves to be stressed that the awareness that work in the factory became the inevitable fate of the worker made

its way. Father Avram, himself a water-wheel driver, brought his son along to train him in the comparatively easy operation of the wheel, for which he received an increased salary of 100 kuruş a month. Let us also point out that the names of the majority of workers appeared for years in the Gümüşgerdan books, i.e. that they were permanent factory workers.

During the Fifties 57 workers and an administrative staff of three; manager, clerk, and overseer, were employed at the mill. Besides them there were two technicians, Czechs in all probability, who were hired for several years to see to the correct use of the machines supplied from Austria. The workers were distributed in the following manner: at the coarse yarn machine - seven, at the other machines, according to the count of the yarn: No. 5 - five workers, No. 4 - three, No. 3 - two. Six shuttle-operators (*kalemci*) were employed for the weaving of the warp and eight bobbinwinders (*masurci*) for preparing the weft. There were 8 carders and 12 sliver makers (*fitilci*)<sup>105</sup>. Here we do not indicate

<sup>105</sup> The only full list of the workers of the mill was made up immediately after the big overhaul of the mill in 1853. It is in Greek. Argiris Kostandinou, manager. At the *coarse-yarn machine*: Patris Meleniklis (of Melnik), Mihalis Stanchov Stanimah (of Assenovgrad), Delchoc Penchov Otlouk (of Panayurishte), Teodoros Neno (ditto). At the *fine-yarn machine*: Teodoros Manoglu Pazar (of T. Pazardjik, Yankos Skoumchis Stanimah (of Assenovgrad), Dimitris Avramoğlu Chepelis (of Chepelare village), Kolios Stefanoglu Belovalis (of Belovo village), Timnios Panayotou Melenetis (of Melnik), Tsanos Georgoglu Perdoplis (of Pirdop), Dimitris Georgoglu Pazar (of T. Ma Pazardjik). *Loom operators, No. 5 count*: Dindoglu Mihail Stanimah (of Assenovgrad), Georgis Hristov Perd. (of Pirdop), Yovan Kostoglu Perd. (ditto), Stoyan Evtimov Perd. (ditto), Yovan Alchiiov Perd. (ditto); *Loom operators, No. 4 count*: Gyuros Zlatov Perd. (ditto), Stoyan Vassiloglu Perd. (ditto), Yovan Petkov Filiplitis (of Plovdiv); *Loom operators, No. 3 count*: Stefan Miroglu Perdogp (of Pirdop), Stoyan Kunchoglu Perdop (ditto). *Shuttle-operators (kalemci)*, Mitkos (ditto), Stoyan Kurdjali Filip litis (of Plovdiv), Neno Yoanov Perdopluo (of Pirdop), Markos Yelioglu Perdoplou (of Pirdop), Dimitris Filip litis (on Plovdiv), Theodoros Yotoglu Perdoplou (of Pirdop). *Bobbin-Winders (masurci)*: Loulcho (Yachoglu Perdoplou (ditto), Teodoros Nachoglu Marasli Filip litis (of Plovdiv), Simon Dinkoglu Sarlovali (of Karlovo), Atanas Stavroglu Stanimakal (of Assenovrad), Dimitri Hristoglu Dermend. (of Purvenets village near Plovdiv), Kostandinos Angelov, Dermend. (ditto), Dimos Stoyanoglu Perdoplou (ditto), Dimitris Stoyanov Marsli Filip litis (of Plovdiv). *Carders*: Petris Iliya Bogdanoglu Bahchiamas (from our garden), Georgis Angeloglu Chiprohloris (unknown), Yassilis Georgu Ilchoglu Stanimah (of Assenovgrad), Georgis Genoglu Pazardjiklis (of T. Pazardjik), Mihailis Dimitri Al ad j ad j i (of Plovdiv), Atanas Kelesis (Kelesha), Pavli Panayolu Filip [iste] (of Plovdiv). *Sliver-makers (fitilci)*: Kostandinos Lazarou Pazardjiklis (of T. Pazardjik), Kostandinos

the several dozens of workers engaged in the sorting out of wool, those working in the fulling department or in the dying-house because it is difficult to understand what part of their work was connected with the mill and what with the vast manufacture of the Gümüşgerdans, which encompassed the population of a large section of the Rhodope Mountains.

