



# Saxon Mining Collectibles

Wendell Wilson

Saxon mining collectibles of various sorts provide an evocative background to the classic minerals of the Saxon Erzgebirge mining district, and are prized historical display items for many mineral collectors as well as collectors of mining memorabilia and antiques.

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## INTRODUCTION



The Saxon Erzgebirge (“Ore Mountains”) and nearby metal mining districts have a long and illustrious mining history spanning many centuries. During that time the miners and their families developed unique traditions, tools, lighting devices, apparel and folk art which today make interesting and evocative collectibles. These are the same miners who retrieved the many classic mineral specimens, especially silver minerals, for which the former kingdom of Saxony is justly famous—specimens that are highly treasured by mineral collectors and museums today. Saxon mining collectibles make fine display objects that help us form a connection with the miners of old, and thus a deeper appreciation of the mineral specimens that they so carefully preserved.

**Figure 1. Early Saxon mining officials in full regalia.**

Eagerly collected categories of Saxon mining memorabilia include complete miners' uniforms, hats, parade swords, fanny-packs (Tscherpertasche), rear apron (Arschleder), knee-protector (Kniebügel), pedestal-mounted sculpture made of minerals (Handstein), miners' occupational beer steins (Bierkrug), wood, pewter, bronze or porcelain miner statuettes, miniature mining machinery models, and many others. Only the following three categories will be dealt with in this article: the Saxon miner's axe, the frog lamp and the blende lamp.



Figure 2. Title page and frontispiece of Andreas Moller's *Theatrum Freibergense Chronicum* ("History of the Town of Freiberg") (1653).



## THE SAXON MINER'S AXE

For many centuries in Saxony, parades have been held on special occasions in which the miners would march in their best finery, wearing hats characteristic of their rank and mining area, and carrying mine lamps and the special miner's axe called the Bergbarte (plural: Bergbarten)—not to be confused with the Berghäckel or Steigerhäckel, which was more like a walking stick with a much smaller axe-head or hammerhead used as a handle.

Silver mining in the Freiberg area of the Erzgebirge began in 1168, and the Saxon miner's axe was developed sometime thereafter as a distinctive miner's weapon. Unlike rural poor who were born into serfdom, miners were free men allowed to bear arms because the silver mines might need to be defended from invaders and thieves. The sovereign might also require the miners' services in time of war.

**Figure 3. Nineteenth-century postcard photo of a miner in early 17th-century dress. Günter Grundmann collection.**

The Saxon miner's axe was probably derived originally from a Frankish hatchet called a francisca. The Bergbarte had a combination hatchet-like blade and a long pike designed for stabbing like a bayonet—a formidable weapon similar to the halberd. By the mid-16th century these had evolved into a purely ceremonial form carried in miners' parades. The design is definitely derived from a weapon and is unrelated to the simple, utilitarian form of the timberman's axe that was used to cut and trim mine timbers. In contrast to the simple timberman's axe, the miner's Bergbarte typically showed a significant amount of artisanship.



**Figure 4. Saxon mining antiques including two 17th-century Bergbarten (“miners’ axes”), two 18th-century Froschlampen (“frog lamps”), a Freiberger Blende (“Freiberg niche lamp”), and a Tscherpertasche (miner’s fanny pack). Oil painting by the author, of items in his collection.**

It is interesting to note that an electoral order published by the city council of Freiberg on April 9, 1532, banned miners from carrying “mine axes and other deadly weapons” on holidays. Apparently these weapons were typically carried on the street as proudly as a Spaniard or a Frenchman might carry his sword. Andreas Möller, in his *Theatrum Freibergense Chronicum* (“History of the Town of Freiberg”) (1653), reported that: “In the year 1557, On December 16, the newly elected King of Denmark Fridericus II came to visit Freiberg with his brothers and cousins. The whole citizenry was summoned and the council members and mining officials gathered in great numbers, dressed in their garb, with their mine axes in hand, to welcome the dignitaries.” An edict of 1693 dictating the proper parade wear stated that “Miners shall be in their miner’s garb and bear no other weapon than the axe.”

