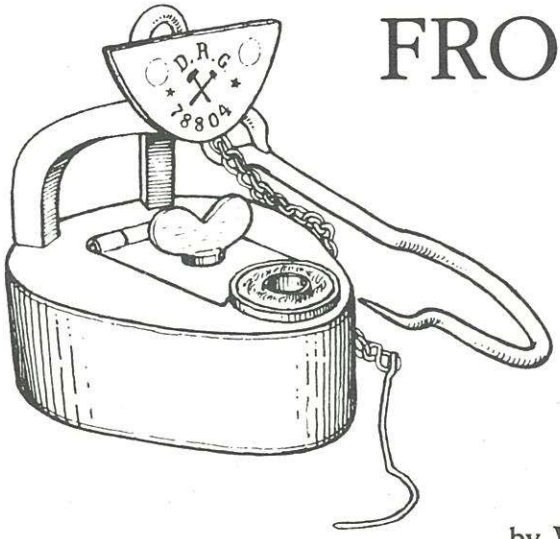
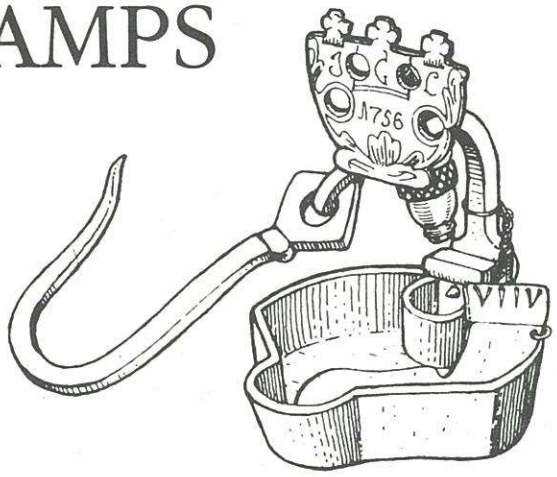


FROG LAMPS

PART I



by **Wendell E. Wilson**
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INTRODUCTION

Frog lamps bear a close relationship to the betty lamp so familiar to American collectors. They have a long and rich history going back to the Middle Ages, and they were imported to America and brought along by immigrant miners. Despite the fact that frog lamps are primarily indigenous to Germany and surrounding countries, they continue to turn up here for the resourceful and lucky American collector. And yet, because they are an artifact of a foreign culture, frog lamps are perhaps the least well understood of all types of mining lamps collected here. It will come as a shock to many mine lamp collectors that there are more different types of frog lamp then there are of carbide cap lamp!

The examples shown here are only those which could be located and documented in a reasonable period of time. Many more are certain to exist in private collections and museums, especially in Germany. Nevertheless, this selection should give a broad and relatively comprehensive view of these fascinating devises.

DEFINITION

Surprisingly, there was no published definition of a frog lamp prior to the publication of my book on the subject in 1981, though the term has long been in use. Below are five criteria for design which, together, serve to define a frog lamp.

(1) **Frog lamps were made to be used by miners.** This is an important point. Some people feel that if a lamp is used by a miner, regardless of what its maker intended it to be used for, it is therefore a "miner's lamp." I disagree. If a captain drives his Chevrolet off a pier that doesn't make it a submarine. The original intent of the maker is what counts.

In a few cases, the maker of a lamp is known, and the historical fact can be established that the lamp was made for a miner's use. In other cases we must decide by inference. Most miners' lamps were made fairly sturdy and strong, to withstand the rigors of that occupation. Sturdy construction is a clue but not proof, as there are some rather flimsy looking examples of frog lamps known.

(2) **Frog lamps have a "miner's hook,"** shaped rather like a fishhook without the barb. There are four or five minor variations on that general shape. Specifically not included is the "halberd hook" which looks like a small harpoon; this hook characterizes household lamps. When present on what is clearly a miner's lamp, the halberd hook precludes the lamp from being called a frog...one can only refer to it as a miner's betty lamp.

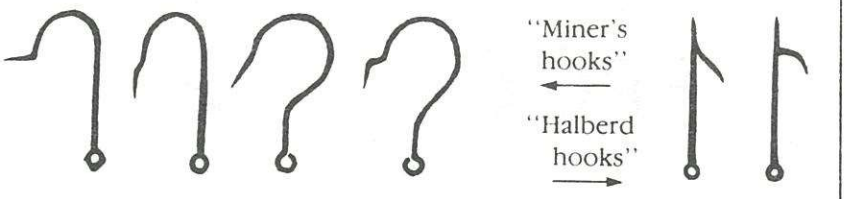


Figure 1. Hook shapes characteristic of miners' frog lamps (left) and household "betty" lamps.

(3) **Frog lamps have a shield.** This is mounted atop the bail (actually a half-bail), near the attachment point for the hook or hook chain. Shields come in a wide variety of shapes, marked and unmarked, brass, iron, or other metals. A little up-turned tab at the end of the bail does not qualify as a shield.