The analysis of the list of the mill workers also makes possible the drawing of certain conclusions. Above all, there is no doubt that the persons employed at the mill, as is clear from the account books, were hired without exception against pay and food. No mention is made anywhere of prisoners. As it sometimes happens, some perhaps accidentally expressed view on an individual case is generalized. The Gümüşgerdan mill was without any reservation a typical private capitalist enterprise.

The distribution of the workers according to their places of origin produces a picture which raises certain important questions concerning the movement of the population. Of the 57 persons taking part in production (three persons formed the administrative staff: manager, clerk and overseer) only eight were of village origin. Five of them were of the village of Dermen Dere (Purvenets village), where the mill was built, and three came from the surrounding villages. This fact is extremely interesting because it shows in an incontrovertible fashion that the mill was oriented towards the towns and not towards the villages. Contrary to the widespread view, the mill was drawing its workers from urban and not from rural elements. The distribution of the workers by place of origin, except the already indicated eight persons from villages and three without given origin, was as follows :

Angegoglu Dermenderelis (of Purvenets village near Plovdiv), Dimitris of Rada the Crazy, Teodoros Dinkoglu Dermender (of Purvenets village), Nikolaos Yovanoglu Yovancho Pazardjiklis (of T. M Pazardjik), Dimitris Yanakis Semerdjiks Filip [tis] (of Plovdiv), Petros Georgoglu Pazardjiklis (of T. Pazardjik), Kozma Petron Pazardjiklis (ditto), Nikolakis Georgoglu Filip [tis] (of Plovdiv), Kostas Todorou Angeli Filipstis] (dition), Mitos Minoglu Pesherehi Filiptis (of Peshtera), Yovanchos Dermenderelis (of Pervenets village), Antonios Germanos, Spiros Kehaya, Dimitrios Zafiriadis -clerk. (CSHA, f. 161, reg. 177, pp. 40-41).

*Place of origin of the workers of the Giimuşgerdan mill**Inhabited localities*

<i>Towns</i>	<i>Number of workers</i>
Pirdop	16
Plovdiv	10
T. Pazardjik	7
Assenovgrad	6
Panagyurishte	2
Melnik	1
Karlovo	1
Peshtera	1
<i>Villages</i>	
Purvenets	5
Chepelare	1
Belovo	1
Without indication	4
Total	56

In most cases these were localities with developed textile production. Pirdop was a well-known production centre of cotton fabrics already in the 18th century. Plovdiv and Pazardjik were famous for their aba production as far back as the 17th century. Panagyurishte and Karlovo were well-known textile centres which during the first half of the 19th century exported merchandise to the distant markets in Asia Minor. Melnik, before its decline in the late 18th century, was also a considerable commercial and industrial centre with rich firms whose representatives could be encountered in Italy and Austria.

The place of origin of the other 88 hired workers of the Gumiişgerdans, partly connected with the mill and partly with the manufacture, is not indicated in full. For the sake of greater completeness we provide this information as well. Of the 51 dyers the origins of 20 are indicated. Of them 14 came from localities with textile production (5 from Kalofer, 3 from Sopot, 3 from Samokov, etc.) and 6 from villages nearby. The twenty or so farm-hands were practically all from the villages. The two blacksmiths were of Kyustendil, and the cooks, of Kyustendil and Stanimaka<sup>106</sup>. Obviously among the hired labour in the mill and

<sup>106</sup> CSHA, f. 161, reg. 177, pp. 39a-401a.

the dyeing section the workers of rural descent constituted an insignificant minority. At the mill, for which information is complete, they made up a mere 13 per cent. The question arises, how to explain this movement of workers from industrial localities as early as the first half of the 19th century?

