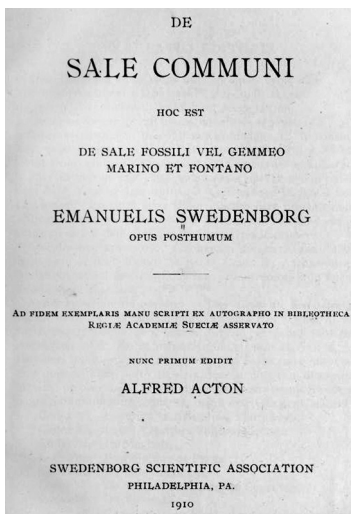


CLAUDIA
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Swedenborg on the Exploitation of Salt in Central and Eastern Europe in the 18th Century



EMANUEL SWEDENBORG,
*De sale communi hoc est De sale fossili
vel gemmeo marino et fontano*
(Philadelphia, PA, 1910)

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ONE OF the most reputed scholar-philosophers of the 18th century, a polyglot encyclopaedist and, in later years, a theosophist, Emanuel Swedenborg (1688–1772) wrote, in the first part of his life, a series of scientific treatises on topics from very different fields (e.g. geology, chemistry, mineralogy, mathematics, etc.). His oeuvre was published in Latin, the international language of the European scientific community of his time. From his theories regarding the *principia naturalia* that have caught our attention, we shall focus on *theoria salis communis* (the theory of common salt), developed in *Prodromus principiorum rerum naturalium: Pars undecima* (Amsterdam, 1721). The Swedish scientist was interested not only in the origin and composition of ordinary salt, but also in its quality, the areas where it could be found, and the methods of

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obtaining it. All these inquiries were gathered into an entire treatise, completed around the year 1728 but unpublished during the author's life (this happened only in 1910, under the title *De sale communi hoc est De sale fossili vel gemmeo marino et fontano*).¹ Containing 60 chapters of variable length, the treatise contains methods, some of them empirical, through which one can approximate the quantity of salt that exists in water or soil, and its quality. The work continues with the regions where salt can be found, mentioning the *montes salini*, *lacus salini*, *aqua marina*: Poland, Catalonia, Hungary, Austria, England, Ormis Island, China, America (*in comitatu Brasiliae*), Russia, Egypt, India, Norway, etc. Further on, procedures and techniques for obtaining salt are discussed for different geographical areas, including the methods proposed by the authors of specialized treatises in previous periods (e.g. Georgius Agricola, G. Himselius, F. Hoffmann etc.). He then addresses the evidence provided by various authors regarding the existence of salt in specific regions, presents details about the appearance, form, density, properties of salt, the methods of obtaining different chemical compounds, experiments regarding salt corrosiveness, etc.

As a work of scientific ambition, *De sale communi* is a global and pragmatic approach to the exploitation of this vital natural resource. The author's great interest in the topic draws on Sweden's need to import salt (from Portugal) at a high price at the time, and on finding a method to obtain it locally, which would have been extremely useful.²

Although it remained in the stage of a manuscript written in Latin until 1910, and although it had a very low impact later on because Latin had not been used as language of science for a long time, Swedenborg's work is illustrative of the trend towards a technological specialization of the monographic approaches regarding salt at a global level, which prevails today.

Despite all these, the approach to the matter is not subjected to the rigor of modern scientific research, the scholar often taking over a great deal of information from the bibliography consulted without directly checking it or comparing it to that provided by other authors. Writing in an era when there was little circulation of books and people, the Swedish scholar mainly had to draw on the works at his disposal (finding out from them about the results of other pieces of research conducted in the same field or adjacent ones; this also holds true for other works more or less connected to the topic in question).

