

“FALU GRUVA”: THE MINE THAT MADE A NATION

This exhibit illustrates the importance of Falun Mine (*Falu Gruva*) to Sweden’s history. Operating for over a millennia, it was for centuries Europe’s largest copper mine. But it was more than a mine. It bankrolled the Kingdom of Sweden, from its 16th Century-war of independence, through its years as a Baltic superpower in the 17th Century, up to the 20th Century.

The exhibit weaves together key aspects of geology, mining and metallurgy with important political, economic and social developments. It is structured as a timeline starting with the discovery of copper at Falun (c. 500-800 AD) through to the mine’s closure in 1992. It stresses the controlling influences of successive monarchs, international trade, and highlights Swedish advances in technology, social services, and the banking and corporate sectors. It concludes with its inclusion on the UNESCO World Heritage Register.

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Fonts key: theme text, *philatelic and non-philatelic items text*

📖 Personal research; ♦ Difficult items to acquire in good condition; 3D Three dimensional items that have been photocopied before scanning the pages for this virtual display.



Falun mine: picture postcard posted from Falun to Uppsala 12 Jul 1907.

Key references

Facit (2017) *Postal History and Cancellations* Facit, Stockholm.

Millington, A (2020) Falun Mine: Viking mine to World Heritage Site in 1500 years, or thereabouts. *Themescene* 37(1), 4-9.

Olson, D (2010) *Falun Mine* Stiftelsen Stora Kopparberget, Falun

1 ORIGINS

1.1 A myth and the start of mining

Imagine this! You are herding goats when Käre wanders off and returns covered in red soil. The next day you follow him. You dig the soil he is rolling in and discover chalcopyrite - the world's most economically important copper ore.



Käre's tale is the discovery myth of Falun. In many Scandinavian mine discovery myths, goats, cattle and reindeer become prospectors!



Meter mark: Pitney-Bowes/Secap prefix HD

Julius Caesar knew of mining in Scandinavia. In 1030 the Norwegian king, Olav the Holy (1015-30), visited the area he called *Jarnberaland* (iron-bearing land) – a reference to bog iron mining. Copper mining at Falun began around 500-800 AD when the Vikings were exchanging ideas and goods throughout Europe – even copper from Falun.



3D Viking bronze belt mount, 9-12th Century. Irish provenance.

Poster stamp: Berlin publishing house, Langenscheidtsche, to publicise their pre-1921 series of translations of Roman classics.



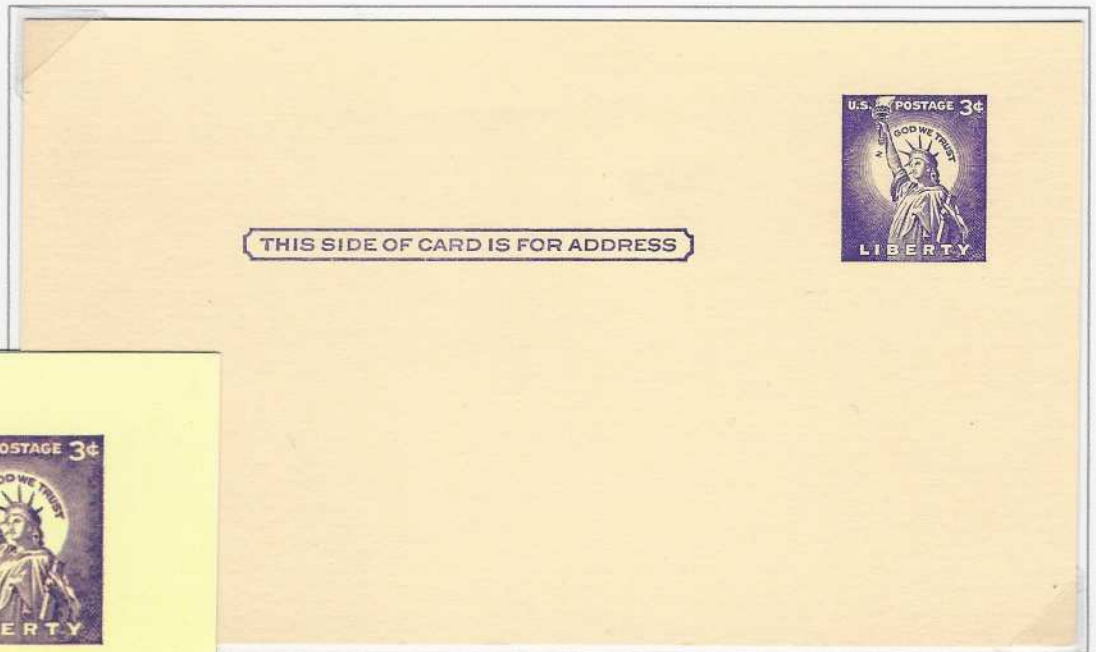
1 ORIGINS

1.2 Scandinavian copper mines

Mines in Scandinavia exploit minerals formed over 1800 million years ago when the area was a sub-tropical ocean studded with volcanoes: similar to the present-day south Atlantic Ocean. Reactions between lava and sea water formed copper, iron, gold, silver and other minerals, which were buried, uplifted and then eroded.