(4) **Frog lamps have a single oil pan** or chamber which is flattened in shape (not as deep as it is wide).

(5) **Frog lamps have a half-bail** connecting the shield and hook to the oil chamber. They do not have trammels or other leveling devices, though the bail may be removeable.

It is the combination of these five features which defines a frog lamp. Other types of lamps may possess one or more, but only the frog has all five.

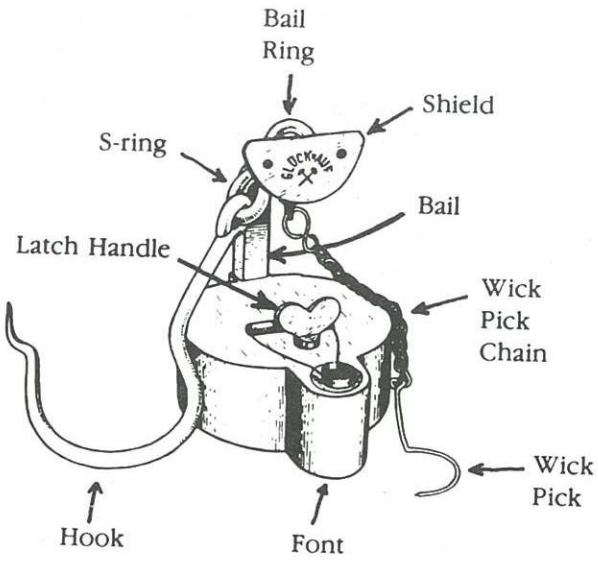


Figure 2. Parts diagram

HISTORY

Frog lamps have been used in the mines of Germany and adjacent countries since the 1500's. They evolved from open clay lamps having no handle or hook, just a thumb-hole as on an artist's pallet.

From the 1500's to the 1700's, frog lamps have burned lard or fat in an open pan. Many were provided with a little shovel (*Molle*) for conveying heat to the fat, to help it flow. Later, oils came into use, and so the font had to be covered to keep the fuel from sloshing out. Frogs made for ceremonial or presentation purposes, however, continued to be make in the traditional open style.

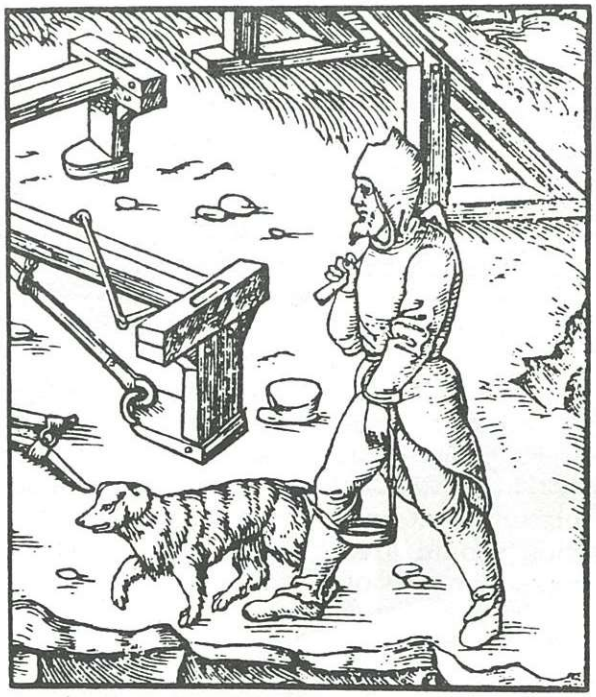


Figure 3. Sixteenth century miner carrying what resembles a frog lamp, although it lacks a shield and curved bail (the artist may have drawn it inaccurately).

Most frogs are constructed of brass or iron, though some extremely rare copper frogs are known. The brass lamps were generally used by supervisory personnel. Lamps given as presentation pieces or made only to be carried in parades were always made of brass.

In the late 1700's the practice arose of attaching a brass cover plate to the shield of an iron frog, either by rivets or solder. The purpose was probably only decorative. It did, however, provide a convenient little expanse of soft metal into which designs or printing could be worked.

A somewhat larger style of frog lamp was popular in the Austro-Hungarian Empire during the 1800's. This region was composed primarily of Austria, Hungary, Bohemia and Romania.

Only about a dozen makers of frog lamps are known by name. Most lamps are unmarked and their makers will probably never be known.

Welding was, of course, unknown during the time that frog lamps were being made. The earliest lamps, the open-pan type, were either cast in pieces (brass) or hand-forged. Later styles, including the Westphalian and Hessen types, were brazed together using brass as the low-melting bonding agent. The sides, top and bottom were made separately as three pieces, then clamped tightly together with a brass wire pressed between them. The assembly was filled with fine sand and heated in a furnace or over a fire until the brass melted and, in effect, soldered the pieces together. The resulting spillage of excess brass on the sides and bottom of frog lamps is a typical feature. Lamps made entirely of brass instead of the more common iron were brazed together with a different brass alloy of lower melting temperature, or with silver.