According to the custom of the age, Swedenborg often mentions only the name of the author quoted,³ sometimes the work, as well (with or without reference to the book or chapter in question,⁴ rarely adding the year or page⁵). Most of the time, he does not mention the source of his information. The author prioritizes the regions on which he has more information,⁶ despite the fact that he had not visited them, opting for the random order of their review. He does

not consider their geographical position on the world map, but the salt's location (mountain, lake or sea) and a series of details concern Central and Eastern European countries. When dealing with mountain salt piles, the author mentions the salt mines in Poland, Hungary and Transylvania (under Habsburg rule at the time).

Particular attention is given to the two salt mines (*fodinae salinae*), near Krakow, *non procul a Cracovia* (*De sale*, 16), Wieliczka and Bochnia.⁷ The data provided are selected from various sources, consulted directly or via an intermediary,⁸ and judiciously organized. The author starts by specifying the mines' depth,⁹ their age (thus alluding to legendary elements he does not properly understand¹⁰), the quantity of salt extracted over time, as well as the areas in which it was used¹¹ and the revenues obtained from the exploitation.¹² The interior of a salt mine is described thoroughly, with the numerous paths and ways, *plures semitae et viae* (*De sale*, 16) which make the crossing of the mine very long, *adeo ut multum temporis requiratur, antequam illam integre liceat permeare* (*De sale*, 16).¹³ Salt columns, which prevent the mine from collapsing, offer a wonderful view according to the author, *pulcherrimum praebent prospectum* (*De sale*, 16), because, when touched by light, they become like the brightest crystal, *instar chrySTALLI nitidissimi* (*De sale*, 16).

Interestingly enough, the author reveals a part of the picturesque details he found in the sources, such as the existence of the salt cathedral of King Augustus II sculpted in salt in the Wieliczka mine; he also unveils shocking details, such as the use of horses that never see daylight, *equi numquam vident diem* (*De sale*, 16), the great number of technical installations in the depths of the mine, *machinamenta plura in abySSO fodinae hujus* (*De sale*, 16), or the fact that even children are born here, *multi etiam homines dicuntur ibi nasci* (*De sale*, 16).¹⁴

However, the scientist has a critical attitude towards such information and seems to doubt its truthfulness; thus, he prefers to prudently introduce words such as "it is said" (*dicuntur*) or "it is believed" (*fidem superat quod*). The same attitude can be seen when there is reference to the information on the existence of a river in the middle of the mountain which provides the people and the animals inside with very pure water, without any salt in it, *quae purissima est, nec ullum praefert saporem salinum* (*De sale*, 17); also mentioned are the miners' superstitions on the sounds that can be heard from galleries with flammable gas leaks.¹⁵ It seemed necessary to him to include considerations on these galleries, as well; salt could not be extracted from them because of the danger of combustion and the gases spread.¹⁶

As to the details regarding the hydrogeologic conditions inside the mine, the scholar mentions that there is no other source of water in the mine due to the dry climate (*sicca temperies*—*De sale*, 17) and no leak from above (*nec illabitur aqua e*

loco superiori—De sale, 17), despite plentiful rainfall (*maxima pluvia—De sale*, 17) and the presence above of marshland (*terra . . . paludinoso—De sale*, 17).¹⁷

On the aspect and quality of the salt, he presents several opinions (without revealing the sources), simply mentioning that “some enumerate only two <types>,” *aliqui numerant tantum duo* (*De sale*, 17), or “others have enumerated more types,” *alii vero enumerant adhuc plura genera* (*De sale*, 17). According to the specialists in the first category, these salt mines contained both rock and transparent salt with perfect crystals, as well as a less compact type which can be used particularly in the household, whereas others distinguish between a hard and a rock salt type, such as crystal; there is another hard, yet very transparent type, along with a third fragile one, very white and clean, and a softer fourth one. A fifth type is also included, namely one of black color, similar to coal or liquid tar, *genus colore nigro carbonis instar sive fluidi picis* (*De sale*, 17).¹⁸

With respect to the means of extraction and processing, there is record of stones of various dimensions being extracted from the mine and hammer-crushed, and the salt transported and sold either ground into powder,¹⁹ or as larger or smaller chunks scraped off cylinders, which the Poles used in the household.²⁰

Intrigued by a piece of information according to which salt from those mines would become heavier in contact with air, Swedenborg (this time, drawing on bibliography²¹) argues that there have been experiments to clear up this aspect, and some of the scientists (e.g. Dobelius) showed that there was no difference in weight, with respect to the salt weighted in the underground and on surface (*De sale*, 18).

