Volker Wollmann, *Un mileniu și jumătate de minerit aurifer la Roșia Montană* [A Millennium and a Half of Gold Mining at Roșia Montană], București, DAR Development Publishing, 2017, ISBN 978-606-94409-0-2

The historian Volker Wollmann is among the few scholars conducting research on the history of mining in Romania. He is a diligent researcher of aspects pertaining to the pre-industrial and industrial historical heritage on the territory of Romania in the eighteenth-twentieth centuries. His research findings are included in studies and reference books dedicated to the subject. To give an example, he is the co-editor of the 11-volume collection entitled *Silber und Salz in Siebenbürgen* (Bochum, the Deutsche Bergbau Museum, 1999-2010) – an editorial project of European significance – and the sole author of the 6 volumes gathered under the title *Patrimoniu preindustrial și industrial în România* [The Pre-industrial and Industrial Heritage of Romania] (Sibiu, Edit. Honterus, 2010-2017) – works that, in time, will themselves become heritage books, as many of the industrial architecture monuments they describe are slowly disappearing from Romania, surviving only between the covers of the studies authored by Volker Wollmann.

This volume is exceptional both in terms of its outstanding graphic appearance and especially of its content. It amounts to a historical monograph dedicated to over 1500 years of gold mining at Roşia Montană, a history that is remarkably well synthesised in the 312 pages of the book. Quite a lot has been written about Roşia Montană in recent years. This subject even became a topic of intense controversy and public debate at the time when the prospect of *SC Gold Corporation* relaunching gold mining here through the method of cyanidation loomed large. In the very first chapter of the study, the author states that the history of Roşia Montană became of interest when the abovementioned gold-mining company was bound by the contractual provisions necessary for the pre-approval of its gold exploitation venture to carry out rescue archaeological investigations, for which it allocated significant

financial resources. To these were added studies on the history of architecture, ethnological and demographic research, etc. which were published in several specialised volumes.

In his turn, the author presents in detail the historiography and documentary sources relating to mining exploitations at Roşia Montană since ancient times (from when the famous wax tablets discovered in the nineteenth century date) to more recent sources, including: the very rich mineralogical-geological literature of the eighteenth-nineteenth centuries or the archival funds containing numerous documents about Roşia Montană and the mining practised here. In fact, some of the most relevant documents from the Archive of the Treasury of Transylvania and from the Cluj Directorate of Mining have been previously published by the same author in volume no. V of the collection *Silber und Salz in Siebenbürgen*.

The author tackles the history of mining at Rosia Montană from a chronological perspective, starting from the Roman and post-Roman periods and continuing with the Middle Ages in the principality. The period of the eighteenth and nineteenth centuries is approached across a significant number of pages (pp. 90-270), which can be explained by the multitude of existing sources that are exploited to the full. Naturally, the evolution of mining is examined closely in line with the political and macro-economic realities of the time, to which the author pays considerable attention, analysing each of the relevant factors that marked this evolution. For example, it is obvious that the establishment of the Austrian administration in Transylvania, sanctioned by the Leopoldine Diploma of 1691, launched a new stage in the development of gold mining in Transylvania. Conducting a rigorous and systematic evaluation of the situation of mining and the problems it faced, the authorities in Vienna took then concrete steps for reorganising it on a new basis, in the spirit of the economic policies and conceptions of those times; as is known, one of these, mercantilism, enjoyed a systematic and consistent implementation in the

Habsburg Empire. It is worth mentioning, in this context, the actions for the revival of mining during the reign of Maria Theresa, both at the legislative, institutional level, and by sending eminent specialists who could evaluate the situation in Transylvania and propose efficient measures for boosting mining activities. There were also a series of investments made directly by the state. In this context, Rosia Montană enjoyed a special attention. The author describes and reconstructs in detail, on the basis of documents, all the efforts and investments made here by the Erarium. It is worth mentioning just three of them, as they were to influence strongly the dynamics of mining activities for more than a century, whether we are talking of mining practised by the state or conducted by private mining companies. Thus, in 1746 extensive work was conducted for opening the Holy Trinity main gallery in Cârnic; at the same time with significant investments were made for opening gold mining exploitations at Săcărâmb or to expand the one in Băița. Also in Roșia Montană, the redevelopment and expansion of Tăut in Orlea provided increased energy-production opportunities for the operation of stamp mills in the area, including private ones. The reality was that of a steady increase in the annual production of gold. Similarly, in 1782 the opening by the Erarium of the Orlea Gallery marked a new turning point in the evolution of mining at Roșia Montană. Minute details and technical data are presented, with reference to all these works which, alongside other administrative measures, were intended to support and enhance the local mining activities. Along the same lines, the authorities in Vienna granted particular importance to the longterm boosting of mining activities in the whole area of the Apuseni Mountains, through measures for reconfirming the old individual and the collective privileges for miners. Since servitude had an important share in agriculture and mining in Transylvania, including on the erarial domains in the area of the Apuseni Mountains, the state was directly involved, taking measures in favour of the mining serfs. These had to be protected from their masters, the feudal lords, who permanently attempted to impose new obligations upon them, both upon those who worked mainly in agriculture, and upon those that, theoretically, earned a living from mining and had no obligations to the feudal landowners.

