

A VIRTUOUS FORM OF WORK ORGANISATION: THE REGULATION OF PAZZANO OF 1845

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ABSTRACT

Child labour in mines has always represented a bitter chapter in the debate on labour protection. Since ancient times in the mines extraction was done with bare hands or with the use of rudimentary tools and without any protective equipment, such as masks, helmets or gloves. This study analyses one of the models of the Italian iron and steel industry of the Bourbon era, active in Calabria from the mid-nineteenth century. In such a regulatory framework, it may be surprising that - as early as 1845 - in the remote mining village of Pazzano in the current province of Reggio Calabria, whose iron mining activity supported the Royal workshops of Mongiana, the organization of work had been prepared by a specific written regulation, which excluded underage workers from activities deemed dangerous, forbade access to work to minors under fourteen, limited the working day to eight hours, discriminated duties and responsibilities according to age groups, also establishing the relative remuneration, and instituted social security measures. A virtuous example of 19th century work organization.

Keywords: Child Labour, Unitary Regulation, Labour Regulations, Human Material.

INTRODUCTION

In a newly unified Italy, the issue of child labour was not tackled as a matter of urgency, but rather, was the corollary of those parliamentary debates that polarised their efforts in an operation aimed at concentrating all existing legislation in the former pre-unitary states on the subject of quarries, peat bogs and mines, arriving at a unitary regulation valid throughout the new born country. The capitalist option prevailed, the sympathisers of which – for obvious reasons – did not wink enthusiastically at the establishment of labour regulations which, by demarcating the boundaries of the employment relationship, would undoubtedly have curbed the possibility for companies to make use of cheap “human material” (i.e., “underage workers”).

Fifteen years after unification, in 1876, deputies Sonnino and Franchetti – urged on by the first trade union movements that were being set up – conducted a parliamentary enquiry into the episodes of exploitation of the so-called carusi siciliani, children between seven and eight years of age employed in sulphur mines, from which emerged the urgency of regulating the matter. It was not until ten years later, in 1886, that the Berti Law dictated rules concerning the hourly limit and the minimum age for access to work, which – however – were not enforced until the Carcano Law was issued in 1902, thanks to which – for the first time – action was taken to support the protection of underage workers.

In such a regulatory framework, it may cause astonishment that – as early as 1845 – in the remote mining village of Pazzano, whose iron mining activities supported the Royal workshops of Mongiana, the organisation of work had been prepared by a specific written Regulation, which excluded under-age workers from activities considered dangerous, forbade

access to work for children under the age of fourteen, set the working day at eight hours, discriminated duties and skills according to age group, also fixing the relative compensation, and instituted social security measures.

Inspired by the military-bureaucratic logic, indeed, the Regulation fit harmoniously into the native tradition and culture, persuaded by the spirituality of the Byzantine hermit monks who, from centuries, inhabited the Sacred Valley and spread among the populations the value of respecting the land, from which they drew exclusively in order to secure the essentials to live in dignified conditions.

More specifically, the Regulation for the iron mines of the Royal Mongiana Establishments, dated 13 April 1845, dictated directives that were very advanced and satisfactory for the time, considering that generally the miners' working conditions were certainly not enviable and that their duties – even before their rights – were often established by means of public notices.

The efficient organisation of the work was based on a pyramid structure, at the top of which was the Director, who was responsible for coordinating the human material, from the Chief Gallery to the apprentice: this was an arduous responsibility, the extent of which grew even greater when, from 1852 (the year Mongiana became an autonomous municipality), the Director was also given the task of looking after the civilian population in his capacity as Mayor and Deputy Judge of the district; despite the commitment required, however, the document show that all the Directors who succeeded one another at the head of the steelworks fulfilled their duties skilfully and competently.

The working day consisted of eight hours, far less than the sixteen hours or ten to eleven hours of a working day in England or the Kingdom, respectively. For accidents, there was, among other things, a social security fund.

In terms of remuneration, while an adult miner (who was not a Chief Gallery) was paid around four ducats for every one hundred cantari of gross iron delivered to the mine mouth, an unskilled worker was paid up to seven ducats per month, while the pay of the foremen, shapers, turners, and moulders was around twelve ducats per month; in any case, it was the ferrazzuolo who received the highest remuneration, as he received about twenty carlini for each *cantaro* and was also reimbursed for coal at the rate of forty grani per head.