Karsten Porezag, in his book on miners' lamps (*Des Bergmanns offenes Geleucht, 1980*), provides an interesting discussion on the possible origin of the term "frog" lamp. He suggests that the name may simply refer to a vague similarity in shape to a frog. But more likely the usage stems from the toad as a symbolic guardian of treasures in German folklore, and as a symbol for alertness. It also happens that in Siegerland the lamp is called a *Hoche-Lampe*; *Hoche*, in the local dialect means frog or toad. The more common German word for frog is *Frosch*, and frog lamps are most commonly called *Froschlampen.*

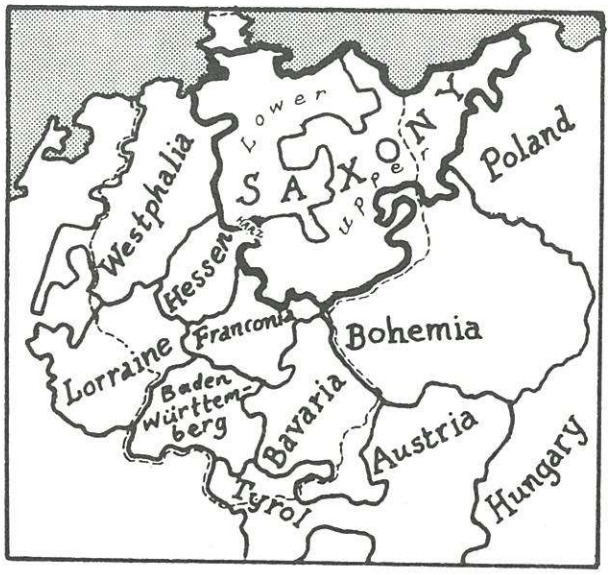


Figure 4. Map showing early geopolitical divisions in Germany and surrounding countries.

REGIONAL TYPES

Only a small proportion of frog lamps are signed. A few others have well established provenance even though unsigned. These form the basis for a regional design classification, allowing the tentative attribution of unsigned lamps to specific regions.

This classification , however, should not be taken too seriously. For one thing, the boundaries of the various kingdoms, duchies, etc. have changed repeatedly over the last 450 years. The town where a lamp was made may have been part of more than one region over the years The main uncertainty, other than boundary changes, is that there is no assurance of rigorous restriction of a design to a region. Many Westphalian-style lamps, for example, may have been made in Hessen, though they were most common in Westphalia.

The illustrations shown here are grouped according to probable region of origin. Within each section, the lamps are arranged approximately in order of age, oldest first, though many lamps cannot be very accurately dated. The regional groupings are: Saxony (depicted in this installment), Wesphalia, Hessen, Austria-Hungary, and Other Regions (all the subject of future installments.)

The frog lamp was developed in the early

1500's in the southern part of Saxony. From there it spread throughout the German Empire and into neighboring countries. The map shows the main geopolitical divisions in 1512 (present-day Germany is shown in dashed lines). The famous Harz Mountains district in Saxony is also shown (pronounced "Harts"). Divisions within Germany remained roughly similar through the 1800's, except for a significant reduction in the size of Saxony, the inclusion of Franconia into Bavaria, and the inclusion of northern Westphalia into Saxony.

SAXON FROGS

Because the frog lamp was invented in Saxony (then a kingdom), the earliest examples are from this region. Most Saxon frogs have a more or less triangular shield exhibiting various modifications. In general, the open-pan type has a triangular shield with three separated crosses at the top, whereas the closed-font type has a truncated lower point and a wavy upper edge without crosses. Many Saxon frogs are attributed to the Harz Mountains mining area. Unlike some other styles, the Saxon-style frog was never imported to America and is hardly ever found here.

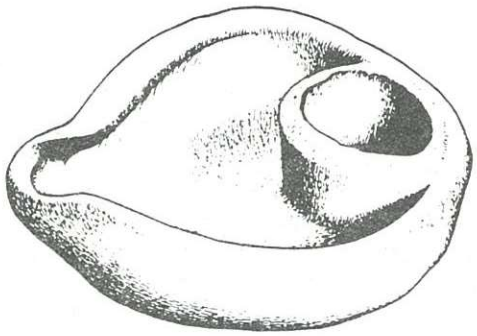


Figure 5. Clay Lamp. Blue-gray ceramic grease lamp used in mines in Germany and surrounding areas until the 16th century. The hole is for the miner's thumb.