The scientist, however, does not always have such abundant information and sometimes needs to be satisfied with what he can find in various bibliographic sources, thus trying to structure the material following the same parameters. Of the salt mines in the mountains of Hungary we find out from a single phrase, with information on both the geographic position—two miles from the town of Eperjes (today Prešov) in county Sáros, close to the Tarcza River²²—and depth (of 555 cubits, *profunditas est 555 ulnarum—De sale*, 19).²³ The details further provided concern the way in which the thick salt veins resemble metals in their positioning, yet surrounded by earth, not stone, *non aliter quam solent metalla, suntque circumdatae terra non vero petra* (*De sale*, 19); moreover, to be more easily taken out from the mine, they are crushed into giant blocks (*moles*²⁴),²⁵ which are cut into two-foot long and one-foot wide rectangular pieces, *in partes quadratas longitudine 2 pedum, et crassitie unius* (*De sale*, 19).²⁶ These fragments, in their turn, are crushed into smaller pieces and sent to the salt mill, *franguntur et submittuntur molae* (*De sale*, 20).

On the aspect of the salt of grey color, *ad griseum vergit* (*De sale*, 20), in halite state, the text reads that after grinding, it becomes as white as it gets, *sed*

cum commolitum est, candescit (*De sale*, 20). With respect to the quality of the salt in Hungarian mines, the author adds that there are several types of crystal clear white, yellow or bluish hard salt in which various figures may be carved.²⁷ Yet, the cold wet environment makes it difficult for the salt to turn into powder. Furthermore, almost black salt is said to be used after the salty water is sprayed on fire, *ex ipsa aqua . . . quae per evaporationem super ignem abjicitur, obtinetur sal* (*De sale*, 20),²⁸ to feed animals that put on high quality fat, *ex quo pinguescunt*.²⁹ These pieces of information, despite being included by the author after the ones on the salt mine in Dej (Dés, Desch), actually regard the salt mine (probably Solivar) near Eperjes.³⁰

We also notice that the author does not refer to the workforce used in the extraction of salt.

Herein, Swedenborg also includes a piece of information about the salt mine in Dej, *Desiensi dicta* (*De sale*, 20), Transylvania, which drew his attention, most likely on account of the convincing exemplification of the conservative qualities of salt. This concerns the discovery of a very big oak log in the salt, so hard that it could be barely cut with iron implements and which, when touched by air, decomposed so fast in four days only that it turned into dust at the touch of a finger (*De sale*, 20).³¹ Although he quotes the work that contains the story, *De admirandis Hungariae aquis* (told to be anonymous³²), Swedenborg actually draws on an intermediary source authored by Robert Boyle,³³ according to his own testimony at the end of the fragment.

In fact, it is not the only passage that draws on *De admirandis Hungariae aquis Hypomnematation* as its primary source. Other objects still found in salt in Transylvania, mentioned in this work and reviewed in another chapter, are the following: iron implements, wood (*instrumenta ferrea ac ligna—De sale*, 124), and a perfectly preserved hen sitting on eggs.³⁴ The intermediary bibliographic source is the work *De Thermis* by Andreas Baccius,³⁵ which mentions Wernher's name (*Vernherus*), but not the title of the work.³⁶ As a result, Swedenborg does not realize that this is the same work cited by Boyle, who considered it anonymous. The fact that it used a different bibliographic source may be an explanation for including these details on Transylvania in a different chapter (Ch. XLV, “De aquis aliis salsis, lacubus et rupibus quorum mentionem passim faciunt auctores”), not in the ones devoted to the mines in Hungary. Listed among “curiosities” by the scholar and the author he draws on, both showing reluctance to them, *vulgare fere est* (*De sale*, 124), they are accompanied by considerations on the quality of fossil salt from Transylvania, more transparent than any salt.³⁷