Without putting the question in this manner, i.e. without talking about the composition of the workers in the manufacture and the mill, something natural owing to the lack of documents, the location of the mill outside the town, somewhere in the folds of the Rhodope Mountains, was nevertheless used as an argument to point out that the capitalists were seeking the investment of their capital far from the big centres where the guild organization was predominant, in places not reached by the restricting force of the guild authority.

To this generalizing principle were subjected in the first place, the Giimuşgerdan mill, as well as all the manufacturing and factory industry, in so far as it existed in the Bulgarian lands, without paying attention to the fact that not a single other factory except the Gumiişgerdan one, nor any other centralized manufacture was founded outside the urban centres.

In another place, in Part Two, it has already been shown that from the end of the 18th century the guild organizations of the most developed branches, chiefly the textile ones, underwent essential changes both in their structure and in the differentiation of their members. As early as the beginning of the 19th century in the main industrial centres their activity lost its orientation against capitalist forms of production.

As regards the building of the Gumiişgerdan mill outside the boundaries of urban localities, the explanation of this phenomenon should be sought in the concrete conditions in which it was organized, namely the presence of abundant running water so necessary for the different manipulations with the wool and its use as motive power; the presence also of a hereditary farm at the village of Dermendere, which for more than ten years had been the fundamental material base of the great manufacturing activity of the Gumiişgerdans in the Rhodope Mountains. These reasons were enough to make the calculating capitalists construct their mill where this was the most economically advantageous for them.

In order to dispel any possible hesitations, we will add something to what has already been said. The area where the Giimuşgerdan scattered manufacturing was active and where the mill operated, was also seized by the guild organization. At the time when the mill had been in operation for a whole year (February 1849), Mihalaki Giimuşgerdan received a collective address from the aba-makers' guild in the Ahigelebi Kaza, signed by 28 Bulgarians and 98 Turks. By this address the guild thanked for Giimuşgerdans' attitude to the aba-makers who stated that they had received the value of the coarse woollen cloth for the army, made at his order<sup>107</sup>.

This is new proof not only of the resignation with which the guild organization approached the capitalist activity developed in the territory covered by it, but also a new argument in favour of the thesis that the guild with its regulations and all its institutions in the middle of the 19th century began in many cases to emerge as a production branch supplementing the activity of the industrial enterprise - be it manufacture or factory. Analogous relations were established, as we have seen, between the guild and the state workshop for saltpetre in Razgrad. There is no ground whatever, therefore, to claim that the guild organizations could determine the selection of the location of a factory in a place situated far from the town.

The solving of one problem does not explain others and above all the observed fact of the inflow of manpower from the town to the mill, situated far from an urban locality and even outside a village.

The widespread explanation which is given for such a movement of the working population from the sub-Balkan towns in the the second half of the 19th century to Constantinople and other busier centres of the Empire is that this movement was caused by the decline of the handicrafts under the influence of foreign competition. This is true but only in part. It is true that during the second half of the 19th century many crafts collapsed and not only under the influence of the importation of foreign goods but also under the not less competitive influence of the local factory, manufacturing and household capitalist industry which became the predominant forms of production, particularly in the textile branches. This process is indicated also by the spontaneous movements of the weavers and spinners engaged in the house-

<sup>107</sup> CMNL, Orient. Dept., sign. OAK 94/38.



hold capitalist industry against the introduction of machines. In Sliven the personal failures later and the illnesses of Dobri Zhelyazkov Fabrikadjiyata were ascribed to the curses of the small producers -weavers, etc.- who were affected by the mill<sup>108</sup>. Still more characteristic was the mutiny of the Samokov spinners and weavers in 1851, who, armed with hoes, axes, spades and distaffs, attacked the workshop of Stongar in Samokov, who imported mechanical cards. The women calmed down only when the gendarmes promised that the cards would be removed<sup>109</sup>.