📖 Apart from Falun, other important copper mines include Visnes (Norway) where the copper for the Statue of Liberty was mined. In contrast to the enormous mine at Falun; others like Bierkes where the copper for the Frösö bell was mined, were small and short-lived. The Lake Copper Syndicate mine issued stamps for its postal service.



Postal stationery card. Issued 31 July 1931 to meet an increase in the domestic postcard rate in the USA the following day. Missing 'I' variety, photocopy 125% enlargement.

📖 Meter cancel commemorating 800th anniversary of the casting of the Frösö bell. The pastor of Frösö obtained the copper to make the bronze used in casting from small mines at Mt. Åreskutan, Fröå and Bjelke on Frösö island in Lake Storsjön. The copper was smelted at Huså. Text reads 'cast in copper from Åre'.



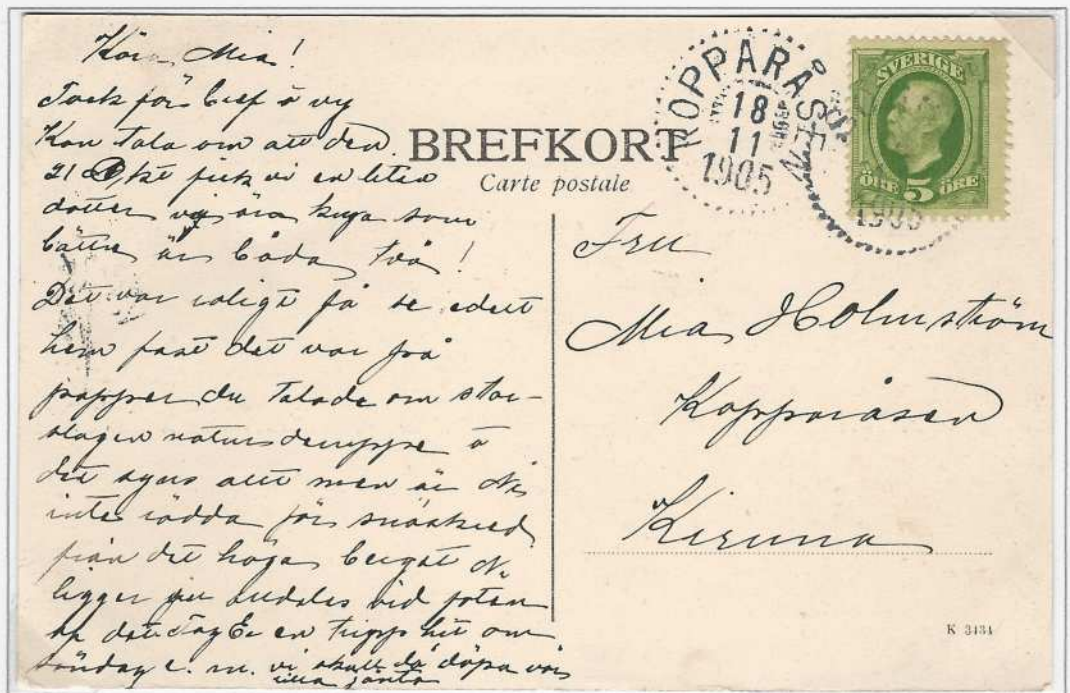
1 ORIGINS

1.2 Scandinavian copper mines

📖 Copper deposits are widespread in Sweden. Some towns derive their names from their copper origins, e.g., Nya Kopparberget (New Copper Mountain) – well known to philatelists as the Tre Skilling Blanco was posted there – and Kopparåsen. The name Falun is not derived from copper, but it is located in the area known as Kopparberget (Copper Mountain) and the mining company founded there was called *Stora Kopparberget* (Great Copper Mountain). From 1647 to 1997, the county (or *län*) was called *Kopparbergs län*. It is now called Dalarna.



Nya Kopparberget:
circular date stamp
29 Jun 1882 (in use
1859-1868). 12 öre
stamp correctly
paying domestic
letter rate.



Kopparåsen:
circular date stamp
18 Nov 1905 (in use
1901-1930). 5 öre
stamp correctly
paying domestic
postcard rate.

📖 Copper, lead, zinc, iron and uranium were mined from 1600-2500 million year old rock at Kopparåsen, in Lappland. The mine is now closed. Nya Kopparberget was mined from 1636-1902. Its copper output was second only to *Falu Gruva*

2 HISTORY

2.1 Establishing royal connections and control

Water generated power for mines and smelters. Water wheels (introduced by 12th Century monks) replaced human treadmills. In the 14th Century water was channelled along canals to these wheels. Gustav Vasa improved mine operations by introducing water-powered winches to hoist ore and groundwater from the lower levels.



Wooden water powered pump and ore hoist, Kreuzer shaft, Falun.



Divided back postcard of typical canal. Sent from Krylbo to Hedemora (date unreadable). 5 öre stamp paying the domestic postcard rare. No publication details.



Another major resource was wood to make charcoal for smelting, construct buildings and machines, and shore up mines. In 1572 Johan III (1568-92) enacted a law that controlled wood cutting and charcoal-making by farmers within 10 km of Falun who hauled it by sleigh in winter and along rivers in summer.