Who made these weapons? The craftsmen responsible no doubt lived in the mining towns and villages of the Erzgebirge; they were probably members of the mining guild, miners or invalids; even today retired miners sometimes earn extra income as wood carvers and amateur craftsmen. Naturally, blacksmiths, weapons makers and cutlers must have contributed in the production and decoration of blades.

It can be deduced from the years inscribed on some of the axes that many were specially made for parades held for visiting royalty and for festivities in the electoral family. On these special occasions it was appropriate to obtain a beautiful new parade axe to carry in the parade. Such showpieces became heirlooms that were the pride of the miners’ families for generations thereafter in Johanngeorgen- stadt, Schneeberg, Annaberg and Freiberg. The axe embodied their

pride of rank and their pride in being part of the miner’s profession. Some axes have been handed down for many centuries in the same family. Little wonder that the owners of these beautiful antiques are reluctant to part with them even today, despite tempting offers from museums, collectors and dealers.

All Bergbarten, regardless of the mining district of origin, have a consistent basic form. The strong handle is a bit thicker toward the lower end and is either oval or circular in cross-section. The front edge of the axe-shaped blade extends upward in a spike, the point of which is usually crowned with an acorn-like protector (probably for safety). The blade is typically wrought iron, although axes from tin-mining districts are often made of tin, and a very few axes were made of brass.



**Figure 5. Saxon miner’s axes on display in the Deutsches Museum in Munich: three Bergbarten and two examples of the walking- stick-style Berghäckel. Wendell Wilson photo.**

Generally the upper edge as well as the lower posterior edge has three (rarely four or five) small circular holes and a larger, usually clover-shaped (very rarely cross-shaped or key-hole shaped) hole cut into the center of the face of the blade. The cloverleaf (“trefoil”) is an ancient Germanic symbol, an emblem of good luck and the blessings of happiness and power to the owner. The blades may also show the hallmark of the forge where the craftsman worked.

**Figure 6. Three 17th-century Saxon miner’s axes, one with an ivory- inlaid wooden handle and two with staghorn handles. Staatliche Kunstsammlungen Dresden collection; Jürgen Karpinski photo.**



The following construction styles are known:

- (1) Simple, undecorated wooden handle with an engraved ivory end-section. Some of these axes have 17th century dates inscribed on them.
  - (2) Wooden handle with carved illustrations but no inlays.
  - (3) Wooden handle inlaid with bone or staghorn. This type (called an Einlagenbarte) was most common in the Freiberg district but was also carried occasionally in other districts of the Erzgebirge such as the Annaberg and Schneeberg districts. The inlays are usually engraved scrimshaw-style with various scenes and designs. Numerous smaller circular inlays surrounding larger inlays can give a polka-dotted appearance. The wood used was usually oak, plum, ash or beech that was stained brown. In rarer cases, axes (called Zainbarten) carry additional ornamentation made from brass wire inlays.
  - (4) Bone or staghorn handle, assembled from closely fitted sections held together by an iron rod core. This style is called a Röhrenbarte, and is generally decorated liberally with scrimshaw- like engravings.
  - (5) The grand axes (Prunkbarten) carried by the highest-ranking mining officials. The handles of these axes may include elaborately engraved gold-plated inlays, and the blades (some in solid
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silver or gold-plated silver) often feature enameled illustrations of the Electoral or Royal Polish crest. The axe that was part of the Elector of Saxony's own parade outfit was studded with jewels from one end to the other.



**Figure 7. Fifteenth-century Freiberg miner's ceramic oil lamp (Tonschalenlampe) with thumb-hole for carrying. The invention of a bail and hook connected through the thumb-hole resulted in the frog lamp design. Stadt- und Bergbaumuseum Freiberg collection; W. Rabich photo.**

Most axes are richly decorated with pictorial illustrations. Mostly human figures and animals are pictured, rather crudely drawn but with the charm of folk art lacking any scholarly pretensions. The most popular illustrations include the electoral crest (usually at the end of the handle), the crossed hammer and chisel miner's symbol, Electoral Princes on horseback, portraits of Electoral Princes, mining officers, elders of miner's unions, miners at work with hammer and chisel (drilling, hauling, ascending and descending), dowsers and mining musicians.