The chapter devoted to the salt mountains in Hungary ends with considerations on the quality of salt in the Carpathians, in general, and Transylvania, in

particular, *nitidissimum pellucidum sal* (*De sale*, 20), yet selected from a different bibliographical source (Friedrich Hoffmann).³⁸ Swedenborg also takes over the errors from Hoffmann, because he did not know the area—e.g. *in Transylvaniae comitatu Colossensi et Derenburgi* (*De sale*, 20)—“in the county of Cluj and Turda in Transylvania,” where Derenburg is probably mistaken for Thorenborg.

Drawing on a rich bibliography, Swedenborg paraphrases, interprets or transposes ad litteram entire fragments from the works he consulted. The result is actually a compilation, as the author takes up ideas, images and schemes from the models in his readings; however, the treatise is compiled with the scientific rigor of a scholar from a period when indicating one’s sources was not always a priority.

The work lists many experiments, definitely of interest in the era; they aimed at uncovering some properties of the salt, data collection on density, corrosiveness, salt quality, etc. Unfortunately, since it remained in manuscript for almost two centuries, the work was completely ignored by specialists. Given its global vision and comprehensive scope, it could be an important landmark in understanding the manner in which the issue of salt was approached at the beginning of the 18th century.



Notes

1. Emanuel Swedenborg, *De sale communi hoc est De sale fossili vel gemmeo marino et fontano*. Emanuelis Swedenborg opus posthumum. Ad fidem exemplaris manu scripti ex autographo in Bibliotheca Regiae Academiae Sueciae asservato nunc primum edidit Alfred Acton (Philadelphia, 1910). Our research draws on the Latin text of the first edition, from which we selected the passages on salt exploitation in Central and Southeastern Europe, adding our translation.
2. David Dunér, *The Natural Philosophy of Emanuel Swedenborg: A Study in the Conceptual Metaphors of the Mechanistic World-View* (Studies in the History of Philosophy of Mind), transl. Alan Crozier (New York–London, 2013), 260.
3. E.g. *Ex Boyleo. Verba eius sunt . . .* (*De sale*, 138): “From Boyle. His words are . . .”; *Haec a Plinio, Baccio, Barba aliisque auctoribus collecta sunt . . .* (*De sale*, 125): “They have been taken from Pliny, Bacci, Barba and other authors . . .” etc.
4. E.g. *Haec posteriora ex Hoffmanni Opusculis Physico-Medicis* (*De sale*, 65): “the latest <were excerpted from> Hoffmann’s *Opuscula Physico-Medica*”; *Georgius Agricola in libris suis De Re Metallica tradit . . .* (*De sale*, 32): “Georgius Agricola, in his books *De Re Metallica* argues . . .”; *Haec Anonymus Gallus in Nouveau Cours de Chymie* (*De sale*, 134): “they <are mentioned> by an anonymous French author in *Nouveau Cours de Chymie*,” etc.
5. E.g. . . . *ut in Actis Lipsiae, an. 1682, p. 386* (*De sale*, 89); *De his vide Nova Litteraria Maris Balthici*, anno 1698 (*De sale*, 82).

