

GEORGII AGRICOLAE DE RE METALLICA LIBRI XII ▷ QVI▷

bus Officia, Instrumenta, Machinae, ac omnia denique ad Metallurgiam spectantia, non modo luculentissime describuntur, sed & per effigies, suis locis insertas, adiunctis Latinis, Germanicisque appellationibus ita ob oculos ponuntur, ut clarius tradi non possint.

E I V S D E M

DE ANIMANTIBVS SVBTERRANEIS Liber, ab Autore recognitus: cum Indicibus diuersis, quicquid in opere tractatum est, pulchre demonstrantibus.



BASILEAE M▷ D▷ LVI▷

Cum Priuilegio Imperatoris in annos v.
& Galliarum Regis ad Sexennium.

MINING AND METALLURGY

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A NEW SOURCE OF RESEARCH MATERIALS

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A large number of very useful printed works has recently come into the possession of the Royal School of Mines. The collection is that of Robert Annan, a Fellow of Imperial College, London, and contains the works of every important authority on mining and metallurgy from 1495.

One of the earliest works is the 1495 edition of *De Mineralibus*, which deals with the magical properties of stones. This lapidary, by Albertus Magnus, was one of the first works on mining to appear in print.

Georgius Agricola, who is best known for "*De re metallica*", is represented in the collection by many volumes. His first work on mining is "*Bermannus sive de re metallica*" of 1530. This deals mainly with the minerals found in Saxon mines. "*De natura fossilium*" was the first serious study of mineralogy and is in the collection as the 1546 edition.

The "*De re metallica*", in the 1556 edition, gives a detailed account of the contemporary practices in mining and metallurgy. It held its position as a major work for over a century, and even today is an excellent source of historical methods. All these editions of Agricola came from Froeben's press in Basle.

Also represented are the books which challenged those of Agricola, namely Rossler's "*Speculum metallurgiae politissimum*" and Schluter's "*Grundlicher Unterricht von Hutte-werhen*".

Two valuable sources of methods used and taught in the 1770's were the textbooks of German Schools of Mining; first the Freiberg book published anonymously in 1772, "*Bericht von Bergbau*", and the Schemnitz school's "*Anleitung zu der Bergbaukunst*" by Delius, 1773.

The Spanish representation in the collection is highlighted

by Barba's "Arte de las metales" of 1640 in a very rare first edition. An Italian text "Practica minerale trattato" by Montalbano is a very useful source. France made only a small contribution to the literature but the collection houses all the important texts, especially those of Hauy.

The English section of the collection is very representative. Carew's "Survey of Cornwall" 1602 contains a section on tin mining and ore dressing. The first English book devoted to mining by Plattes was "Discovery of subterranean treasure" 1639.

Aspects of mining involving hydraulics are covered in four books by Thomas Bushell dating from 1641. Derbyshire lead mining in the seventeenth century is covered by Houghton's "Rara Avis in Terris"; this gives the laws and customs of the Derbyshire mines. A similar work covering mining in the Mendips dates from 1687.

Works of the eighteenth century start with the 1702 edition of Savery's "The miner's friend" and Hardy's "Miners guide". Borlase's "Natural History of Cornwall" 1758 gives an account of the minerals and methods of mine working. The "Elements of Minerology" 1784 by Kirwan is the first systematic treatment of the subject in English.

These are just some of the printed books in the collection which in all numbers three hundred items. However, there are many interesting manuscripts - for instance, a collection of letters written by Sir Joseph Banks on the lead mines in Derbyshire and the complete set of cost books 1848 to 1875 relating to the Wheal Buller Mine at Redruth.

The collection is available in the Lyon Playfair Library at Imperial College. It will certainly be of invaluable use to anyone researching into mining and metallurgy. It is to be hoped that modern additions will be added to keep the collection up-to-date.

