

German Bows: From ‘Cramer Bow’ to ‘Biedermeier Bow’

by Kai Köpp

Published in: *L’Archet Revolutionnaire Tome II* (Katalog London 2015), ed. by Jérôme Akoka, Paris (Pietrossel’Arte) 2015, p. 9–12.

Introduction

The symbol for the pre-revolutionary bow in Paris was the so-called “Cramer bow”, a German model that the famous Mannheim violinist Johann Wilhelm Cramer (1746–1799) had introduced to the French capital in 1769 before he moved on to England in three years later. The unique feature of this model is a head profile that swings out in two directions, described as a “battle-axe” head. This style is usually combined with an elegant frog of ivory, as numerous French and German examples show. According to the contemporary French violinist Michel Woldemar (1750–1815), a well-informed musician of doubtful professional background, this German bow model had been the favourite bow of wealthy amateurs in Paris up until the revolution. However by 1802 it had been dismissed completely in favour of the new model by François Xavier Tourte, as Woldemar points out.¹

It has long been assumed that the musical world of this era unanimously followed the taste and preference of Parisian string players, and that all professional musicians soon changed to the Tourte model. However, recent research clearly shows that this was not the case, as this preference was reported only among the followers of Viotti. Whoever did not identify with the revolutionary Viotti school of violin playing – and this was as much a matter of politics as of schooling or personal preference – was likely to have retained a traditional bow model in the early 19th century.² This even applies to the defeated German states that were part of the ‘Confederation of the Rhine’ (see map below), which was created by Napoleon between 1806 and 1813. Research revealed that the famous

¹ Cf. Bernard Gaudfroy, „Histoire de l’archet au dix-huitième siècle“, in: B. Millant, J. F. Raffin, B. Gaudfroy (ed.), *L’Archet*, Paris 2000, vol. 1, p. 61 and p. 158.

² Cf. the research project about historical bows at the time of Beethoven at the Bern University of the Arts: <http://www.hkb-interpretation.ch/projekte/ein-bogen-fuer-beethoven.html> (retrieved 20.8.2015).

Saxon court orchestra at Dresden did not use 'modern' bows in the French style before 1851.³