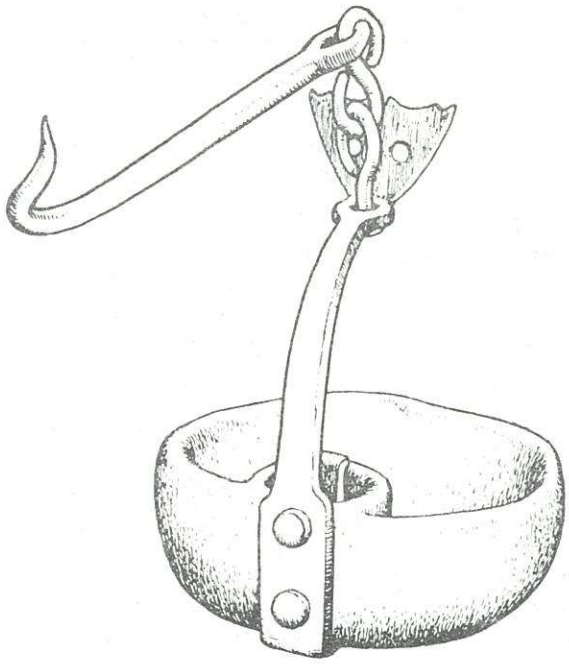


Figure 6. Annaberg Frog. This frog might be likened to a missing link. The font is clay (as in the previous figure), identical examples of which were used in the early 1500's and perhaps earlier, but without the bail. It was carried in the hand, with the thumb placed into the thumb-hole for stability. Subsequently someone got the idea of attaching a metal hanger, and the first frog lamp was born. This example has been dated 1529, and was used around Annaberg, a famous silver mining region. (Collection of the Kreismuseum, Aue)

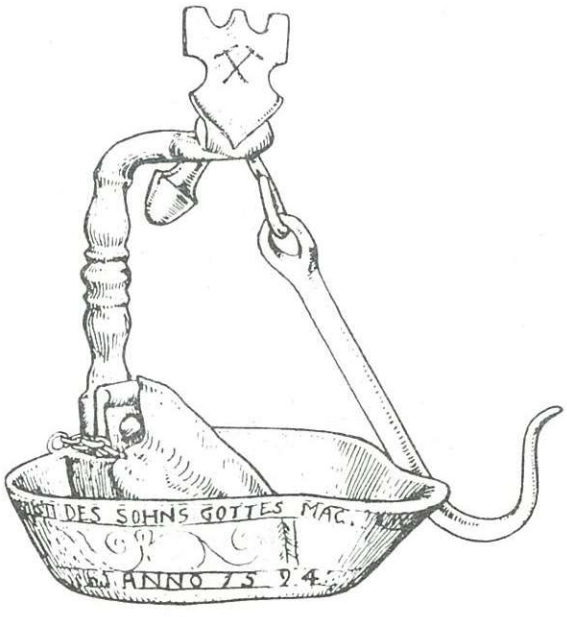


Figure 7. Freiberg Frog. This lamp comes from Frieber, Saxony. It is dated 1594 on the font, which also carries an inscription: "DAS BLUT JHESU CHRISTI DES SOHNES GOTTES MAC(H)T UNS REIN VON ALLEN UNSERN SÜNDEN." Roughly translated, it means: "The blood of Jesus Christ the Son of God cleanses us of all our sins." (Collection Kreismuseum Zwickau)

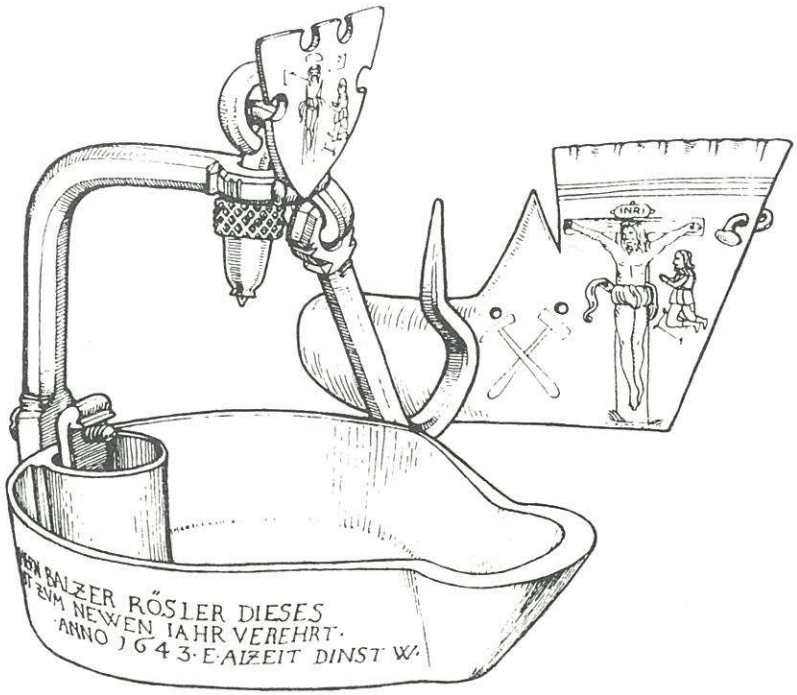


Figure 8. Saxon Frog. The inscription on this cast brass lamp indicates that it was presented to Mr. Balzer Rösler on New Years Day of 1643 by Severin Adeler. The elegant engraving on the shield and on the *Molle* (or *Schaufel*) depicts the owner as supplicant before the Crucifix. (Collection of the Bergakademie Freiberg)