Postcard, with written message on front as per prevailing UPU regulations, of Dalälven valley near Falun illustrating the type of forested farmlands that supplied wood and charcoal to the mine. Sent from Halahult to Visby 14 July 1902. 5 öre stamp paying the correct rate. Published by Gerda Söderlunds.

2 HISTORY

2.1 Establishing royal connections and control

Queen Margareta issued the first royal charter for mining, which included the Kopparberget, in 1397. From then on Swedish monarchs strongly influenced mining and smelting at Falun.



Mine owners established the Guild of St. George in the 15th Century to protect their interests. Trade guilds were a common Medieval practice
Coppersmith's sign, 1263 (right)



Gustav Vasa's (1523-1560) reign brought considerable changes to the mine. Swedish fortunes became closely tied to the fortunes of the mine and it became known as Sweden's 'cash box and treasury'

The state paid for copper with promissory notes, effectively becoming the forerunner of the Bank of Sweden.



5 kr banknote, 1974 series, uncirculated condition



Mine owners backed Vasa financially in the war against the Kalmar Union (comprising all of Scandinavia, Greenland and the Orkneys and Shetlands) after which Sweden became independent. Falun copper was used to forge cannons, pay mercenaries, and buy back lost territory.

Liebig trade card, No. 4 in set of 6 on the Bronze Industry published in the 1930s.



2 HISTORY

2.2 Extending royal control and the royal mints

Copper production rose from 56 to 680 tonnes per year during Vasa's reign, which coincided with declining production at European mines, especially Mansfeld in Saxony. Falun became Europe's most important mine. Copper was shipped to Lübeck on boats known as cogs as part of the Hanseatic League trade; extending existing German interests in the mine. Sweden benefitted financially from its copper exports: but the money was soon spent.



Lübeck, the main Hansa city, was founded in 1143

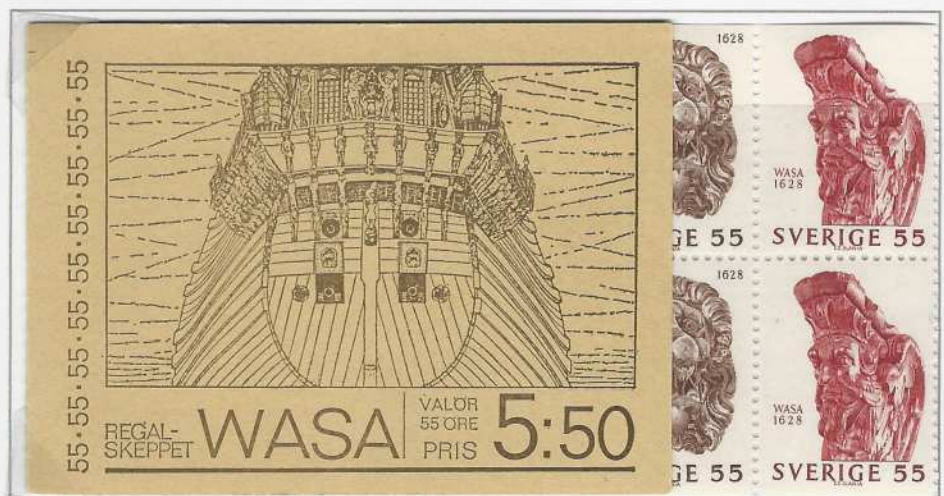


Gustav II (1611-1632) pursued an aggressive foreign policy aimed at making Sweden the Baltic superpower. Wars were fought against Russia and the Baltic States, and large parts of Prussia and Poland were annexed. Falun copper paid for these political aspirations.