Documents show that a surgeon was assigned to Mongiana as early as 1840, but he was never particularly needed since, with the exception of the cholera epidemic of 1848, it does not appear that the Calabrian population suffered from the diseases typical of most of the human resources employed in private industries at the time; there was also a zero per cent alcoholism rate. Finally, in addition to the surgeon, both a pharmacist, who also acted as a doctor, and the teachers who educated the children of the workers in the Arms Factory were permanently resident in Mongiana.

The Mongiana iron and steel mining complex, although not from the outset, was nevertheless a virtuous model of disciplined work organisation.

From an early age, labourers were taught the techniques of ironworking, which were nothing more than the fruit of centuries of experience, handed down from generation to generation by local masters: almost all the members of the family, indeed, without exception of women and children, worked in the ironworks, learning at an early age the secrets of choosing and cutting the trees, setting up the charcoal pits (from which the coal was obtained to feed the furnaces), digging tunnels and extracting the ore, up to its processing, which - because of its lack of ductility - could only be done by the ferrazzuoli of Mongiana.

APPENDIX

Regulation for the Iron Mines

Chapter 1

Duties of the Captain In Charge of the Dependency

Article 1

The Captain in charge of the Dependency will receive the orders from the Director of the Establishment, and will give him a weekly report detailing the personnel and materials employed, the products obtained and the expenditure incurred. And extraordinarily then he will review all the needs of the Dependency and will obtain its provisions.

Article 2

It is his responsibility to ensure the regularity of the accounting cards, as well as the monthly and annual ones.

Article 3

He must direct the work from the outset; indicate divergences in the event of an obstacle, the fortification, the personnel, and the materials to be used.

Chapter 2

Duties of the Artillery Guard conservator of Materials

Article 1

The Artillery Guard of the Dependency of the assignment is the Secretary of the Dependency itself and is therefore obliged to draw up the Financial and Material Accounting Papers and the correspondence.

Article 2

He shall execute all the revenues, and the accounts shall be regularly ordered to him. He will indispensably help in the receipt of props and half-props from the woods and will assure that the ore extracted from the various Galleries, and poured in the various receptacles, is net and of the refined weight.

Article 3

He will establish a logbook in each Gallery in which he will calendar the different timber administrations. At the end of the month, he will total them up and deduct the results from the reports of the Gallery Heads respectively for the accounting operations. Once a month, he will

review the Machines and tools marked in an appropriate Table signed by the Captain in charge of the Dependency, and which will be renewed every three months likewise that of de Boni.

Chapter 3

Duties of the Chief Miner

Article 1

The Chief Miner is the medium through which orders are issued for work to be performed and personnel to be employed.

Article 2

He is exclusively in charge of the practical part of the trade, and the instruction of the apprentices.

Article 3

He will be responsible for any inconveniences that may occur, both in new works and in maintenance works; therefore, he will propose to the Captain of the Dependency all the necessary means, which he will also implement in urgent cases, but will immediately inform the aforesaid.

Article 4

He will oversee the quality and quantity of the products, take care of the accuracy of the new fortifications, and label the timbers that need to be changed.

Article 5

It shall ensure that the Gallery Chiefs and all personnel adhere to their duties, and that the timetable is regularly observed, reporting all deficiencies.

Article 6

Since he cannot be present in all the Galleries at the same time, he will leave the necessary instructions to the Gallery Chiefs and execute them.

Article 7

He will be entrusted with the journal of the various Galleries for the progress of the works, with all the circumstances that may affect the future, just as the direction and extraction of the extensions, the precise location of the ore that may have been left behind, the reason and everything else.

Chapter 4

Duties of Chiefs Gallery

Article 1

Chief Gallery will be instructed to adhere to the established timetable, which must irrevocably begin at the tip of the day, and end eight hours later without interruption, and so from eight-to-eight hours, until some need arises.

Article 2

They will take exact note of the personnel employed and the materials used in the different works, as well as the extensions, and the products obtained, calling on the Chief Miner, where necessary especially in the different Measures.