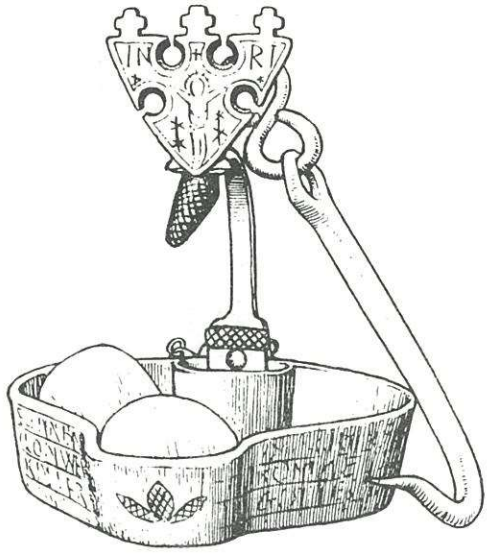


Figure 9. Saxon Frog. This lamp is dated 1643 on the inscription that runs around the font. The shield is surmounted by three crosses representing the Holy Trinity, and has a crudely engraved crucifix accompanied by the letters INRI (meaning "Iesus Nazarenus, Rex Iudaeorum," Latin for Jesus of Nazareth, King of the Jews"). Frog lamps of the 16th and 17th centuries commonly carried religious inscriptions as an aid in protecting the miner. (Collection of the Freiberg Mining Museum)

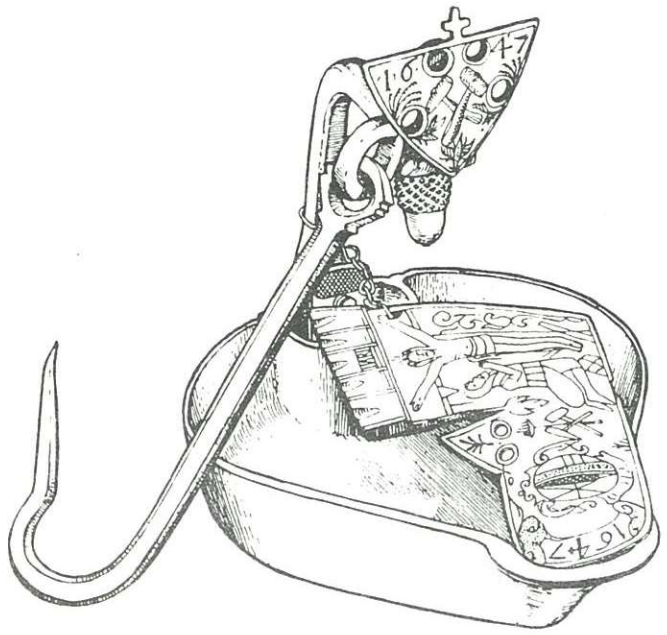


Figure 10. Saxon Frog. This elaborately engraved lamp is dated 1647 on both the shield and the *Schaufel*. The coat of arms on the *Schaufel* is that of Saxony. The shield is somewhat unusual in having only one cross instead of three. The shield is brass; the rest of the lamp is iron. (Collection of the Science Museum of Victoria, Melbourne)

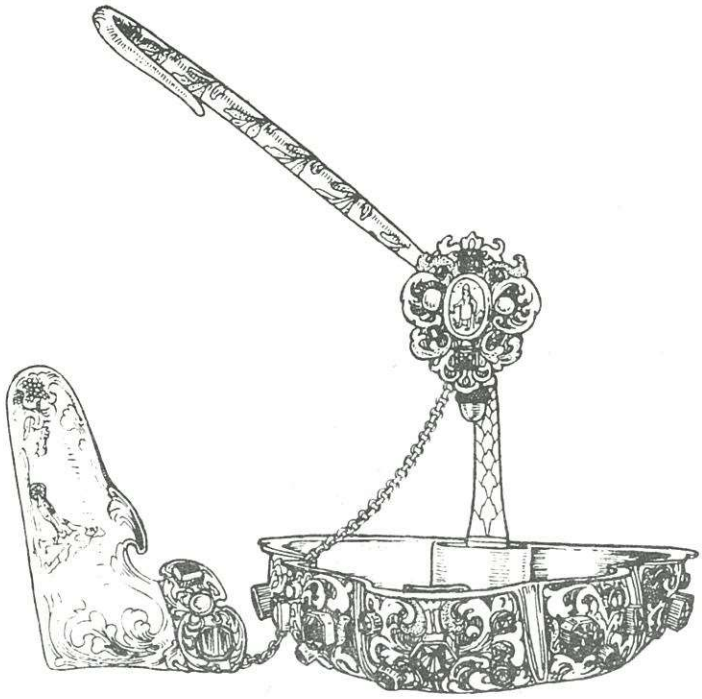


Figure 11. Samuel Klemm Saxon Frog. In 1677 the Council of Freiberg presented to the Saxon Elector Johann Georg II a complete miner's parade costume of the most lavish construction. Included was this remarkable parade frog, made of gilded silver from St. Daniel's mine at Schneeberg, and encrusted with garnets, rock crystal, opal, amethyst and smoky quartz, all gemstones found in Saxony. The lamp, and the rest of the costume, is the work of the famous Freiberg goldsmith Samuel Klemm the Younger. It is today a part of the famous collection in the "Green Vaults" of Dresden. (Staatlich Kunstsammlungen Dresden)