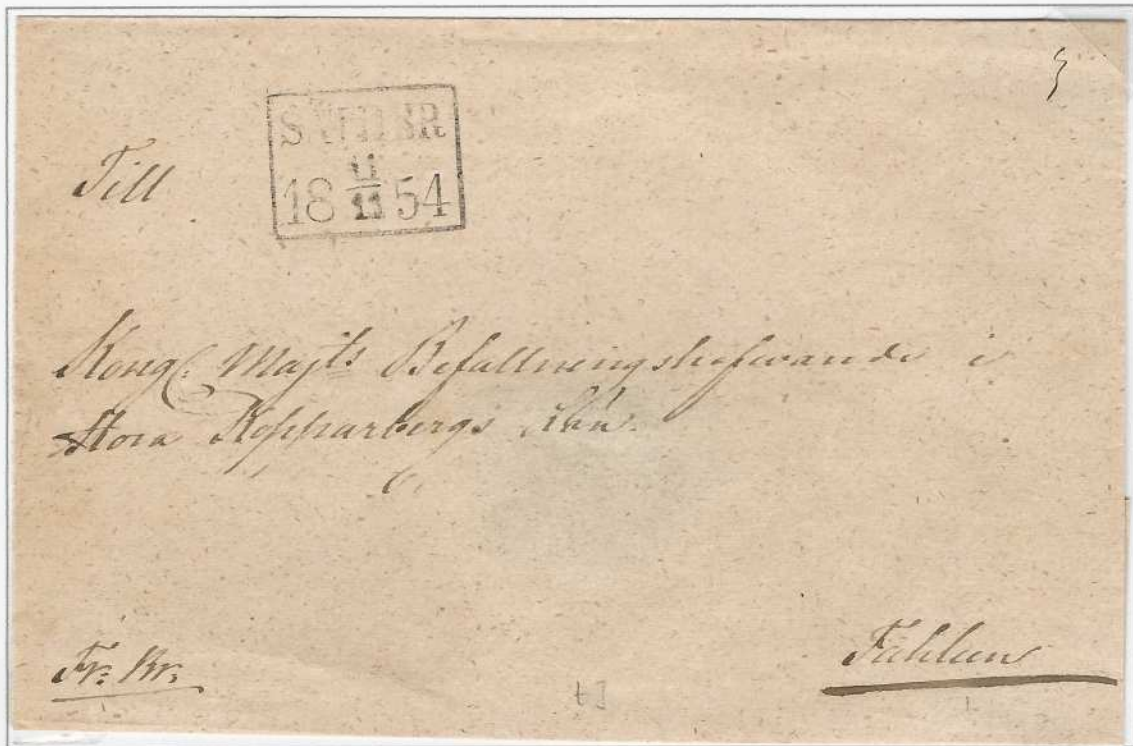



Ship-of-the-line, Vasa's, maiden voyage on 10 August 1628 was a disaster. Top heavy with cannon made of Falun copper, it sank in Stockholm harbour.

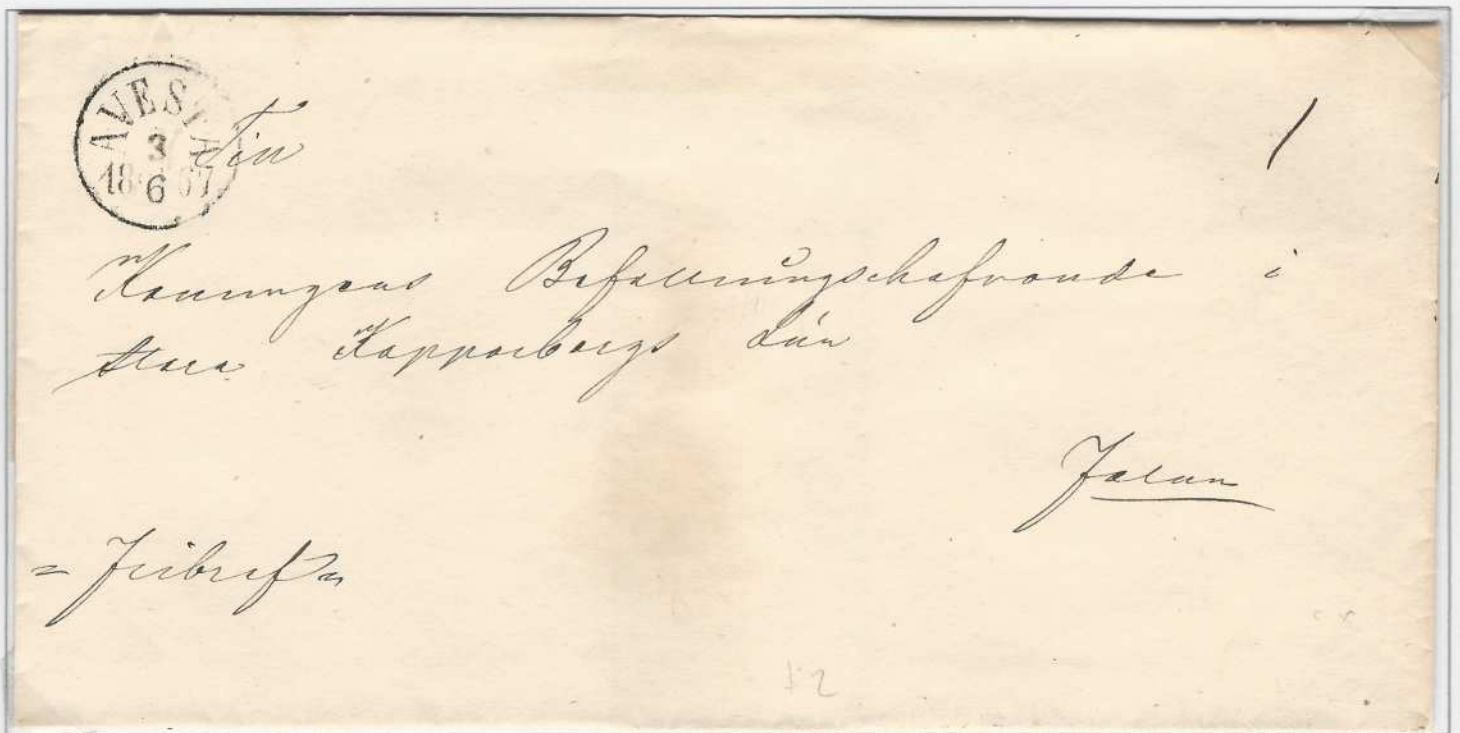
Vasa restoration booklet, 3 Sep 1969. Engraver: Czeslaw Slania, Designer: Jan Magnusson



Sweden teetered on the edge of financial disaster in the 1580s and the 1620-30s. Controls on copper exports saved it and led to it minting coins from Falun copper. The first mint at Säter, 29 km S of Falun, operated from 1619-39. It was water powered. In 1639 the Avesta mint, 58 km SE of Falun, where the river flow was greater was built to replace it.