Religious illustrations are also common, including God the Father, Christ, angels, evangelists, prophets, etc. But also entire groups or scenes were depicted: e.g., Nativity, Adam and Eve with the snake (the Fall of Man) and others. Tobacco-smoking miners with pipes similar to Dutch clay pipes are depicted on an axe dated 1690. Flowers, especially stylized tulips, were very popular. Some axe handles are decorated with bible verses, lyric verses, and miner's sayings. Above all, the handle of every complete axe—and this an essential component for proper style—must display a crucifix at the neck. Praying miners and often angels—in the form of the well-known wood carved, crowned Erzgebirgian Christmas angels—must kneel before the crucifix.

As the Saxon miner's axes have become more coveted by museums, collectors and dealers of antiques, the prices have reached considerable heights. Unfortunately fake or reproduction mining axes also exist and may be sold as originals. So it is wise to work with a knowledgeable dealer. Borchers (1912) commented on the prevalence and quality of such fakes being circulated over 100 years ago:

Unfortunately, objects of the venerable Erzgebirgian mining art, which are right now, at the time of the decline of the Erzgebirgian mining industry, in high demand from museums and collectors, are being faked in profit-seeking schemes and sold to collectors. Especially mining axes (Bergbarten) are among those faked objects. The imitations, however, are not well executed. In most cases, fresh and often still fatty cattle bones are used instead of staghorn as in most authentic old axes. The illustrations of mining, machines and tools on these imitations is

often completely wrong. Even if the engravings of the craftsmen who produced the authentic old axes are simple and naïve, they are technically correct down to the smallest detail.

### SAXON FROG LAMPS

Frog lamps (Froschlampen) are miners' oil lamps with a half-bail, hook and shield; the earliest examples date back to the mid-16th century. They evolved—possibly in the Annaberg area of Saxony, where the earliest known example is dated 1529—from ceramic open-pan lamps having a hole for the miner's thumb. The innovation was to attach a metal half-bail through the thumbhole and a hook from which the lamp could be hung. Almost from the start it appears that the half-bail carried a triangular shield at the top. The hook had a characteristic shape with an up-turned point that might be driven into a mine timber. It is secured into the top of the half-bail by an acorn-shaped button. A small shovel or scoop (Molle or Dochtbleche) was usually attached by a chain, and used for moving around the thick tallow fuel (Unchlitt) so as to keep the wick fed.



**Figure 8. Copper frog lamp dated 1746 on the shield. Stadt- und Bergbaumuseum Freiberg collection; W. Rabich photo.**



The term “frog” lamp is probably an allusion to the squat, rounded shape of the original oil pans, but the toad in German folklore was a symbolic guardian of treasures and a metaphor for alertness, so there may have been a double meaning.

**Figure 9. Copper and brass frog lamp with elaborate engraving and sculpted shield dated 1677. Stadt- und Bergbaumuseum Freiberg collection; Helmut Fiege photo.**

The most common form of the shield on early Saxon frog lamps is more or less triangular. Beginning around 1610, the shield was topped by three crosses symbolizing the Holy Trinity. Medieval miners were highly religious, and probably figured they could use every bit of divine protection that could be conjured. In some cases the oil pan carried religious inscriptions or incantations. A 1594 example in the Kreismuseum in Zwickau, Saxony carried the inscription (in German) “The blood of Jesus Christ the son of God cleanses us of all our sins.” An example in the Freiberg Mining Museum, dated 1643, carries a similar inscription on the oil pan and a crude crucifix engraved on the shield with the letters “INRI” (an abbreviation for Iesus Nazarenus Rex Iudaeorum). Another fine example in the Freiberg Mining Academy carries a crucifix on the shield and also on the oil shovel. The engraving on the pan indicates that the lamp was presented to Balzer Rösler on New Year’s Day of 1643 by Severin Adeler.



**Figure 10. Brass frog lamp with elaborately engraved shovel and sculpted shield dated 1679. Deutsche Bergbau-Museum Bochum collection; Helmut Fiege photo.**

Frog lamps from the Harz region had a shield with a scalloped top edge rather than three crosses.