6. A great part of information comes from works written in modern languages (e.g. French, English, German), which the scholar appropriately tried to translate into Latin.
7. *Loca praedicta sunt Bochnia et Wieliczka (De sale, 16)*: “The places mentioned above are Bochnia and Wieliczka.”
8. He mentions Gabriel Rzączyński and Bernard Connor, whose names are misspelled in the 1910 edition (*Cannos* and *Rsacfynski*), corrected in the “Corrigenda” of the same edition (Swedenborg, 167). It is not certain whether he consulted them directly, given the errors and confusions he made. For instance, the reproduction of Connor’s account (according to which, in 1548, a cobbler discovered, while he was digging a well, a fountain whose center had a thin salt wall), in which the Morstin family name, as owners of the field, was misspelled, Swedenborg probably considering it a toponym: *tunc incolae hujus regionis ex Morstif profundius adhuc effodere puteum inceperunt (De sale, 16)*: “when the inhabitants of that region from Morstif started to dig the well deeper and deeper.” Cf. Bernard Connor, *The History of Poland, in Several Letters to Persons of Quality . . .*, vol. 1 (London, 1698), 247.
9. . . . *fodina Wieliczka dicitur 456 gradus profunditatis habere, sed circa Bochniam non nisi 80 scalas (De sale, 16)*: “. . . it is said that the Wieliczka mine is 456 steps deep, whereas Bochnia is no less than 80.”
10. For instance, the masculinization of Princess Cunegunda’s name, whose ring is said to have been discovered in salt at Bochnia, in 1251: *per Cuningundum, cujus annulus ibi repertus fuisse (De sale, 16)*. Cf. Gabriel Rzączyński, *Historia naturalis curiosa Regni Poloniae, Magni Ducatus Lituaniae, Annexarumque Provinciarum, in Tractatus XX divisa: ex Scriptoribus probatis, servata primigenia eorum phrasi in locis plurimis, ex M.S.S. variis, testibus oculatis, relationibus fide dignis, experimentis, desumpta opera (Sandomiriae, 1721)*, 58. It seems that the discovery of the salt deposits at Bochnia occurred in 1248: Janusz Wiewiórka, Józef Charkot, Krzysztof Dudek, and Małgorzata Gonera, “Historic Salt Mines in Wieliczka and Bochnia,” *Geoturystyka* 4 (18) (2008): 62.
11. . . . *per 200 annorum spatium adinvenere infinitam salis quantitatem, quo ad maximam partem usi sunt Poloni, Silesienses, Bohemi etc. ut et qui partem Ungariae colunt (De sale, 16)*: “. . . in a time span of 200 years, they found an indefinite quantity of salt used by the Poles, Silesians, Bohemians, etc. and those that live in Hungary.”
12. Probably under the influence of sources, the currencies mentioned in connection to the revenues achieved annually from salt exploitation are Tympfen (*Reditus ex his salinis putatur esse 800000 Tympfen—De sale, 16*) and imperial Thalers (*25000 thalerorum Imperialium—De sale, 16*).
13. The total length of this area is over 200 km, galleries and chambers included. Aleksander Garlicki, “Salt Mines at Bochnia and Wieliczka,” *Przegląd Geologiczny* 56, 8/1 (2008): 667.
14. Tributary to source texts (e.g. Jacques Savary des Bruslons, *Dictionnaire universel de commerce . . . Tome second. F–Z. Continué sur les Mémoires de l’Auteur et donné au public par M. Philemon-Louis Savary (Paris, 1723)*, s.v. *sel*), the author even preserves their metaphorical expression to underline the impressive dimensions and the special organization of the salt mine: *In locis his subterraneis videre licet Rempublicam quandam*

subterraneam, quae suas habet leges, suas etiam familias (*De sale*, 16): “In these underground areas there lies an underground republic with its own laws and families.”