Säter (above) cover to Stora Kopparberget län in Falun. Boxed postmark (in use 1851-68). Avesta (below), cover to Stora Kopparberget län. Circular postmark (in use 1860-1882).  Manuscript numbers, top right of covers, indicate the sequential number of letters posted from the offices the day postmarked. Both covers benefitted from free postage, manuscript **Fr. Br.** and **Fribrif** respectively.



2 HISTORY

2.3 The Midsummer 1687 mine collapse

Midsummer 1687 would have seen revellry in the streets and taverns of Falun from 24-26 June as the holiday comprised Midsummer, St John's Day and a Sunday. At 4 pm on the 25th there was a large collapse. Fortune shone on the miners, as nobody was working, and the mine owners, as a very rich ore vein was exposed.



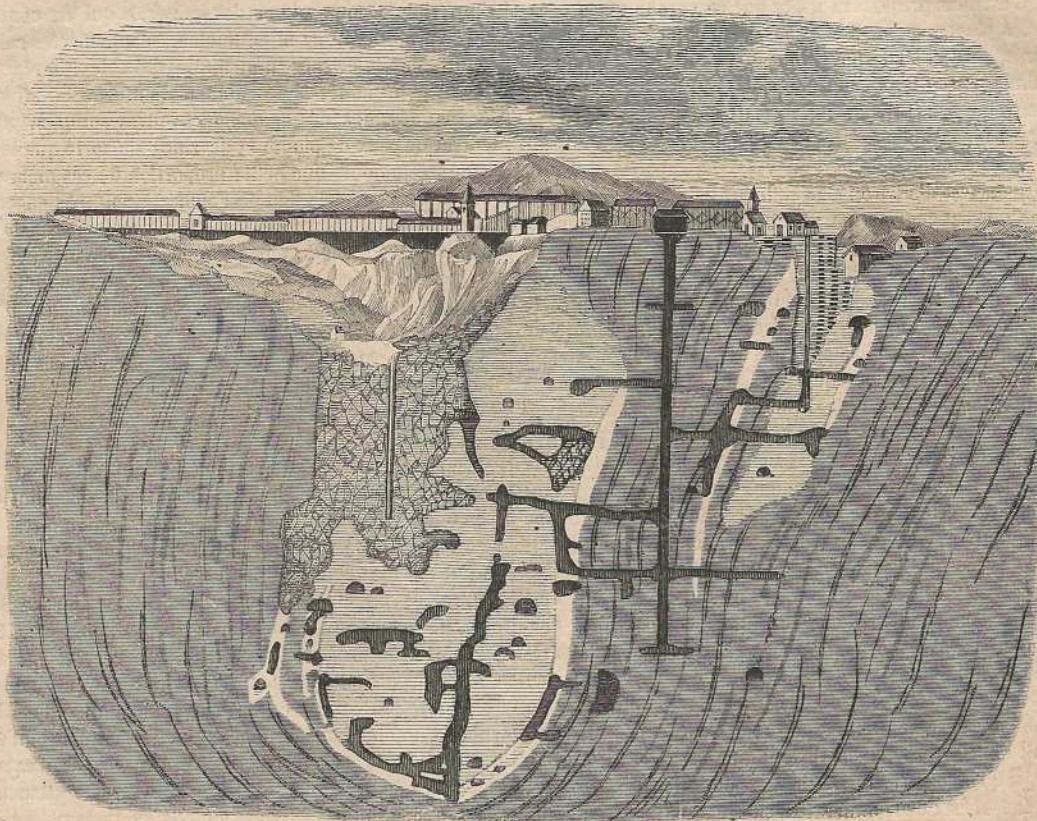
Midsummer and St John's Day Celebrations




The collapsed mine became a tourist site, *and still is*, but did little to stimulate improvements in mine safety.

596

MAGASIN PITTORESQUE.



Coupe d'une mine près de Falun.

 Cross section of Falun mine, showing the cave in and major shafts and tunnels. *Magasin Pittoresque*, 1849. This popular encyclopaedic magazine was published in Paris from 1833 to 1938. Compare the mine buildings to those on the stamp above.

King Johan III appointed the first surgeons in Sweden at Falun mine and the country's first emergency hospital was opened at the mine in 1695. The mine financially supported widows - a forerunner of Sweden's state welfare system.

When Carl Linnaeus visited Falun in 1734 he observed that "Not even lichen or moss grows on stones" due to air pollution from the smelters. In 1737 the French Academy of Sciences linked smelter fumes to lung disease in Falun.

