CHARACTERISTICS OF PRUSSIAN LINES HELMET EAGLE OF THE VARIOUS MODELS OF PICKELHAUBEN

Like the pickelhaube as a whole, the helmet eagles were constantly adjusted in order to always make an attractive and elegant appearance on the evolving helmet. This guide should help to assign the different variants of the Prussian line helmet eagles for enlisted men to a pickelhauben model on the basis of its individual characteristics.

First of all, however, I would like to thank one more time my friend Tony Schnurr from kaisersbunker.com, who once again helped me out with a lot of photos.

M1842/43/57

The line helmet eagle of the helmet M1842, M1843 and the M1857 is 12.5 cm to 13.0 cm high and can be easily identified by the broadly fanned tail feathers and the muscular biceps arms (Fig. 1+2). At the very beginning, cast brass helmet eagles were also used (Fig. 1), but the Army quickly decided against this because of the heavy weight. The design of the cast and pressed helmet eagle M1842 was similar, but the cast models were made of solid material and can be recognized by the smooth back.

Figure 1 - Cast helmet eagle M1842/43

Figure 2 - Stamped helmet eagle M1842/43

Since the manufacturers of that time were not yet able to cut free small spaces without much effort, there was still some excess material left between the wings and thighs of the helmet eagles after molding. Reworking would have been possible without a doubt, but the effort wouldn't have been insignificant and the costs thus too high. Since it was not very noticeable, the economical Prussians decided to leave the excess material as it was. The one shown in Fig. 2 is the most common helmet eagle for both enlisted men's and officers' helmets. There are other variants of the helmet eagle M1842/43, with larger deviations at the tail feathers, but these were, as far as I could find out, exclusively Landwehr eagles. Therefore, I suspect that they were all helmet eagles of property helmets.

To attach them to the helmet, either threaded bolts with a stealth head were inserted through 2 holes drilled for this purpose in the wings (Figs. 1+3) and screwed to the helmet with rectangular bow nuts, or 2 threaded pins were soldered to the back and also screwed with rectangular bow nuts (Fig. 4). The stealth heads of the pass-through bolts were often shaped to fit the missing feather pattern caused by the hole in the helmet eagle, which was sometimes more and sometimes less successful (cf. Figs. 1+3). However, some stealth heads are real works of art, which always show me how proud the craftsmen of that time were of their work.

Figure 3 - Fixing helmet eagle M1842/43 with through bolt (But this method was practiced only until short after 1860)

Figure 4 - Fixing helmet eagle M1842/43 with soldered threaded pin

M1857/M1860

When the banner was introduced on May 10, 1860, the already existing helmet eagles were often reworked. The banners were placed as best they could on the relatively narrow wings and soldered on. Several small holes were drilled in the helmet eagle so that the solder could flow properly under the banner and the soldered joints would last for a long time (Fig. 5+6). However, there are also helmet eagles in the style of the M1842/43 with a pressed-in banner (Fig. 7). These were probably only produced shortly after the introduction of the banner, because the M1860 helmet also introduced a somewhat lower helmet eagle with a modified design.

Figure 5 - Helmet eagle M1842/43 with later added banner

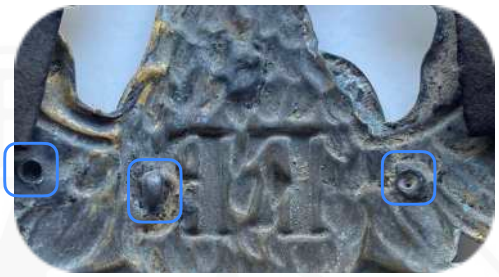

Figure 6 - Backside of a helmet eagle M1842/43/57, with soldering points for a later added banner

Figure 7 - Helmet eagle M1842/43/57 with integrated banner by presswork.