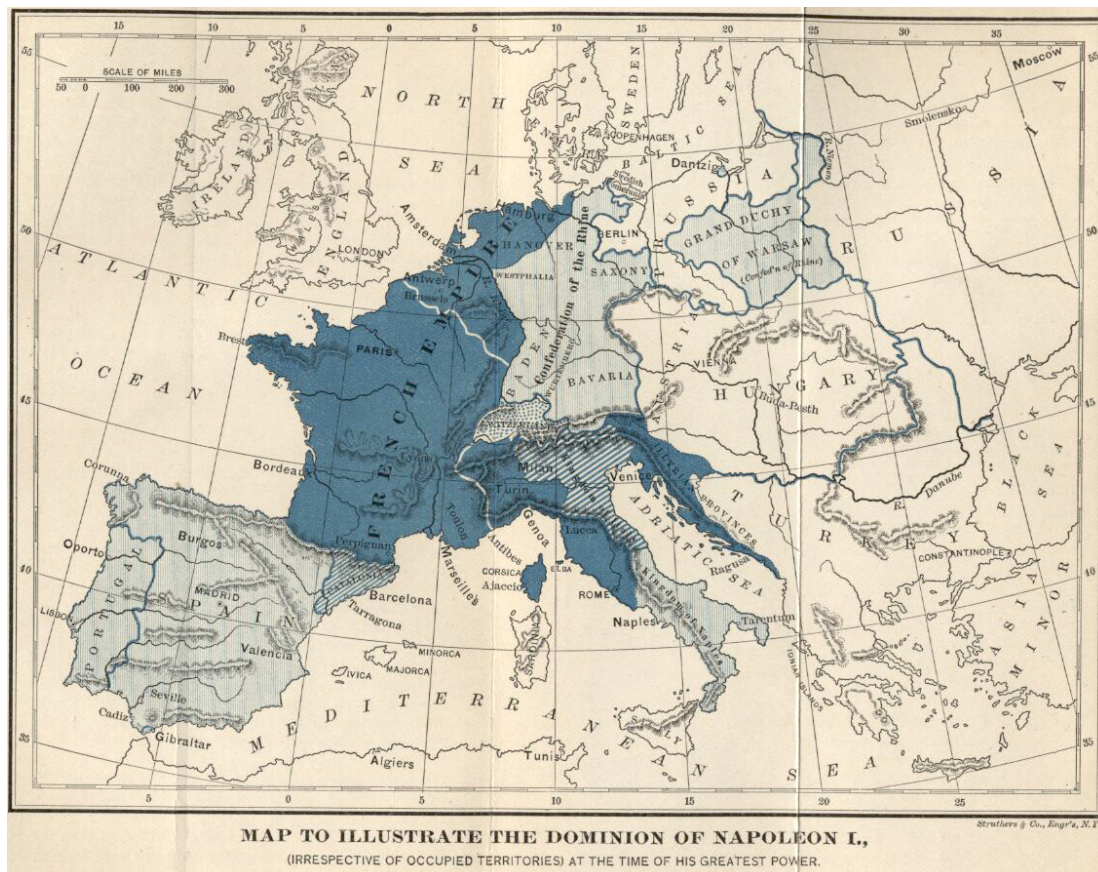


Figure 1: Map of Europe at the height of Napoleon's power, from: Louis Antoine Fauvelet de Bourrienne, *Memoirs of Napoleon*, New York (Ch^s. Scribner's Sons) 1891

However, German traditional bow models were far from being uniform or standardised because they were made to suit the musical demands of different repertoires.⁴ Bows were often supplied by makers who were ac-

³ Cf. the research project on the first performance of „Der fliegende Holländer“ in Dresden 1843: <http://www.hkb-interpretation.ch/index.php?id=93> (retrieved 20.8.2015)

⁴ Cf. Kai Köpp, „Historische Streichbögen als Interfaces. Repertoirespezifische Spieleigenschaften und Direktionsfunktion“, in: Michael Harenberg / Daniel Weissberg (ed.), *Klang(obne)Körper*, Frankfurt/Main 2010, p. 147–172 (especially p. 161–169).

quainted with the musical requirements of the ambient musical style. It seems obvious that, besides the violin making workshops, skilled musicians provided new bows as well. Often German court violin-makers had a background as practical musicians, so they knew the specific playing qualities a good bow should have in order to perform the local musical repertoire. In these cases, it is quite difficult to identify a maker unless he was known especially for his bows, an example being Johann Gottfried Schramm, violin maker at the Saxon court of Gotha, who did even sign some of his bows.

During the time-period dealt with in the present study (late 18th to early 19th centuries), Germany was a country divided into many territories, each with its respective courts and musical establishments. There were strong local centres that served as a model in musical style, like the residential courts of Saxony and Prussia in the East, Hesse and the Electoral Palatinate in the West, and finally Bavaria and Austria in the South. Very generally said, the Eastern courts such as Berlin/Potsdam and Dresden were musically dominated by an Italian vocal ideal, while the Western and Southern courts followed a more instrumental idiom that tended to be more virtuosic in the South. Munich in particular became influenced by the Western idiom because the famous Mannheim orchestra was transferred to this residence after the elector inherited the Bavarian territory in 1777.

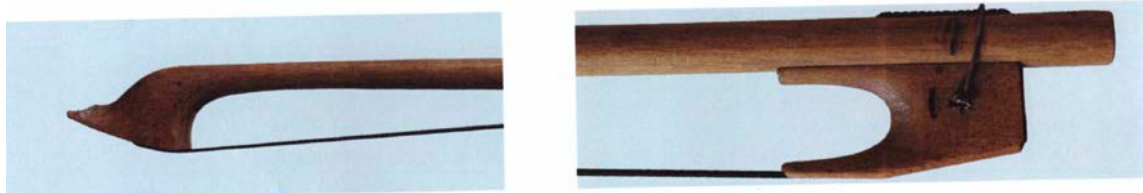
Although Germany had no common national identity of musical practice or instrument building at that time, there were two German rural instrument making towns that were not producing for a local court but depended on the export of their musical products: Markneukirchen in the east and Mittenwald in the south. Protestant Markneukirchen was part of Saxony with its splendid court at Dresden and its thriving industrial centre at Leipzig. The catholic town of Mittenwald in the Tyrolian Alps had no political connection with Bavaria and its Munich court until 1803, but was located at the important transit route from the independent industrial centres Augsburg and Nuremberg to Venice. Both violin making towns had a significant output in bows, but Markneukirchen proved to have better access to exotic woods than Mittenwald,⁵ so by 1840, export-oriented

⁵ Cf. Joseph Focht, „Quellen zum süddeutschen Bogenbau an der Wende vom 18. zum 19. Jahrhundert“, in: *Der Streichbogen*, Michaelsteiner Konferenzberichte 54, Michaelstein 1998, p. 39f.

bow making had been fully taken over by the Markneukirchen workshops which were to dominate the international market for the next century. Nevertheless, in revolutionary times, both towns were supplying their customers with bows.