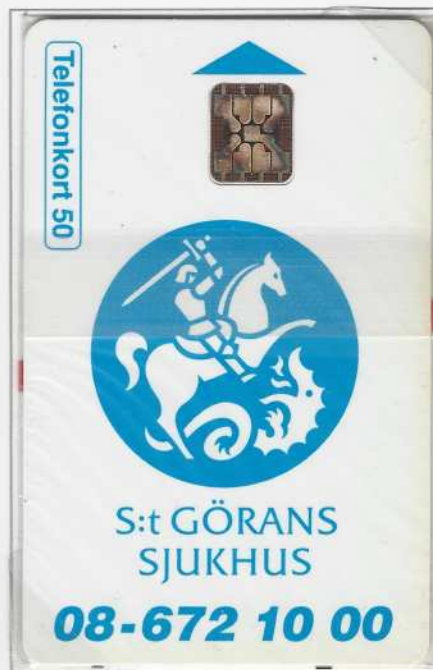


Pre-stamped Lettre Verte with Pitney-Bowes/Secap Prefix MM meter. The Lettre Verte scheme – introduced in 2011 – aims to reduce the carbon footprint of French domestic mail.



Trial colour proof

Mine widows often opened inns, and alcohol abuse became rife. The mining company began to control alcohol sales – a forerunner of the Swedish state's alcohol monopoly.



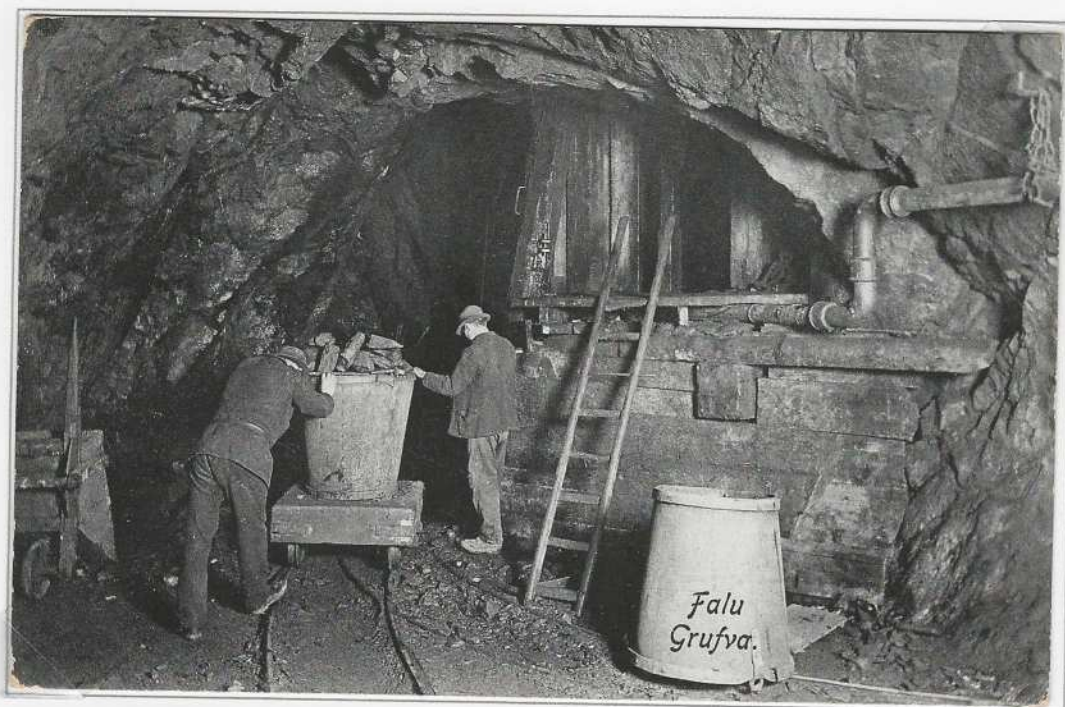
50 kr phonecard for St. Goran's Skjuhus Hospital in Stockholm, which became Sweden's first private emergency hospital in 1999 (304 years after the first emergency hospital opened in Falun).



Even after the collapse, safety was not a priority. Deaths and injuries peaked at >70 in 1705-10, mainly due to gunpowder and dynamite use, and silicosis. Equipment amounted to felt hats and naked flame lights; as in other European mines.



Things had improved little by the early 20th Century. Helmets, electric lamps and pneumatic drills were not introduced until the 1940s.



Early 20th Century postcard (unused) showing mining operations at the mine. Equipment had not improved significantly: felt hats, wooden machinery and no modern mechanisation. Note alternative spelling of mine - Grufva. Publisher: Zander & Sagers Bookshop, Falun.

Kongl. Maj:ts och Rikets
Kamar- och Bergs- Collegiers
A n n o u n d e l s e,

Angående

Förbud emot bruk och nyttjande af Betsman
eller Pyndare wid Bergsmans-hyttor.


Gifwen Stockholm den 15 Oktober 1801.



Cum Gratia & Privilegio S:æ R:æ Maj:stis.

SEIDERSÖLM, Tryckt i Kongl. Tryckeriet.

Seventy

◆  Proclamation from the Kammarkollegiet (the government department overseeing mining) 15 Oct 1801, prohibiting the use of uncalibrated beam scales (Betsman and Pyndare) in mines and foundries. A fine of 3 and 1/3 riksdalers and confiscation of the ore or metal was levied on uncalibrated scales.