The crossed hammers symbol (Schlägel und Eisen) of the mining profession is also a common marking on the shields, as are a pattern of four holes. In some cases the shield itself carries an engraved date and perhaps a further inscription. An example in the Bochum Mining Museum is engraved “Ge Chr L Schell Ernst August Stol- len 1864,” commemorating the completion of the Ernst August water-drainage tunnel in the Harz Mountains on June 22, 1864; the other letters are an abbreviation for the name of the recipient, Georg Christian Ludwig Schell, a contract miner from Zellerfeld who had been involved in the construction of the tunnel.

The open-pan frog lamp was often used as a ceremonial object carried in parades long after such lamps were replaced by more modern forms of lighting. Ordinary frog lamps were typically made from iron, sometimes with a brass plate riveted to the shield as a space for engraving. Parade frogs and presentation frogs, on the other hand, are typically made of brass or bronze, and rare examples are known in copper or copper and brass. One extraordinary example was part of a complete miner’s parade costume presented to the Saxon Elector Johann Georg II by the City Council of Freiberg in 1677. It is made of gilded silver from St. Daniel’s mine at Schneeberg, and is encrusted with polished garnet, rock crystal, opal, amethyst and smoky quartz gems, all found in Saxony. The costume (including a similarly lavish Bergbarte) was the work of a famous Freiberg goldsmith named Samuel Klemm the Younger, and is preserved today in the “Green Vault” collection in Dresden.





**Figure 11.** Jewel-encrusted gilded silver frog lamp made for Saxon Elector Johann Georg II in 1675–1677 by the Freiberg silversmith Samuel Klemm. Staatliche Kunstsammlungen Dresden, Grünes Gewölbe collection; Jürgen Karpinski photo.



**Figure 12.** Early brass frog lamp dated 1607. Stadt- und Bergbaumuseum Freiberg collection; Helmut Fiege photo.

Possibly in response to the use of a thinner mineral oil for fuel instead of tallow, the open pan was enclosed in the 1860s to prevent the fuel from sloshing out. An opening with a slide lock was left for the wick to emerge from the oil pan, and instead of a Molle a tweezers on a chain was supplied for pulling up the wick. However, by this time the Freiburger Blende was already coming into use, and consequently the closed-pan Saxon frog lamps are comparatively rare, except for parade frogs.

Frog lamps for use in the mine were eventually replaced by the brighter carbide lamps in the early 20th century, and there is even a rare hybrid frog lamp designed to operate on carbide instead of oil, for those miners who just couldn't give up their frogs. Its rarity today attests to its failure to gain popularity.

Note: It is the shield that characterizes an oil lamp as a miner's frog lamp. Without the shield it is instead merely a "Betty lamp," of lighter construction and intended for household use.

## THE FREIBERGER BLENDE



**Figure 13. Freiburger Blende, late 19th-century, with spherical "coo-coo lamp" inside. Staatliche Kunstsammlungen Dresden, Grünes Gewölbe collection; Jürgen Karpinski photo.**

Open-flame frog lamps were used for centuries in Saxony, but they had two major disadvantages: dripping water or high winds underground could extinguish them. Apparently these disadvantages were particularly acute in the mines of the Freiberg district, because it was there in the mid-18th century that an alternative was invented: a linden-wood box, lined with polished brass and open on one side, holding an oil lamp or candle protected both from falling water and

wind. If conditions were particularly windy, a glass or muscovite window could be inserted to cover the open side, while ventilation holes admitted just enough air flow to provide oxygen for the flame. This kind of lamp is called a Freiburger Blende. The German word Blende refers (among other meanings) to a blind niche in a wall; thus the Freiburger Blende is like a wall niche that you can carry with you. Of course the Freiberg miners themselves referred to it simply as a Blende.



The Freiberger Blende, first described in a 1743 glossary of mining terms (Johann Caspar Zeisig's *Mineral und Bergwerks Lexicon*), had other advantages as well: If the working face in the mine was relatively wind and water-free, the small, spherical oil lamp, called a cuckoo (Kuckuck) lamp, could be removed from the Blende and set up on a rock, secured with a piece of clay, thereby providing all-around lighting like the frog lamp. The Freiberger Blende was provided with a fixed, well-made wrought-iron (or rarely copper) hook on the back, so it could be hooked into the miner's vest or collar strap and worn on the chest, on his belt, or hooked onto the front of an ore car like a headlight. Such practices would be dangerous with an open frog lamp swinging around on its hook chain.