15. *In cavernis his dicuntur audiri interdum sonos instar gannitum canis, vociferationum gallinarum, et plura quae operarii autumant sinistrum omen esse* (*De sale*, 17): “In these galleries sounds resembling a dog’s barking, a hen’s cluck and even more can be heard and workers see them as bad omens.”
16. . . . *effluvia facillime possunt incendi et flammam arripere, quod expertum est Wieliczkae anno 1644, tunc enim incendium quoddam inchoatum est, quod continuasse dicitur per integrum annum, et vapores vel odores sulphureos ex se copiose sparsisse* (*De sale*, 17): “. . . leaks can easily become flammable and ignite, which actually happened at Wieliczka, in 1644; then a fire started and it lasted for a year, widely spreading vapors and sulphur smells.” Cf. Rzączyński, 58.
17. In the modern era, researchers indicated serious problems caused by water infiltrations in the mine as a result of the uncontrolled development of mining activities, which even led to disasters (the oldest on record dating from 1868). Krzysztof Brudnik, Mariusz Czop, Jacek Motyka, Kajetan d’Obyrn, Marek Rogoż, and Stanisław Witczak, “The Complex Hydrogeology of the Unique Wieliczka Salt Mine,” *Przegląd Geologiczny* 58, 9/1 (2010): 791.
18. For a modern approach to the stratified disposal of salt in the Wieliczka and Bochnia deposits, see *ibid.*, 61–70.
19. *Frusta haec salina . . . malleis tunduntur adeo ut apta sint molis subjiendi; et molitur sic in farinam quandam, quae coloris est candidi . . .* (*De sale*, 17): “These salt pieces . . . are hammered until they become appropriate for the mill; and the <salt> is thus ground into a bright white flour . . .”
20. . . . *ex superficie vel extrema parte cylindri abraditur tantillum salis in usus oeconomicos* (*De sale*, 18): “from the surface or the cylinder end salt is little by little rasped to be used in the household.”
21. *Acta Maris Balthici*. It is actually about *Nova Literaria Maris Balthici & Septentrionis* (1699), 72–74; Swedenborg, 158. The scholar may not have consulted the paper directly, given the fact that the information is also present in other works of the time which draw on the same source, hence the difficulty in assessing whether he had direct access to it or not.
22. The editor of Swedenborg’s work preferred to emendate the toponyms *Eperies*, *Saros* and the hydronym *Tarcza* (*De sale*, 19), according to a more recent source, whereas in the manuscript Swedenborg probably took over the data from the *Dictionnaire universel de commerce* (Savary des Bruslons, s.v. *sel*), writes *Eperiei*, *Sarax*, *Tarchz*.
23. This is the mine of Prešov (located today on the territory of Slovakia).
24. . . . *moles plusquam 300 centenariorum pondere* (*De sale*, 19): “. . . blocks weighing more than 30,000 pounds.”
25. István Draskóczy, “Salt Mining and Trade in Hungary from the mid-Thirteenth Century until the End of the Middle Ages,” in *The Economy of Medieval Hungary* (East Central and Eastern Europe in the Middle Ages 450–1450), eds. József Laszlovszky, Bálint Nagy, Péter Szabó, and András Vadas (Leiden–Boston, 2018), 212–213, also mentions the great dimensions of the salt blocks extracted from Hungarian mines during the medieval period.