3 BEYOND MINING

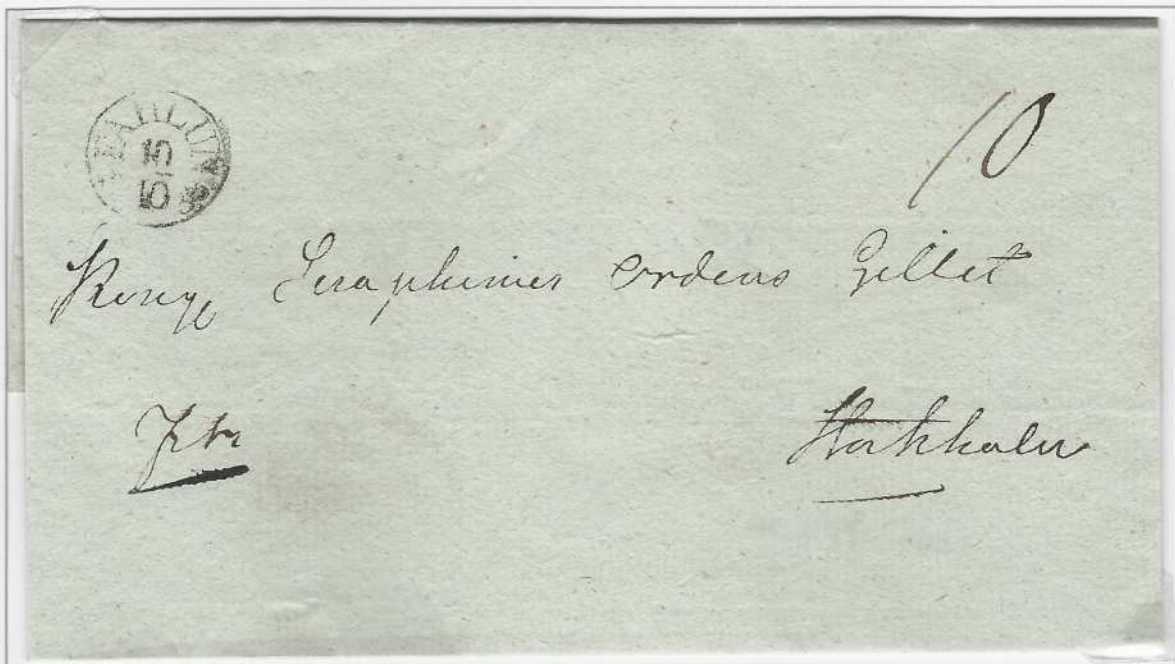
3.1 The world's oldest joint stock company

A share certificate from the mine in the name of the Bishop of Västerås dated 1288 makes the mining company - *Stora Kopparberget* - the world's oldest joint stock company.



Västerås local, 1945-47, showing city's cathedral. Local Post period II coincided with the end of the Swedish Post Office's monopoly on printed matter mail.

Stora Kopparberget (or Great Copper Mountain) dominated the national economy and was the *de facto* administration in *Kopparbergs län* from 1647, which changed to Dalarna in 1997.



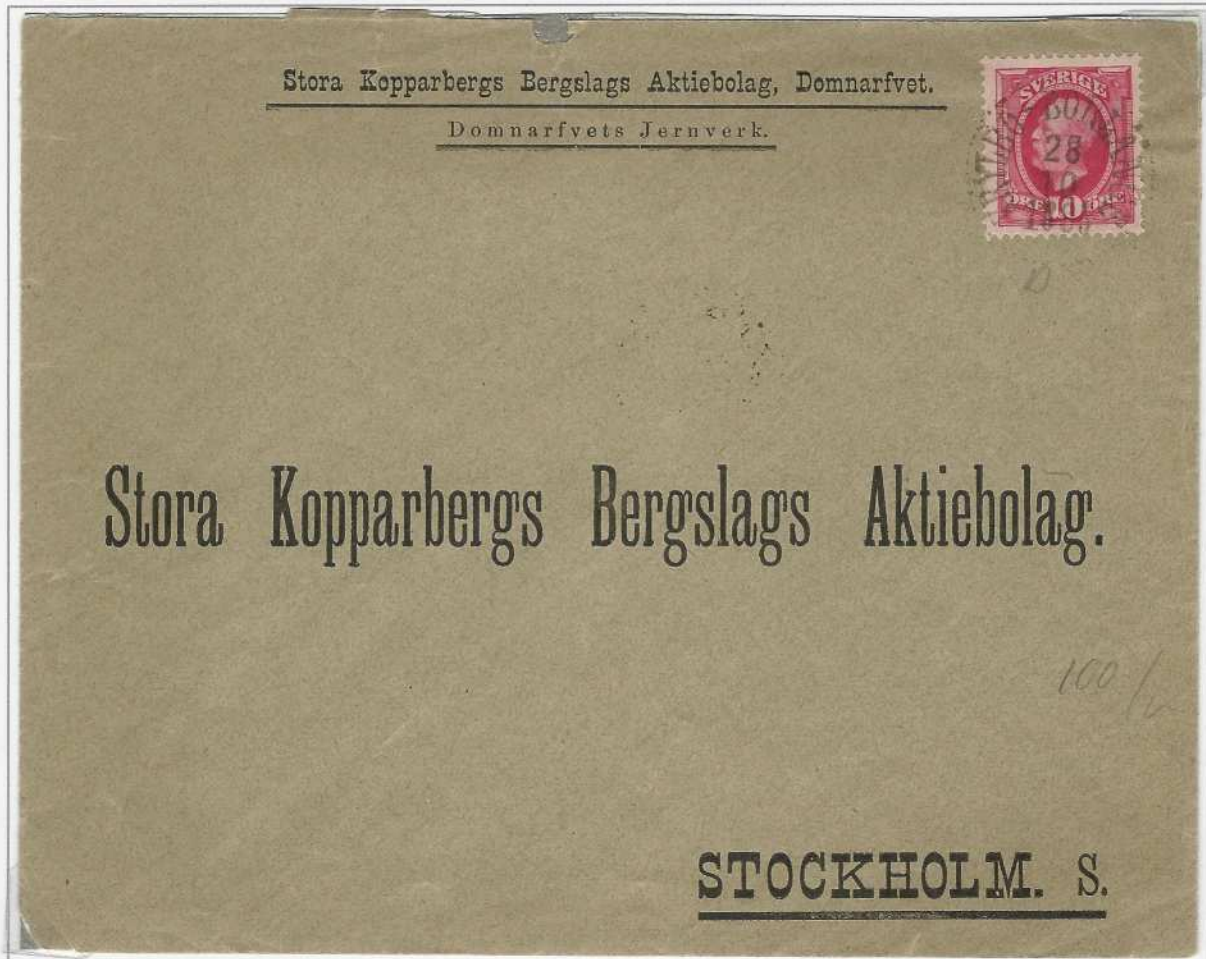
◆ Falun to Stockholm 10 Oct 1838. Manuscript *Fri*, lower left, indicates free postage. Wrapper closed with *Stora Kopparberget län* seal which includes the ♀ symbol. Free postage privileges apply because is a local government cover and, maybe, because it was addressed to the Royal Order of Seraphim, Sweden's highest order of chivalry.