**Figure 14.** Freiberger Blende, late 19th- century, with spherical “coo-coo lamp” and separate socket for a candle. Staatliche Kunstsammlungen Dresden, Grünes Gewölbe collection; Jürgen Karpinski photo.

Freiberger Blenden existed in a number of different variations. Some had no sliding front window and thus no need for ventilation holes; these were the earlier models and sometimes fetch a premium on the collector market. In practice, the front window was rarely used anyway. Some were lined with sheet tin instead of brass; originally only mine supervisory personnel were allowed to use brass-lined lamps as a sign of high rank, while the lamps of the common miner were lined with tin-plated steel. Eventually, though, brass lining became standard for all Blenden. Some lamps (probably the most recent) were constructed entirely of sheet metal. Sizes ranged from around 15 cm (children's and visitors' models) to around 27 cm in height. Ordinary miners generally used the cuckoo oil lamp in their Blende, whereas the mine surveyors (Markscheider) usually used a candle; consequently some Blenden have both a socket for a candle and a stub for mounting a cuckoo lamp.

Some examples have been referred to specifically as Annaberger Blenden and Schneeberger Blenden, as well as Freiberg Blenden. Slight differences in construction—particularly regarding the design of the upper part of the sliding window—for each Saxon mining town may have been typical. However, it is still unclear whether Blenden from all nine early Saxon mining districts (Altenberg, Annaberg, Scheibenberg, Freiberg, Johanngeorgenstadt, Marienberg, Geyer, Ehrenfriedersdorf and Schneeberg) had any consistent and identifiable differences in design. Freitaler Blenden, however, were characterized by a hinged front window. The practical virtues

of the Freiburger Blende eventually became widely recognized, and its use spread beyond the Freiberg region to other mining regions in Germany and Central Europe.

Freiberger Blendes are eagerly sought after today by collectors of mining lamps and artifacts. Modern replicas of the Freiburger Blende are still made in the Erzgebirge for use in miners' parades, but they have little collector value and bear little resemblance to originals in their construction techniques and materials. Outright fakes are also known, and should be rejected. Every little wormhole and nick indicative of actual use is valuable testimony to authenticity. Old brass sheet metal commonly develops cracks with age which, if present, are a good indicator of authenticity. An accumulation of dust and dirt in the vertical slots for the sliding window is also a good sign. And the hook on the back should be affixed with rivets rather than screws. Miners carefully cleaned the brass lining each day, lest the reflectivity be diminished, but black tarnish in the cracks and around nail heads shows age.

## OTHER SAXON MINING COLLECTIBLES

Virtually everything that the early Saxon miners used, wore or made had significance and is therefore collectible. Following is a partial list of some of the other types of collectible Saxon mining memorabilia, antiques, artifacts and folk art.

Ore cars

Miners' paintings

Saint Barbara cult items

Photographs, engravings and prints of mining scenes

Mining scene postcards

Mining scene stereo-cards

Miners' sculptures, carvings and statuettes

Miners' dioramas (Handstein, Guckkästen, Buckelbergwerke, Geduldsflaschen, etc.)

Miners' machinery models

Miners' surveying instruments

Mine scales and assaying equipment

Miners' uniforms

    Working uniform (Bergarbeiterjacke, Bergkittel, etc.)

    Parade uniform (Paradejacke, etc.) Miners' pins, badges, insignia and medals

Miners' beer steins (Bierkrüge) Mining-theme glass and porcelain items

Miners' swords (Bergbausäbel, Bergschwert)

Miners' hats

    Working hats (Berghut or Schachthütte)

    Parade hats with plume (Schachthut mit Federbusch)

Miners' lamps

    Carbide lamps

    Safety lamps

    Candle holders

    Oil torches (Rüböllampen)

Miners' fanny-packs/knife-holders (Tscherpertasche) Miners' utility knives (Tscherper)

Miners' seat-protector (Bergleder, Arschleder) Miners' walking stick (Steigerhäckel)

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