Figure 12. Harz Frog. Open-font frogs of this type were used in the Harz before 1800, when lard instead of oil was the typical fuel. The four holes on the shield are rather common. (Owner unknown)

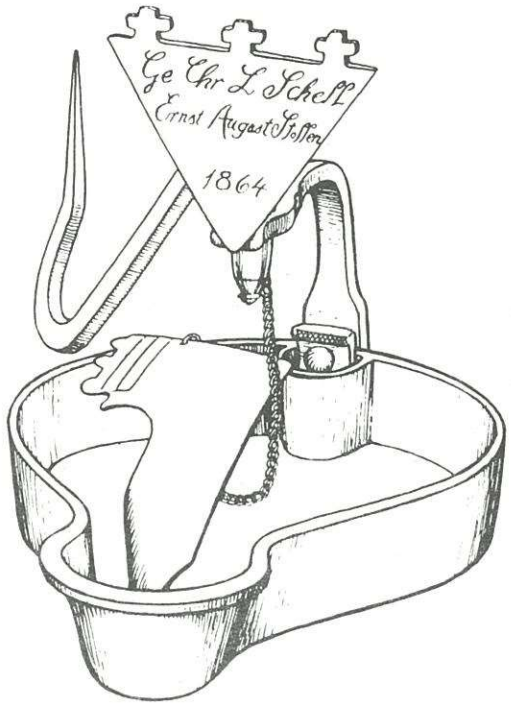
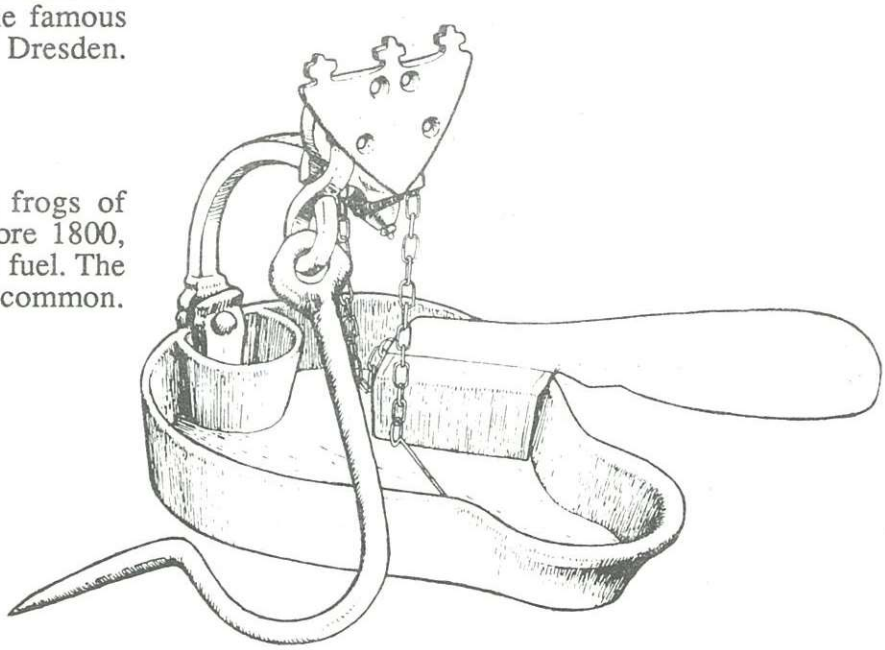


Figure 13. Harz Ernst-August Presentation Frog. This lamp was presented to Georg Christian L. Schell of Zellerfeld upon the completion of the Ernst-August tunnel in 1864. The tunnel, a masterpiece of German engineering and construction, required 30 years to complete. Perhaps as many as 17 of these all-brass presentation frogs were given out to the most important miners involved in the project. (Bochum Mining Museum collection)



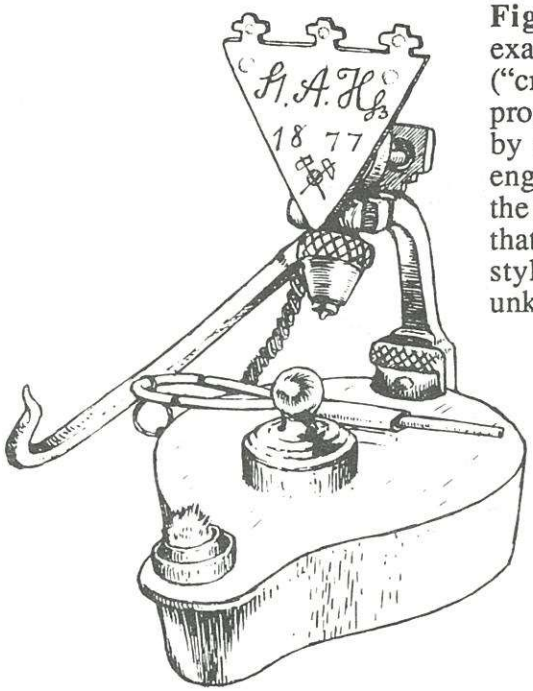


Figure 16. Harz Frog. This rather late example of the Harz frog still has a *Kreuzschild* ("cross shield," in reference to the three crosses; pronounced "kroitsshild"). The shield is covered by a brass plate affixed with six rivets, and is engraved with the owner's initials, the date, and the crossed mallet and gad. Porezag (1980) feels that the shield is of the wrong shape for the font style, and therefore a later addition (Owner unknown)