During the first half of the 19th century, however, the textile industry was at the peak of its development. The entire population fit to work on both sides of the Balkan, in the Spednogorie and the Rhodope Mountains was engaged in the making of aba, coarse woolen cloth, galloons, shepherd's cloaks and socks. The textile industry formed the foundations of the economic thriving of the sub-Balkan townlets and of the industrial centres of Sliven, Gabrovo and Plovdiv. It was precisely the upsurge of this branch -the manufacture of aba and galloons- that determined the emergence of a considerable manufacturing production and of the first factories in the Bulgarian lands. Under the general adverse conditions for industrial activity in the Ottoman Empire, the Bulgarian bourgeoisie resolved to invest capital in industry, only after becoming convinced that the production of this kind of merchandise was not threatened by the penetration of cheaper and better-quality West European goods, because a reliable marketing of the goods is the first condition for the development of manufacturing and industrial activities.

Nevertheless it is indisputable that during the first half of the 19th century it was precisely urban elements that filled the ranks of the hired workers of the big Balkan manufacture in Constantinople and of the Gümüşgerdan mill. It was they that settled in the inhabited localities along the most animated trade roads: Plovdiv, Adrianople, Constantinople, Asia Minor and Egypt. What were these elements like, what does this fact prove?

The answer in our view can be only one. Gümüşgerdan did not fill his mill with workers straight from the villages because he could draw sufficient manpower from the towns. As early as the first quarter

<sup>108</sup> G. Kozarov, *Dobri Zhelyazkov Eabrikadjiyata*, (in Bulg), Sofia, 1934, pp. 39, 46.

<sup>109</sup> *Tsarigradski Vestnik*, of 2/23 October 1821, published in Istanbul.

of the 19th century and perhaps earlier, unemployed labour existed in a comparatively high degree in most inhabited localities, the result of the constant inflow of semi-proletarian elements from the villages. The free manpower market gradually expanded without being able to find sufficient opportunities for application. This stratum of urban poor became the source which fed capitalist relations in whole branches of the textile industry in their embryonic forms, in handicraft workshops and in the conditions of prevailing guild organizations. Only the presence of a sufficient market of manpower for hire could explain the absence of a shortage of workers when for a brief period in the second quarter of the 19th century the textile industry in the Bulgarian lands registered such upsurge. The flow of workers to the manufactures and factories during the first half of the 19th century was brought about not by the ruination of small commodity producers in the same branches but by the influx of urban poor to a thriving industry. This shows that the social stratification of the population in industrial settlements, indicated usually as an example of prospering small commodity production, had reached a great depth long before the Crimean War. It was not the absence of manpower available for hire that would impede the development of capitalism in the Balkan Provinces of the Ottoman Empire.

Besides, the phenomena indicated in the examination of the industrial enterprises were in point of fact of a much broader significance. They showed that capitalist relations in industry had passed from one stage into another, from a level of forces of production into a new, higher one, from a lower degree of capitalist exploitation to a higher one.

This process, however, neither reached the necessary scope, nor received a force corresponding to the possibilities created. The reasons for this varied in their nature. We will dwell on some of them.

It is known that factory activity was connected with the expenditure of considerable funds. The founder of the first mill in Sliven, D. Zhelyazkov, lacked the necessary capital and he had to propose his plans to the state which was interested in finding cheap broadcloth for the army. This was inevitable when one takes into consideration the fact that the construction of the Sliven mill and its provision with machinery cost more than one million kuruş. How many persons could

set aside such a sum, in addition to the funds needed as circulating capital and for the purchase of raw material. Despite the reaching of a level of development when the process of accumulation of money capital should be accelerated, for a number of reasons this process was in practice absent during the genesis of the Bulgarian industrial capitalist. A considerable part of the Bulgarian capitals, regarded as enormous, were in fact far from being so big compared to the actual needs for industrialization.