Article 3

Every Saturday at the end of the work, they shall personally present to the Captain in charge of the Dependency a detailed report of all the circumstances expressed in the previous article with the approval of the Chief Miner.

Article 4

They will ensure that all individuals do not waste any time and that the Coffee and any other containers used for transport contain the set quantity, handing over the full quantity of ore for each individual and a token which they will collect at the end of the day to ensure the quantity extracted, or the number of trips set for everyone to the outside of the Galleries.

Article 5

They will carry out the instructions they have been given, carrying them out under the strictest responsibility by drawing up extraordinary reports for each major transgression.

Article 6

They will also have to work at night, for they will be present at their respective Galleries until 11 p.m. CET, and a Miner specially appointed Corporal will ensure this. In the meantime, they will fix the developments, and the next day they will make progress. They will deposit the extracted ore in front of the Minali, and the next day they will have it measured and poured into the same Minali.

Article 7

They will make the reward payments that will be decided by the Establishment in the presence of the Captain in charge of the Dependency.

Chapter 5**Duties of Corporals***Article 1*

From among the Miners, upon the proposal of the Officer of the Dependency and with the approval of the Director of the Plant, one shall be chosen for each Gallery, or more as required, who shall be called the Corporals.

Article 2

They shall not work like everyone else, as they will be informed, but they shall ensure that the Miners and apprentices fulfil their duty, and they will have to report any failures to the Chief Miner and in his absence to the respective Chief Gallery, subjecting them to corporal punishment, fines, and dismissals.

Article 3

They will be stationary as far as possible and will oversee the buildings, machines, materials, and tools that the Miners cannot distribute.

Article 4

They will be paid a daily fee of five grains on their earnings for all the above-mentioned extraordinary tasks.

Chapter 6

Duties of Miners and their Service

Article 1

The miners will work in groups in each Gallery, and one shift per month will be organised so that everyone has a share in the local advantages and disadvantages.

Article 2

They will be divided into three classes in proportion to their skill, the first of which will include those who know perfectly well any work of the trade, the second those who are skilled also in fortification and the third finally those who know well only the handling of the pickaxe, and the mace with the Conci.

Article 3

In addition to the requirements for passing from one class to another, the requirements of activity, zeal, honesty, and morality must be added, in the absence of which, they can also have a rank reduction.

Article 4

Their remuneration shall be adjusted as follows, i.e., taking into account the quotient of the division of the net residual of all income by the number of working days of all miners in each Gallery; the sixth part shall be deducted from the 3rd class Miners and redistributed in the ratio

of 1.2 to the 2nd and 3rd class Miners. In the event that there is no 3rd class, 10% shall be deducted from the 2nd in favour of the 1st.

Chapter 7

Duties of Apprentice Miners

Article 1

The Apprentice Miners will also have a Chief who is the carter of the respective Gallery: he must make sure that all personnel fill the coffee or other container assigned to them, that they do not waste time during the hours of labour, and finally that every piece of equipment is in order before starting work.

Article 2

For each transport outside the Galleries with the hand-carriages, and otherwise, personnel shall receive the corresponding token as long as it contains the prescribed number of ore.

Article 3

The Chief of the Apprentices, or Brigade Chief, will bring the details of the sites where the apprentices are to be assigned daily so that each one can go to the most appropriate and the most lucrative of the products identified and those that the nature of the service may require.

Article 4

In consideration of such duties, the Brigade Chief will receive a daily compensation of three grains at the expense of the apprentices of his Gallery. On the contrary, he will be punished, fined, and demoted if he does not fulfil his duties with alacrity.

Chapter 8

General Provisions

Article 1

The number of Ore extracted from the Mines is always approximate; the final count will be obtained when the Ore from the Foundries is also emptied.

Article 2

Therefore, in order to avoid deficits due to scraps during transport to the Foundries, in the reweighing and therefore in the desiccation, the Miners will explore, and the apprentices will extract the tenth of the ore more. However, the remainder that may be found shall be brought into the accounts and shall be distributed to the Staff in proportion to the days of work and the trade. If, despite the aforementioned precautionary measure, shortages occur, they shall be replaced in the same proportions.