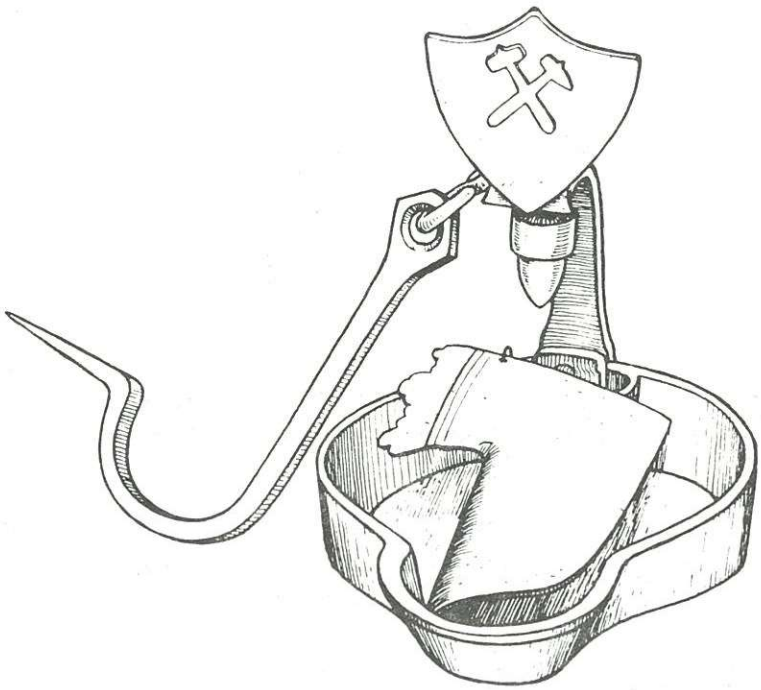
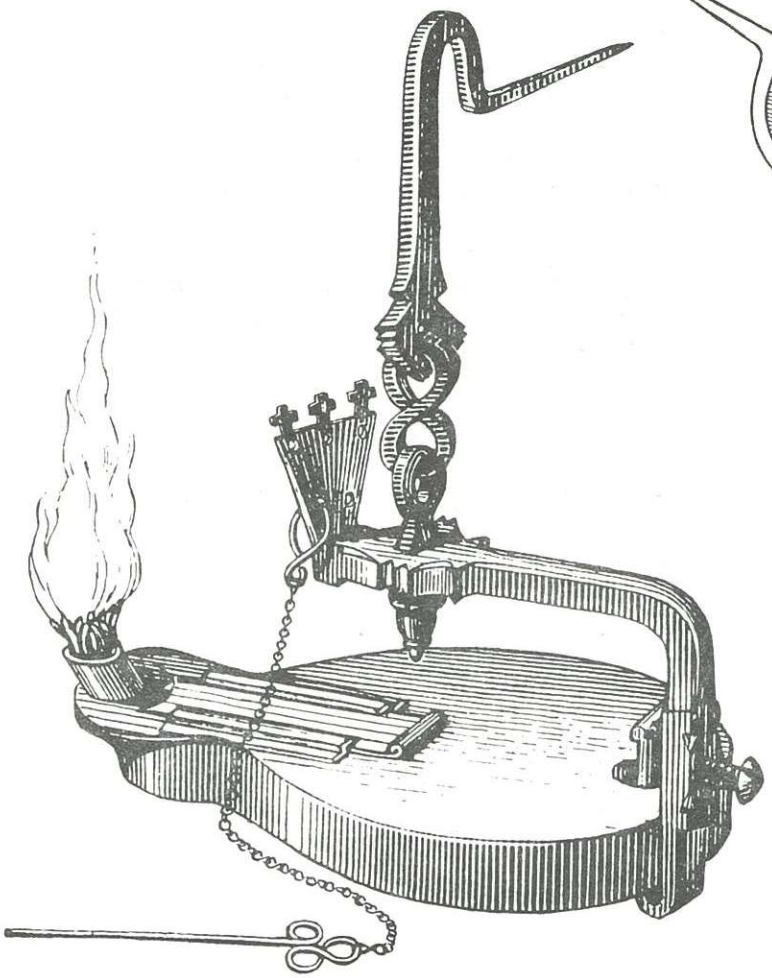