In 1998 it merged to form *Stora ENSO* - one of the world's largest forestry and paper companies operating in Europe and China. Copper is no longer on its balance sheet!

As copper reserves were exhausted, gold was mined

Red paint, manufactured from ore impurities, is used widely in Sweden.





Inter-office cover, from Krylbo Borlage (Domnarfvets Jernverk, the iron-making arm of the company) to Stockholm 28 Oct 1910. 10 öre stamp correctly paying the national letter rate.

Stora Kopparbergs Bergslags A. B.
 Gegr. im 13. Jahrh. **Falun** (Schweden)
 Filialen in **Hamburg, London** und **Paris**
 Erzeugung von jährlich ca. 55 000 Tons
ZELLSTOFF
Sulfit, prima fest ungebleicht
Sulfat, bleichfähig sowie helle
 und dunkle Kraft

Niederlassung für Deutschland:
Stora Kopparbergs Bergslag G. m. b. H.
Hamburg I.

◆ Early 20th Century German Trade Directory advertisement for sulphate and sulphite sales through Hamburg, indicating the

The city uses the copper symbol ♀ to promote tourism, mirroring its use of the city's coat of arms.



Postcard with commemorative postmark for the city's tercentenary. The city coat of arms with three ♀ forms part of postmark. 15 öre stamp correctly paying the domestic postcard rate. Printed by Falu Nya Boktr, Artist Dala Fornsal. (below) front 0.75x reduction.



3D Pin for the 1982 Swedish ski game, often held in Falun, with copper symbols



Hotel luggage label (1950s) illustrating the use of the ♀ copper symbol in advertising. Hotel no longer exists, though the building is still in the town centre.

Celebrities have visited the mine since 1924, royalty even longer. Popular tourism began in 1960 and it became a World Heritage site in 2003. Hans Christian Andersen was an early visitor. King Carl XVI Gustaf (1973-) first visited in 1968, and later opened the World Heritage site.



FALU GRUVA

FALU GRUVA | Gruvplatsen 1 | 791 61 Falun | 023-78 20 30
info@falugruva.se | www.falugruva.se




 Mine tour ticket, carried underground to a depth of 210 m by the exhibitor - and creased to prove it! May 2019.

Utgivningsdag: 26 mars 2004.

Frimärksförlagorna är målade av Jordi Arkö. De visar: 1/ Stora Stöten och Creutz läve. 2/ Husbergs pivå, Svedens bergsmansgård och Kopparvägen. 3/ Anfarten, entrébyggnaden till besöksgruvan. 4/ Hus i gruvarbetarnas stadsdel Elsborg med två gruvarbetare i förgrunden och två av stadens celebriteter, Axel Fridell och Ernst Rolf, i bakgrunden.

Typografi: Gustav Malmfors.

Häftesomslag: Adolf Fredriks läve, målning av Jordi Arkö. Layout: Olof Baldursdottir.

Tryckt hos: ©2004, Posten Frimärken, Stockholm.

Artikelnummer: 240890

Booklet issued to commemorate inclusion on World Heritage Register. Issued 26 Mar 2004, Designers: Gustav Malmfors and Olof Baldursdottir, designs based on paintings

Falun copper is found on many important roofs, in fact eight other World Heritage sites have Falun copper roofs including:

Versailles



Roskilde Cathedral



Drottningholm Palace

