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Great Exhibition of the Works of Industry of all Nations,  
1851.

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CATALOGUE.

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*IN THREE VOLUMES.*

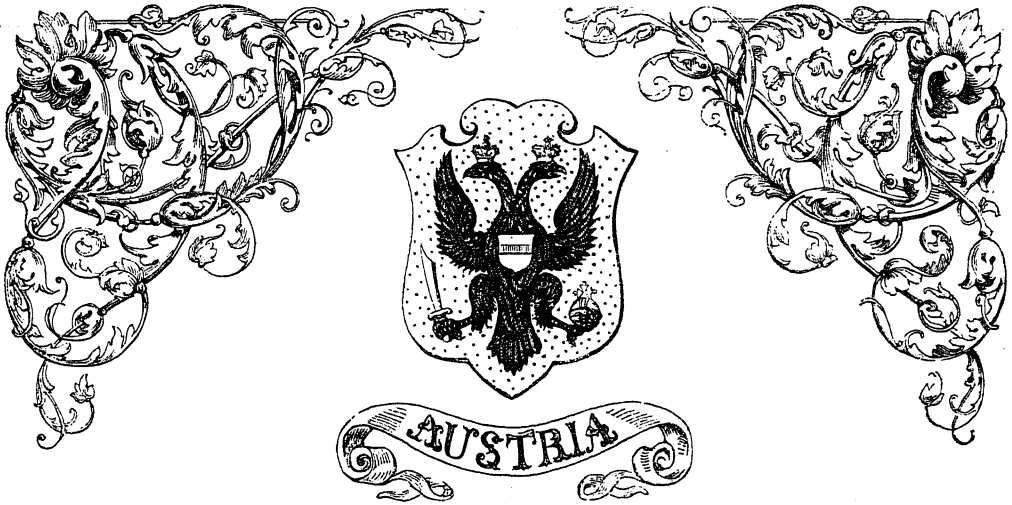
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NORTH AND SOUTH AREAS, C. TO E. 58 TO 61; F. 59 TO 61; K. 59, 60;  
 L. TO P. 58 TO 62; Q. R. 56 TO 61; S. 57 TO 61.  
 NORTH EAST CENTRAL GALLERY, I. 59 TO 61.  
 SOUTH EAST CENTRAL GALLERY, M. 58 TO 61.  
 SOUTH EAST GALLERY, N. O. 58; P. 59 TO 63.

*Commissioners, CHEVALIER DE BURG, and CHARLES BUSCHKE, Esq., 43 Clarges Street, Piccadilly;  
 Custom-house Agent, C. J. MAJOR, 21 Billiter Street.*

THE Austrian productions form a highly-interesting feature in the Great Exhibition. About seven hundred and fifty exhibitors appear as the representatives of this important territory; and the articles forwarded by them must be acknowledged to have added a large share to the attractions of the Foreign side of the Building. So large a portion of annotatory matter has been introduced, in such places as appeared to be most suitable in the body of this Catalogue, that it is rendered less necessary to offer a lengthened introductory notice. To the matter so introduced it is merely necessary to add the remark, that originating from the best-informed sources, and conveying a very large amount of useful knowledge, not to be readily met with in any other work, it has been inserted with very little abbreviation. The raw materials are largely represented, and by a most interesting selection of objects illustrative of the mineral wealth of this monarchy.

"Austria abounds in every description of metal. All the more useful kinds, with the exception of platinum, are to be found therein; and in the production of the precious metals, Austria is surpassed by Russia alone. Transylvania is one of the richest countries of Europe in gold; Hungary, also rich in gold, is still richer in its yield of silver. Bohemia ranks next to Hungary in this respect, and Transylvania immediately after Bohemia. In the production of quicksilver, Austria, by reason of her possession of Carniola, stands next to Spain. Bohemia supplies excellent tin, Carinthia the purest lead, and Hungary is extremely rich in copper. Iron is produced throughout the countries of this empire, the only exceptions being Görz and Gradisca, Illyria and Venice. Styria is pre-eminent in respect both of the quantity and the quality of its iron, which is considered equal to any raised in Europe. Fossil and brown coal the Austrian dominions may be said to possess in inexhaustible abundance, and, in consequence, mining has been carried on in these regions with peculiar spirit and energy. Due advantage has been taken of the progress of modern science in so pushing the advancement of this branch of the national industry, that though it cannot be said to have attained the utmost degree of development which it may be capable of reaching, yet it must be allowed to have closely approximated to it."