Figure 14. Harz Parade Frog. This all-brass open-topped frog was made to be used only in parades and ceremonial functions. The shape of the hook is characteristically Harz, though the shield deviates somewhat from triangular. Parade frogs were made in the obsolete open style long after the closed-font oil-burning frogs came into use, probably simply out of tradition. (Bochum Mining Museum collection)



← **Figure 15. Harz Frog.** This is an illustration from *La Vie Souterraine* (Life Underground) by Louis Simonin, published in 1865. Actual examples having this exact design are unknown. (Owner unknown)

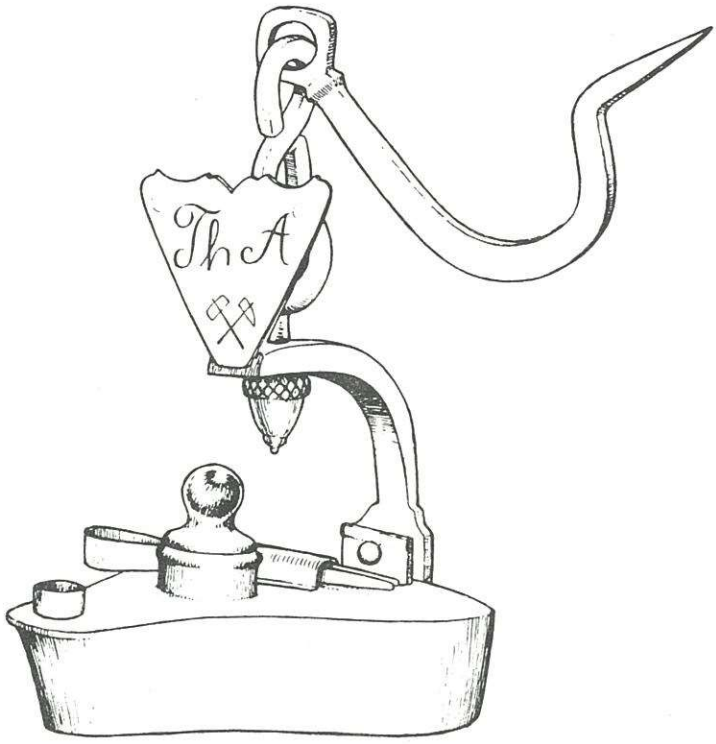


Figure 17. Oberharz Frog. The triangular shield, scalloped across the top, marks closed-font frogs from the Oberharz (Upper Harz) region.

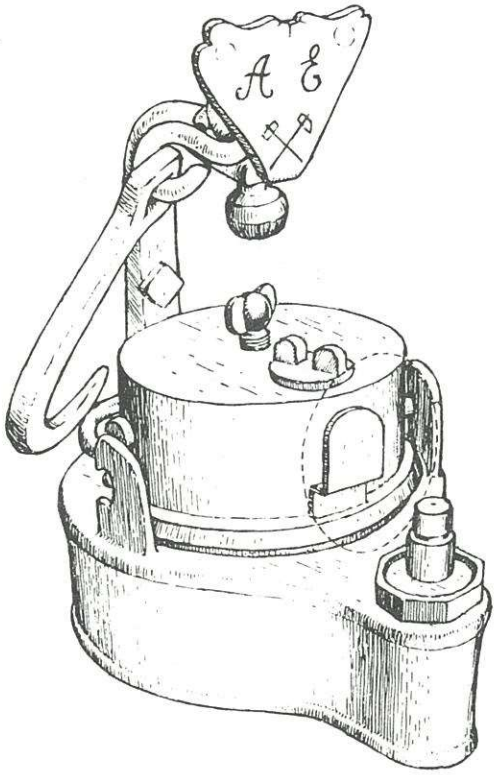


Figure 18. Carbide Frog. Among the most rare frogs is this bizarre item, a frog designed to operate on carbide and water. German patent No. 294759 on this lamp was issued to Albert Pfannenschmidt on 26 October 1906. A reflector (here missing) was hung on the small flat hook behind the burner. Used in the Oberharz (Bochum Mining Museum collection; another example bearing the initials "WW" is in the Hellmuth Kluge collection)

Figure 19. Evolution of the Saxon Shield. The inspiration for the earliest shields on Saxon frogs, which originated near Freiberg, may have been the emblematic eagle (upper left) which was a national symbol. This is only speculation, but the shapes are very similar as seen on frogs dated 1594 and 1598 (upper middle). This shape was stylized somewhat by cutting out the indentations with a drill or circular file, as shown in the example at upper right, dated 1643. Shortly thereafter the tradition arose of adding three crosses atop the shield, representing the Holy Trinity. Two examples of this type (lower left) are dated 1643 and 1675. Unfortunately this resulted in a weakness allowing the center cross to be easily broken off. As a result, the four holes were moved inward on the shield so that they did not intersect the shield edge (lower middle). by this time the holes had lost all design significance, but were retained out of tradition. Finally, in the 1800's (lower right) the holes were eliminated, probably to allow the engraving of a date and initials or other inscription on the shield.