A substantial chapter is dedicated to the evolution of mining in the period 1850-1867, when again significant changes occurred at Roşia Montană. They were primarily of a technical nature and were the result of investments made by the state: the investments in the Orlea gallery, the construction of new stamp mills at Gura Roşiei, etc. All of which are thoroughly reconstituted by the author. There were also institutional and legislative measures, two of which should be mentioned: the Mining Law from 1854, a statute of exceptional importance because along with other legislative measures regulating industry and commerce, it profoundly influenced economic life at the regional level. First of all, rules and administrative practices were standardised in the field of mining, thus ensuring a much higher consistency and stability.

The new Mining Law from 1854 regulated in detail the conditions for opening exploitations and for the transfer of ownership, stipulating the rights to use movable and immovable property specific to the field of mining. Another change was caused by the abandonment of the old privileges and tax practices, many of them incoherent and erratic, and by the introduction of a system based on the principle of the proportionate taxation, according to the income, of all categories of taxpayers, even though this led to a considerable increase in the value of taxation. These measures, together with the liberalisation of the gold market, gave a new impetus to mining in the area. The patent of October 24, 1856, enforceable in all the provinces, lifted the obligation of delivering gold and silver exclusively at the state's gold redemption offices and led to a growing interest in the exploitation of gold in

the area, a phenomenon that was also reflected in the higher number of concessions granted to individuals.

The chapter that makes reference to the developments of the period 1867-1914 reveals the oscillating evolution of the mining activities at Roşia Montană, determined, of course, by the macro-economic circumstances, but especially by the local conditions. The most important of these was that of water resources, necessary for the operation of stamp mills – which influenced the production depending on climatic conditions.

The author treats in detail the effects of the introduction of electricity for the facilities at Roşia Montană. Electric power, the main source of energy of the second industrial revolution, led to the adoption of technologies with increased efficiency: ore transportation, "Californian"-style stamp mills, etc. Detailed descriptions are provided of all the technical facilities that used electricity as a source of power. The author's conclusions show, however, that the data on the production of gold and silver were not reflected directly in the introduction of modern techniques, at least not in the period after 1905.

A special chapter is dedicated to the social effects of gold mining at Roşia Montană: the author insists on the situation of public health services in the area, subsidised by the state since the eighteenth century. Summary data are presented about the denominational and state schools in Roşia Montană. Interesting data are offered about the churches and ecclesiastical architecture of Roşia Montană, a multi-confessional community par excellence in a place where, ever since the eighteenth century there have existed no less than 5 churches of different denominations. The chapter includes very accurate and detailed data on the architecture of these places of worship, accompanied by suggestive images. As a matter of fact, images of exceptional quality are used for illustrating the entire volume, increasing its attractiveness.

Thus, as usual, Volker Wollmann offers readers a high quality editorial product on a subject that remains of interest not only for historiographers, but

also for society at large, as long as the reopening of gold mining in Roşia Montană is still a matter of interest and has an important stake. The style is the one that has consecrated the historian Wollmann in all of the works he has published: meticulousness, a concern for conveying data and details as accurately as possible, the clarity of ideas. This is because he is not only a good archaeologist, legitimised as such by his doctoral thesis, but also a perfect connoisseur of the languages of his sources (Latin, German). His research reveals a real cult for archive documents, remarkably expressed by the volume under our consideration. To this is added his specialised knowledge of mining technologies, architecture and the history of architecture etc.

We salute this effort and also wish to congratulate the editors of the volume, Ana Dumitran and Valentin Deleanu, who have ensured that the work is printed in outstanding graphic conditions in the *Bibliotheca Mysei Apvlensis* XXV collection.

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