Article 3

The ore to be extracted from the Galleries must be free from sterile matter; therefore, the Miners must strictly see to this fulfilment, otherwise the necessary expense will be borne by them.

Article 4

All miners and apprentices except the Corporal, assembled under the orders of the respective Chief Gallery at the end of the day's work shall take one hour to repair the stretch of road to the previous tunnel, those of the last hour.

Article 5

The apprentices then under the orders of their Corporal, they will clean the interior of their own Gallery, ores, and sites premises, take charge of the machines, and tools of their equipment, bringing those that deserve them to be restored.

Article 6

Four grains per day will be taken from the maintenance costs in each Gallery, which will be allocated to a lamp to be kept at the disposal of the Chief Officer of the Dependency, the Chief Miner and the Chief of the Gallery for their daily visits and for the purchase of the paper needed for the Reports to be made by the latter, as well as for the pistols to be fired against the rocks.

Article 7

There will be two Tables in each Gallery, in one there will be transcribed the duties of the individuals assigned to the work, with the Articles of the Ordinance and the Military Penal Statute dealing with the subordination of crimes and punishments. In the other, the Machines and tools existing in each Gallery, and the tools and fittings of the constructions.

Article 8

At the end of each semester, the Constructor of the Establishment will go to the Mines and mark on a plan the extensions of the different branches of each Gallery, a copy of which must be deposited in the Directorate Archive and another in the Mines Archive.

Chapter 9**Machines and tools***Article 1*

The machines and tools will be supplied by the Establishment, except for the Coffee and bandoleers for the apprentices, which they must supply themselves.

Article 2

Each miner shall receive two pickaxes, one of which shall be a single-pointed pick, and a lamp. The picks shall be marked and numbered progressively so that their weight is known at the time of delivery and to ensure, for whatever reason, at the time of remuneration that they are of the same weight.

Article 3

The picks delivered to the miners will also have iron improvements at their expense.

Article 4

The Establishment will withhold machines and Tools that cannot be returned.

Chapter 10

Remuneration of Miners

Article 1

Since the miners will have to provide the oil and the spun cotton wicks themselves, the price for the exploitation of the ore will be two and a half grains per *cantaro*, including the labour for the fortification needed.

Article 2

This remuneration is established indiscriminately regardless of the distance within the Galleries. If, however, the ore is of such extreme hardness that it cannot be obtained by ordinary means, the powder shall be supplied to them with the prudence required.

Article 3

The price of a regular *canna legale* will be three ducats and fifty grains, while that for the facilitation of ore extraction will be reduced by one-fifth of the current rates since the miners will still have to carry out the necessary fortification and provide themselves with the necessary oil and wicks for their own use.

Article 4

Finally, the premium for replacement of each prop will be two and a half grains, while one grain will be allocated for each half-prop, as Miners will have to provide their own oil and wicks.

Article 5

The construction of the bump will be paid for at a rate of six grains per *canna legale*, including the laying of the rails and others.

Article 6

All other work will be paid for at the end of each day in the sum of thirty grains, including pickaxe improvements, oil, and wicks.

Chapter 11

Remuneration of Apprentice Miners

Article 1

The price for the extraction of materials shall be distinguished from that obtained by labour where wagons, hand-carriage, sleds, or other means cannot traffic; regarding the sites where such means can be used to reach the ores, the prices can be seen in the following list resulting list.

Article 2

Apprentices must provide themselves with the oil and wicks in all carving works; and when the time comes to replace them; their merit will be twenty-two grains instead of twenty, in order to buy the oil and the wicks themselves.

Article 3

Those who transport on their backs the material must have Coffee of the capacity of 55.37 or 28 in proportion to the gorge of each one, so that in every two, three or four transports they are respectively equivalent to one cantaro.

Chapter 12

Fines and bonuses

Article 1

Whoever of the miners and apprentices commits transgressions through tardiness, laziness in work, or fraudulence, the first time will be warned, the 2nd will be punished with restriction to prison, the 3rd fined from one to six carlini, and the 4th expelled if not foliated, but if filiated will report it to the Director of the Establishment to be sent to serve in the Army.