Identifying styles and qualities

Historical bows are rarely signed, almost never dated and therefore hard to localize in their original local context. Archives of bow-making towns provide statistics about historical output. These numbers show that a small percentage of this output included bows of high quality, often decorated with valuable materials. However the majority of bows were made of cheaper wood, even of local timber, so it is likely that these cheap accessories were readily thrown away when damaged. A rare exception is the ordinary and rather clumsy violin or viola bow N° 62 made of common beech wood. It was probably made and used between 1780 and 1820 and displays a late – and clever – type of “crémaillère” mechanism of metal wire. The remains of its original hair consist of about 80 white and grey hairs. The mortise in the frog (5 mm) is much smaller than at the tip (8 mm), so the bow was probably strung with the hair in one direction only. Simple bows like this were made and sold as late as about 1830 according to the Markneukirchen Kämpffens catalogue, described as Nr. 55 “Violin Bogen ordin.[är] mit hacken”.⁶



N° 63: Violin/Viola bow of beechwood, Germany ca. 1790–1820

⁶ Cf. the reproduction in Klaus Grünke, Irene Loebner, C. Hans-Karl Schmidt, Wolfgang Zunterer (ed.), *Deutsche Bogenmacher, German Bow Makers, 1783–1945*, vol. 1, Bubenreuth 2000, p. 21.

An interesting method of dating and localizing bow models is provided by the examination of historical organ cases, because often they are decorated with angels playing string instruments. Usually organ cases can be dated precisely, and the name and nationality of the sculptor can be found in the church archives as well. On large and elaborate organs, the angel musicians can be of life size, and if so, they often bear instruments that have not been carved or modelled by the sculptor, but taken from local workshops or ambulant instrument dealers. As a result, these instruments – although obviously of rather simple quality and built for less than professional purposes – give at least a hint of the style of bows contemporary to the construction of the organ case.

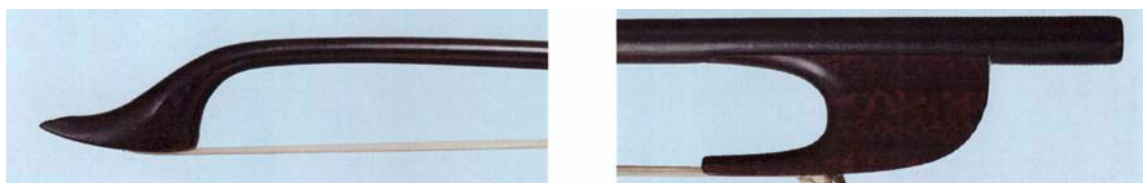
Observations of organs in the south-western part of Germany reveal that bows with a “battle-axe” profile have been in use in the middle of the 18th century already, while the distance of the hair to the stick at the tip increases significantly during the third quarter of the century.⁷ The end of this development is represented by the elaborate bow N° 94 with its classicist decoration that may have been made in the vicinity of a court in the South-West of Germany. Examples like this indicate that the “Cramer” head possibly developed from a traditional style connected with courtly residences such as Stuttgart, Karlsruhe or Mannheim. Research in this field should be extended in a more systematic way to collect data not only on string instruments with their bows and fittings but also on posture and bow hold represented in these sculptures.



N° 94: Elaborate cello bow of exotic wood, South-Western Germany ca. 1800–1830

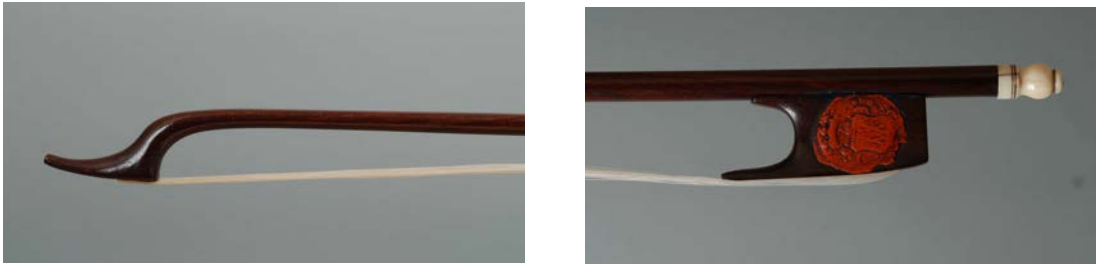
⁷ Cf. Sylvia Rieder, „Als plastisches Dekor zweckentfremdete Musikinstrumente – eine Möglichkeit zur regionalen und zeitlichen Einordnung verschiedener Bogentypen“, in: *Der Streichbogen*, Michaelsteiner Konferenzberichte 54, Michaelstein 1998, p. 47–56, especially 54–56.

Many early bows that are preserved in collections survived because of their artful ornamentation or illustrious provenience (this is also true for fittings such as bridges, strings and tailpieces). As a result, most of these examples cannot be considered representative of the standard bow in use among professional musicians of the revolutionary times. The clip-in cello bow N° 24 is another rare exception because it is not a collectible item either, but a professional tool of high quality. It is made of snakewood (also called letterwood) and could have been made and used in Germany or Italy from 1760 to 1800. Functional bows like this were likely used until they broke. They are rarely preserved in collections unless they could be connected with a famous owner (like in the case of Tartini's bows displayed in Trieste). In this example N° 24, the inset of the clip-in frog is especially interesting because it has an unusual "U" profile with edges instead the common "V" shape. Study using a microscope reveals that this profile is of later date and must have been recut, probably from a worn-out "V" shape, to hold a new frog fitted to it. This affirms that this bow was used extensively, but at some point was unable to keep up with early 19th century playing techniques.