Minerals, metals and their ores, chemicals, agricultural productions, silk raw and manufactured, models of machinery, carriages, and a variety of objects illustrative of the other classes of the Exhibition, are found in this collection. Numerous philosophical and musical instruments are also shown. The textile manufactures, and leather, paper, books, and printing are adequately illustrated in the various articles belonging to their classes. In glass manufactures Austria has long been pre-eminently distinguished, and the specimens exhibited sustain her celebrity. The metal manufactures are also illustrated by the contributions of a considerable number of exhibitors, whose productions bear comparison with the universally celebrated hardwares of England. Beautiful examples of porcelain and common wares are exhibited. The miscellaneous objects represent in an interesting manner those variations in the products of foreign artisans which characterise them, and distinguish them from our own. Universal interest is excited by the fine specimens of statuary and other art productions exhibited by Austria. The suite of rooms containing the articles made by the Messrs. Leistler, of Vienna, is one of the most interesting features in the Austrian department, and presents an imposing picture of the luxurious furniture of the nobility of Austria. The state bed, with its appendages, the dining-tables, side-board, and chairs, exhibit a lavish outlay of ornamental labour. One portion of this furniture, a carved Gothic bookcase, is designed as a present to Her Majesty the Queen of England from His Majesty the Emperor of Austria.—R. E.



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1 MIESBACH, ALOIS, *Vienna*—Proprietor.

Coals, brown coals, and lignite, from Lower Austria, Upper Austria, Styria, Moravia, and Hungary.

[The coal mines of this exhibitor are the most extensive in the empire: his thirty mines contain a store of at least 900,000,000 cwt. of coal, whereof 864,000,000 have been discovered by himself. They give direct employment to 1,961 men, produce annually 2,750,000 cwt. of coal, and are already in a condition to furnish four times that quantity, although the greater part of them are only now being opened and prepared for working.]

Coal is found in Austria in constantly increasing quantities, particularly in Bohemia, Moravia, Silesia, Lower Austria, and Hungary. Bohemia takes the first place as to the quantity, and partly, also, as to the quality of its coal, nearly half of the total quantity of the coal and brown coal produced in Austria being Bohemian. Considered generally, however, the production of coal is only trifling at present.

The production of coal, in 30 years, has increased tenfold; and at a rapid ratio. The prices of wood and charcoal are constantly increasing, with an annually increasing demand for fuel to be consumed in factories, &c. It is, therefore, very probable that the collieries of Austria will, at no distant period, be worked to a far greater extent than at present. Scarcely 100,000 cwt. of coals are extracted in a year from coal-fields that are known to contain as much as 1,500 millions of cwt. The exports of Austrian exceed the imports of foreign coal by about 300,000 cwt. A large proportion of the fuel obtained in Austria is lignite. This substance, which is intermediate in its character between wood and coal, and is of a brown colour, possesses considerable value as a calorific agent, although it is in this respect inferior to the ordinary coal of Great Britain. Its importance to the countries and districts where it is found can scarcely be exaggerated, and its abundance justifies the belief that the enormous thick detached beds in which it occurs will ere long be fully worked. The lignite not unfrequently presents those evidences of its origin from the decomposition of coniferous trees, from which the geologist draws his most accurate inferences.—R. E.]

Specimens of alum.

2 IMPERIAL MINES, *Vienna*.

Mercury and cinnabar, and ores of the same, from Idria.