This is, however, only one side of the problem, because the opening of factories and centralized manufactures on a more limited scope required less capital. Here we come up against the simple reluctance of the representatives of the bourgeoisie to deal with factory activity. In the general insecurity they preferred to retain the possibility of an easier transfer of capital from one field into another. They wanted to be able to mobilize their funds at the least danger and, if necessary, even to withdraw them from production and export them out of the country. This was connected with the inhibitory influence of the Turkish rule on the country's capitalist development. Even when strong demand for certain goods favoured the emergence of industrial enterprises of a higher type, they obviously preferred lower forms of production, such as scattered manufactures.

A typical example of this was the well-known Giimiişgerdan, who actually set up a mill, but it did not occupy a central place in his production activity. He continued to invest capital in a great variety of fields: in trade, in acquiring real estate property and farm property and in the maintenance of a widely dispersed manufacture, in which the population of dozens of willages and the members of whole craftsmen's guilds in the towns were involved.

The mill, moreover, was created only when the Gumiişgerdans succeeded, through the intercession of the Plovdiv Yali, in securing the regular supply of about 40,000 arshins of aba. The advantages of the factory form of industry were obvious for a capitalist of the Giimiişgerdan type. On the other hand, however, without a permanent market ensured in advance, without orders from the Government, without the support of the Turkish administration, the Gumiişgerdans did not dare found a mill.

Setting forth all this, it was important for us to point out that the emergence and development of capitalist relations constituted a

slow and painful process. The relentless laws of expanded reproduction pushed capitalist entrepreneurs towards the application of ever more improved forms of capitalist production. The conditions in the Ottoman Empire compelled them to decide to take one or other consecutive steps forward in the organization of their enterprises only after appropriate support from the Turkish authorities. It is not necessary here to describe in detail what an effect the heavy regime and continuous pressure exercised by all units of the disintegrating Ottoman feudal system had on the activity of the capitalists. The lack of security was one of the greatest brakes on the putting of more lasting investments in industry. The words of F. Engels about the incompatibility of the Turkish rule with the capitalist system are well known. In this case Engels had in mind the main condition for capitalist accumulation, namely an elementary security for the person and the property of the capitalists (who were non-Turks in their majority)<sup>10</sup>. It was precisely this that was lacking in the Ottoman state.

## Ö Z E T

### OSMANLI İMPARATORLUĞUNUN BALKAN EYALETLERİNDEKİ İLK FABRİKALARI

Makalede, Osmanlı İmparatorluğu'nun en gelişmiş bölgelerinden biri olan Bulgaristanda, 19. yüzyılın başından itibaren gelişmekte olan kapitalist ilişkilerin daha iyi kavranmasına yardımcı olmak amacıyla üç fabrikanın ayrıntılı ve mukayeseli incelenmesi yapılmıştır.

Tanzimat reformlarının başarısızlığı Osmanlı İmparatorluğu'ndaki modernleşme sürecinin yeterince incelenmemesine yol açmıştır. Bu boşluğu biraz olsun doldurmaya katkıda bulunmak, araştırmanın en önemli amaçları arasındadır.

Yazıda, Balkanların ilk modern işletmesi olan ve devlet tarafından Sliven'de kurulan (1836) dokuma fabrikası, Razgrad'daki güherçile imalâthaneler fabrikaları ve özel teşebbüsün ilk büyük sanayi yatırımı olan Plovdiv'deki (1848) dokuma fabrikası ayrıntılı ve mukayeseli olarak incelenmiştir. Söz konusu fabrikaların kuruluşu ve gelişimi incelenirken, kapitalist ilişkilerin gelişimine ışık tutması açısından, kullanılan iş gücünün niteliği ve çalışma şartları üstünde ağırlık olarak durulmuştur.

Sonuç olarak yazıda belirtilen çeşitli engelleyici faktörlere rağmen, önemli sanayi kollarında ve özellikle dokuma sanayiinde, 1840 lardan itibaren, fabrika tipi imalâta geçiş ve kapitalist ilişkilerin gelişmesi hızlanmıştır.

<sup>10</sup> K, Marx and F. Engels, *Works*, vol. XVI, part II, p. 22,