M1860

The M1860 helmet eagle (Fig. 8) was slightly lower than the M1842/43/57, measuring 12.0 cm to 12.5 cm in height, but the width remained the same. Due to the changed proportions, the wings appeared somewhat wider and the banner "Mit Gott, für König und Vaterland" (With God, for King and Fatherland), which had also become somewhat smaller, could be positioned more pleasingly as a result, with larger spaces between words. Furthermore, the bumps on the upper ridge of the wings, which looked like well-toned biceps muscles, were compressed into triplet bumps, giving the wings a more elegant look overall.

There were also major changes to the tail feathers. The broadly fanned feathers were replaced by a simplified design with short feathers on the outside and long tail feathers in the middle (short "**ǁǁ**").

Figure 8 - Helmet eagle M1860

M1867

The helmet eagles M1860 and M1867 are identical except for the fastening system. However, while the helmet eagle M1860 was still attached to the helmet using threaded pins and rectangular bow nuts (sometimes also with normal square nuts), a new attachment concept was introduced for the helmet M1867. On the back of the helmet eagle M1867 two elongated, downward bent straps were soldered, which were placed into matching grommets on the helmet (Fig. 9+10). The army hoped this would allow the helmet eagles to be removed quickly and without tools, since they often shined in the sun and thus offered enemy snipers a good target. However, this fastening system was cancelled again as early as 1871 because the helmet eagles were now lost too often.

Fig. 10 also nicely shows that the seam of the helmet shell of the pickelhaube M1867, if not made of one piece, moved to the front, where it was mostly covered by the helmet eagle. This step was necessary because the spine on the back of the helmet M1867 was dropped for weight reduction and no ugly seam was wanted to be seen on the now completely visible surface.

Figure 9 - Attachment straps of a helmet eagle M1867

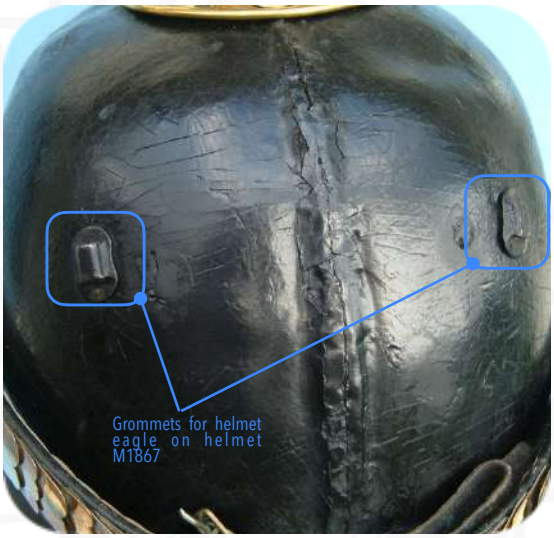

Figure 10 - Helmet M1867 with riveted grommets for the helmet eagle

Interesting side note:

The Royal Saxon Army, the armies of Mecklenburg-Strelitz, Mecklenburg-Schwerin and the army of the Grand Duchy of Baden never adopted the Prussian fastening system of the M1867 pickelhaube. Their emblems on the M1867 helmet continued to be fastened with threaded pin and square nuts.

M1871

For the M1871 helmet eagle, the proven thread/nut attachment was used again, since the helmet eagle mount from the M1867 was, as mentioned, not practical at all. Instead of the rectangular bow nuts, simple square brass nuts were used instead. And although the M1871 helmet was again slightly lower than the previous model, the dimensions of the helmet eagle were unchanged this time. However, the design of the M1871 helmet eagle differed from its predecessor in a few aspects.

For example, the excess material between the wings and legs became slightly smaller due to advances in metalworking, and the tail feather base was again redesigned. Following the taste of the time, the feathers were now made a bit straighter (Fig. 11). The base now looked somewhat like 3 "v"s standing next to each other, with the middle "V" being larger and the design therefore given the abbreviation "**vVv**".