Article 2

Subordination for other offences and misdemeanours shall be prosecuted as by law.

Article 3

For each fine, an Extraordinary Report shall be made, and a special register shall be kept, and the revenues shall be administered by a Council composed of the Captain in charge of the Dependency as President, the Chief Miner, Chief Gallery, Corporal, and Older Apprentices as Members and assisted by the Guard as Secretary.

Article 4

These sums shall be deposited with the Officer of the Dependency in a three-key chest, one of which shall be held by the Chief Gallery, the second by the Corporal, and the third by the apprentice, and shall not be used in any way without a written resolution.

Article 5

The use of such sums will be to gratify month by month those who distinguish themselves for zeal and activity in the Royal Service, and a sum will be destined to help those who, because of misfortunes suffered in the work, could not otherwise get food.

Article 6

At the end of each year, a general balance of the Inflows and Outflows will be established, which will be verified and closed by the Director of the Establishment.

Table 1: Below are detailed payments for extracting one cantaro of material out of the Galleries.

Table 1 PAYMENTS FOR EXTRACTING ONE CANTARO OF MATERIAL OUT OF THE GALLERIES.													
Detail				With Coffee						Flat			
			Flat			Uphill		With Hand- carriage				with Wagons	
	Quantity	D	G	D	D	G	D	D	G	D	D	G	D
	25			5	9					1			1
	50			7	1		2			4			2
Distances in canne legali	75			9	1		5			6			3
	100		"01"	1	1		8			8			4
	125		"01"	3	2		1		"01"				5
	150		"01"	5	2		5		"01"	2			6

REFERENCES

Cf. B. De stefano, g. Maticena, op. cit., p. 168.

For the Regulations, see State Archives of Naples, Military Section, Artillery Command, bundle 100

In this regard, A. MARINO, *Le Ferriere di Mongiana. L'industria siderurgica in Calabria del XIX secolo*, Edizioni Accademiche Italiane, Torrazza Piemonte 2016, p. 114.

Law no. 3657 of 11 February 1886 (GU no. 040 of 18 February 1886, official and unofficial part) known as the «Berti Law» on the work of children in quarries, mines, and factories, prohibits work before the age of nine and night work before the age of 12. The Berti Law remained in force until 1902, when Law 242/1902 (Carcano Law) was passed. (The law was definitively repealed by Decree Law No. 200 of 22 December 2008, converted with amendments into Law No. 9 of 18 February 2009 – “Stralcialeggi”).

Marino, *Le Ferriere di Mongiana*, ... op. cit., p. 115.

R. Malta, *Cercavo la Luce. Storia sanitaria delle zolfare di Sicilia*, Accademia delle Scienze Mediche, Plumelia edizioni, 2012, p. 6.

See Gazzetta Ufficiale of the Kingdom of Italy No. 157, 7 July 1902

Spadaro, C. M. *IL Lavoro Minorile Nelle Miniere Calabresi In Età Borbonica Tra Antiche Regole E Nuovi "Diritti" Child Labor In The Mines In Calabria Bourbons Between Old Rules And New" Rights"*.

The «Regulations for the Iron Mines of the Royal Mongiana Establishments» of 1845 represents, in fact, an interesting fusion of military-bureaucratic logic and the paternalistic desire to involve the workers themselves in the control of the various work phases. The working day was already eight hours, unlike the sixteen applied in other nations, and less than the eleven/twelve in force in the Kingdom; for the most uncomfortable tasks this limit could also be reduced. In addition, corporal punishment was provided for, but there was also a welfare fund for those who were injured at work. See G.Matacena, *Architettura del lavoro in Calabria tra i secoli XV e XIX*, Edizioni Scientifiche Italiane, Napoli 1983, pp. 122-123.

When the Regulations came into force in 1845, the Director was to perform the function of coordinating the work of about eight hundred people, in their many specialisations; however, in the decennium between 1850 and 1860, this number rose to one thousand five hundred people, as also testified by Colonel Massimino in his Report to Garibaldi in 1860. See M. Carascosa, *Memoria amministrativa della Mongiana ed il Budget dell'anno 1814*, Biblioteca Nazionale di Napoli, Section Manoscritti e rari.

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