26. Most of the details seem to be excerpts from the *Dictionnaire universel de commerce* (s.v. *sel*), translated by Swedenborg into Latin.
27. Cf. Savary des Bruslons, s.v. *sel*.
28. This procedure for obtaining salt was known in Antiquity, according to Latin authors such as Tacitus (*Ann.*, 13, 57) and Pliny (*N.H.* 31, 83), who mention its use in Germany and Gaul. The grey color in the salt came from the mixture with the ashes resulting from burning wood: Cristina Carusi, *Il sale nel mondo greco (VI a.C.–III d.C.): Luoghi di produzione, circolazione commerciale, regimi di sfruttamento nel contesto del Mediterraneo antico* (Bari, 2008), 39–40. The technique was also used in the area of Transylvania and Moldavia from prehistory to the beginning of the 19th century: Marius Alexianu, Ion Sandu, and Roxana-Gabriela Curcă, “Fire, Brine and Wood: The First Nutritional Supplement in the Inland World,” *Mankind Quarterly* 52, 3–4 (2012): 423.
29. A series of experiments conducted by modern researchers showed that this type of salt had chemical properties with beneficial effects on animals’ bodies (*ibid.*, 417–421). Salt consumption actually brings animals an additional supply of minerals, also leading to greater water consumption.
30. Cf. Savary des Bruslons, s.v. *sel*.
31. On the discovery of other wood objects preserved in salt, in Transylvania, see, for instance, Anthony Harding and Valerii Kavruk, “Transylvania,” in *Explorations in Salt Archaeology in the Carpathian Zone*, eds. Anthony Harding and Valerii Kavruk (Budapest, 2013), 41–153.
32. Actually, the work is written (in Latin) by Georg Wernher (Georgius Wernherus). See *Călători străini despre Țările Române*, vol. 2, eds. Maria Holban, M. M. Alexandrescu-Dersca Bulgaru, and Paul Cernovodeanu (Bucharest, 1970), 13–16; Octavian Tătar, “Un proiect fiscal pentru Transilvania: Raportul lui Georg Werner din 1552 către autoritățile austriece,” *Terra Sebus: Acta Musei Sabesiensis* 6 (2014): 329; a detail also mentioned by Swedenborg’s editor in the Appendix (Swedenborg, 156).
33. Cf. Robert Boyle, “Suspensions about some Hidden Qualities in the Air,” in *The Philosophical Works of the Honourable Robert Boyle Esq.: Abridged, Methodized, and Disposed under the General Heads of Physics, Statics, Pneumatics, Natural History, Chymistry and Medicine: The Whole Illustrated with Notes, Containing the Improvements Made in the Several Parts of Natural and Experimental Knowledge Since his Time*, vol. 3, ed. P. Shaw (London, 1725), 82.
34. *Quodam loco, gallina cum ipsis ovis incubans reperta est, quae eo obducta sale servata est, ac incorrupta etiamnum ostenditur* (*De sale*, 124): “In a place a hen was found brooding eggs; covered in salt it was preserved and finds itself to be unaltered.” The text is reproduced ad litteram after Andreas Baccius (cf. Baccius, 236), who, in his turn, draws on Wernher for the data. Cf. Georgius Wernherus, *De admirandis Hungariae aquis hypomnemation: Ad generosum et vere magnificum D. Sigismundum in Herberstain, Neiperger, & Guttenhag Baronem, inclyti Roman.*

Hung. & Boëm. &c. Regis, D. Ferdinandi consiliarium, & fisci in Austria praefectum (Viennae, 1551), f. 12.

35. Andreas Baccius, *De Thermis Andreae Bacci Elpidiani . . . libri septem . . . De lacubus, fontibus, fluminibus, de balneis totius orbis et de methodo medendi per balneas* (Romae, 1622).
36. *Ibid.*, 236.
37. The sequence is also taken over from Baccius (*ibid.*).
38. Fridericus Hoffmannus, *Opuscula Physico-Medica*, Antehac seorsim edita iam revisa, aucta, emendata et delectu habito recusa, Tomus primus (Ulmae, 1725), 314; cf. Swedenborg, 157.

Abstract

Swedenborg on the Exploitation of Salt in Central and Eastern Europe in the 18th Century

The present paper is an analysis of the data concerning the regions of Central and Eastern Europe, where salt is extracted from the mountains (Poland, Hungary, Transylvania), offered by the theologian scholar Emanuel Swedenborg in some passages of his scientific work, written in Latin, *De sale communi*. A considerable number of these passages, which are of great interest for the history of technology and sciences, relate to issues that have been forgotten but which need to be revalued from the point of view of current developments in those fields. The aim of the study is to reveal the scientific principles that guided an 18th century scholar when dealing with such a topic. We are also interested in finding out the extent to which Swedenborg succeeds in systematizing the various theoretical and practical information, useful for understanding the nature of salt exploitation at that time, considering older works and the latest bibliography at his disposal.

Keywords

Latin language, Hungary, Poland, Transylvania, salt mine