Figure 11 - Helmet eagle M1871

M1887/M1891

The helmet shell of the helmets M1887 and M1891 was again somewhat lower and the helmet should also be lighter than the previous model. To reduce the weight, the helmet eagle was therefore remodeled and reduced in size once again. It was now 11.0 cm to 11.5 cm high and unchanged 14.0 cm wide. By now metalwork had improved to such an extent that the excess material between the wings and legs could be completely removed, as it was the case with the officer's helmet eagle. Another identifying detail is once again the tail feather base, but this time it has only been slightly redesigned. As seen in Fig. 12, the feathers still look somewhat like 3 "v "s standing side by side, but the middle tip no longer reaches deeper than the lateral ones and they now all look the same size. The abbreviation therefore changes to "**vvv**".

To attach it to the M1887/91 helmets, the soldered threaded pin and a brass squared nut continued to be used. However, the hunt for a better fastening method that would allow the helmet eagle to be removed more quickly and without tools continued, and in 1895 it seemed that a solution had finally been found.

Figure 12 - Comparison helmet eagle M1871 (left) and M1887 (right)

M1895

The helmet M1895 was the last major stage of development of the pickelhaube and although there was still research on improvements the helmet remained almost unchanged in use until the beginning of the First World War.

The helmet eagle M1895 was 11.0 cm high and was mostly made of aluminum bronze due to its lighter weight. This was also the result of the progress in metal processing, since it was only not long before that it was possible to produce a yellow aluminum bronze at all.

The design of the helmet eagle M1895 was pretty much the same as the helmet eagle M1887/91, but with a new fastening concept. For this, 2 wire loops were soldered on the back of the helmet eagle (Fig. 13), which were then inserted through metal eyelets on the helmet and the helmet eagle was then fixed to the helmet with 2 simple leather wedges. This fastening concept was kept until the end of the pickelhaube on the enlisted man's helmet.

Figure 13 - Back of helmet eagle M1895

M1915

I would have to mention the M1915 helmet eagle, but I won't go into it too much. It was almost identical to the helmet eagle M1895, but due to the lack of material during the war it was made of steel and grayed by a chemical treatment (Fig. 14). This surface treatment was lighter and more durable than a coat of paint and was an answer to the well-known problem with reflecting fittings and enemy gunners. Still worth mentioning is that the quality of manufacture has noticeably decreased during the war. The details of many war productions are far from being as clearly worked out as those of pre-war productions.

Figure 14 - Helmet eagle M1915

One more thing…

Unfortunately, this guide can only be of rough help. We live in an overflow society today and dump things far too quickly. A repair or a retrofit is often considered too expensive or nobody even thinks about it. However, people living in those days were very economical, the manufactured equipment had to endure a longer period of use and parts were also modified. Therefore, the introduction date of a new helmet model cannot be considered absolute, but was rather a floating process. Variations in the appearance of uniforms were expressly tolerated for a generous transition period. There was often just a uniformity provision for a specific group, such as a battalion. Thus, if there were not enough helmets or helmet components to uniformly outfit that defined group, then modernization was on hold until the parts were available. Also, if a helmet or its components were still in good condition after the end of its defined wearing time, then it could also happen that the wearing time was extended. For example, I have seen a helmet eagle M1842 with soldered banner and the fastening straps of a M1867, or also a helmet eagle M1871 with the wire loops as with the M1895.

Finally, I would like to point out that you always have to look very closely to assess the authenticity of a helmet emblem. To avoid a fake emblem, you should, for example, check the following points:

- Is the design correct? There are some minor differences due to artistic freedom, since the various manufacturers all made their own stamping molds and only a few specifications had to be strictly followed, but overall the differences described above were the same.
- Is the patina authentic? Materials age differently and a true patina can never be wiped off.
- Are the dimensions correct for the particular helmet eagle?
- Is the manufacturing quality good enough? For example, were the edges and details properly shaped?
- Are there indications if a helmet eagle was cast (e.g. small bubbles)?
- Are the heraldic colors of the helmet eagle correctly represented on the surfaces?
- Was the correct material used?