[A large quantity of mercury or quicksilver is annually produced at Idria, a town in the duchy of Carniola, the inhabitants of which are chiefly occupied in its extraction. The quicksilver mines are extremely productive. The cinnabar ore yields when very rich fifty per cent. of this metal. This ore is a sulphuret of mercury, and gives up the latter metal by sublimation.]

With the quicksilver mines of Idria is connected a manufactory of vermilion, which produced, in the year 1847, 981 cwt. of that pigment. The residue of the quicksilver is used up to some small extent, about 300 cwt., for technical purposes and preparations, but the greater portion of it is sent abroad. The exports of quicksilver amount to an annual average of 2,341 cwt. (in the year 1846 they reached 5,478 cwt.), and of preparations derived from it, such as corrosive sublimate, calomel, &c., to 41 cwt. By the consumption of quicksilver, for the manufacture of vermilion and for other technical purposes, the value of the annual produce of the raw material is greatly increased. The mines have been

worked for upwards of three centuries and a half, and were originally discovered by an accident.—R. E.]

Sulphur, from Szwozowicz in Galicia, and Radoboj in Croatia.

Rosette-copper, from Agordo in the province of Venice and Moldava.

Blistered copper, from Schmöllnitz in Hungary.

Tin, from Schlagenwald in Bohemia.

[Tin, a metal which of late years has become of so much importance in the occupations of manufacturing industry, is not found within the Austrian monarchy in sufficient quantity to meet the demand for it. The imports of tin from abroad during the same period of five years, 1843 to 1847, amounted on an average to 3,785 cwt. annually, whilst the exports of this article were but 90 cwt., value 4,500 florins. But, whereas the imports of tin wares were, for the same time, inconsiderable, the exports under this head amounted to 304 cwt.]

Litharge, from Pzibram in Bohemia.

Zinc, antimony, and similar mining produce.

3 UPPER HUNGARIAN MINING ASSOCIATION, *Schmöllnitz, Hungary*.

Quicksilver, refined copper, block copper, and various other similar productions for smelting.

[The whole quantity of raw copper raised in Austria is not used there. Until the year 1847, indeed, the imports of copper into Austria were greater than the exports from it; the excess of the former, as compared with the latter, during the years 1843 to 1846, averaging about 3,000 cwt. annually; but since 1847 these exports have been considerably in excess of the imports. In the year 1847 the imports reached 8,667 cwt., while the exports were 28,254 cwt.; but in the year 1848, for 3,891 cwt. imported there were 5,489 cwt. exported, so that, out of the whole production of that period, 58,568 cwt. remained in Austria. It should, however, be borne in mind that the copper found in Austria does not equal the Russian or the Swedish copper in quality, and that it is therefore indispensable to draw a supply of the finer sorts from abroad. Of the quantity produced beyond the amount that she exports, about 40,000 cwt. are converted at the copper-mills and rolling-works into 38,400 cwt. of copper sheeting and hollow ware (the Government establishments produced, in the year 1847, 6,562 cwt. of such ware and copper sheeting), and the remaining 18,568 cwt. were used for various alloys and other purposes. Copper acquires its highest increase of value when employed in the manufacture of percussion-caps, galvano-plastic productions, and brass hardware. Austria drives a brisk trade in articles of copper and brass with foreign customers.]

4 SZUMRÁK, JOHANN FRIEDRICH, *Neusohl, Hungary*—Proprietor.

Cobalt and nickel ores, from Bocza, together with the residue obtained from the same.

Calcareous slate, from Molcsa in Hungary.

Analysis of the above residue:—

Ferdinand Level.	Dreibrüder Level.
The raw ore contains 61·8 per cent. residue.	The raw ore contains 54·8 per cent. residue.
The residue:—	The residue:—
Nickel . . . . . 22·546	Nickel . . . . . 17·224
Cobalt . . . . . 19·886	Cobalt . . . . . 16·430
Copper . . . . . 9·719	Iron . . . . . 8·102
Iron . . . . . 15·403	Bismuth . . . . . 7·644
Arsenic, sulphur, &c. 32·446	Copper . . . . . 2·101
100·	Arsenic, sulphur, &c. 48·499