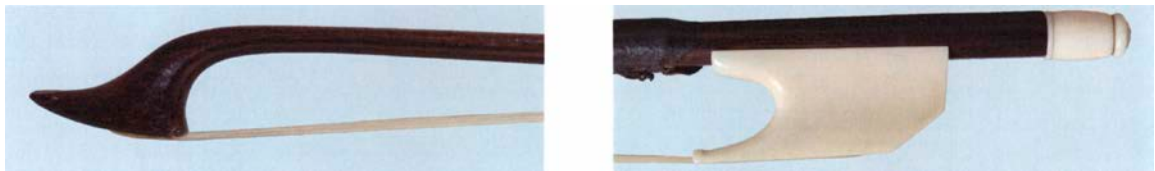
N° 24: Cello bow of snakewood, Germany or Italy, ca. 1760–1800

Iconographical evidence confirms that the head of this cello bow is a characteristic example of the Italian style. Since this style was also found at prominent musical courts like Potsdam or Dresden, it cannot easily be attributed to an Italian origin, though. For a more precise attribution of the bow, details of material and workmanship as well as reliable information on provenance need to be considered. In the case of the Italian style violin bow N° 53, the provenance is indicated by the coat of arms depicted in the red seal (indicating that this bow was the property of a court). An identification of the seal will give the rare opportunity to attribute this bow much more precisely than without this mark.



N° 53: Violin bow of Pernambuco, Italy, end of 18th century

According to the description of the Turinese violinist Francesco Galeazzi (1758-1819), a certain type of Italian bow can be identified by a characteristic concept: the head is not separated from the stick but rather appears to develop out of the stick in a rounded curve.⁸ It is remarkable that this information comes from the 1817 edition of Galeazzi's violin treatise: it seems to indicate that after the Napoleonic army moved out of Italy, musicians like Galeazzi insisted on their traditional bow models (just as violin makers continued to build 'baroque' or rather transitional necks in certain regions of post-Napoleonic Italy). Another cello bow of this Italian style can be seen in N° 59. The examples N° 64 and 86 indicate that bows in the Italian style continued to be in demand by English violinists as well.



N° 59: Violin bow of exotic wood in the Italian style, Germany ca. 1790–1800



N° 86: Violin bow of exotic wood in the Italian style, England ca. 1800–1820

⁸ Cf. Köpp 2010 (cf. footnote 4), p. 168, with full quotation.

Wettengel's 1828 treatise on bow-making

One of the most explicit German sources of this time is the copious treatise on the art of violin- and bow-making by Gustav Adolph Wettengel (1801-1873) that was published in 1828.⁹ As a Markneukirchen bow-maker, Wettengel gives a very detailed description of the local bow-making craft and adds numerous plates to illustrate his text (including templates). His information is based on immediate experience and is not very retrospective either, considering that he might have started to learn the craft when he was 12 years old and that he published his treatise at the age of 27. So this source marks the end of the time-span that is examined in this context.

In his description, Wettengel appears surprisingly conservative to modern readers. For the best bows for example, he prefers snakewood to Pernambuco. He is also quite sceptic about the technique of bending bow sticks with heat, but recommends the old method of cutting the camber out of the wood instead. Interestingly, he calls the mother of pearl inlays into ebony frogs (like eyes, shields or flowers) a “recently invented ornament” that replaced the fashion of having ornamental figures like hearts drilled out of ivory frogs. So this earlier style of frog might only have been considered outdated when he started his training as a bow maker in about 1813, which seems to indicate that bow models like this have been built into the early 19th century.

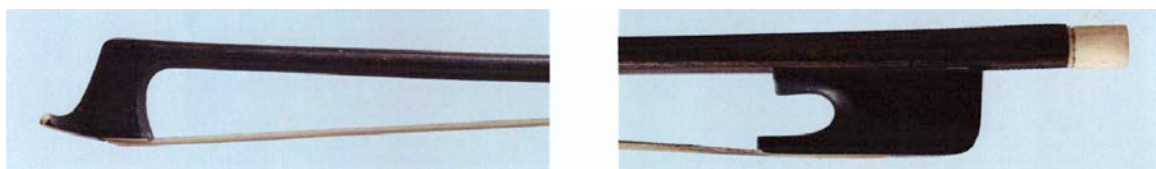
By 1828, the standard model that Wettengel describes does resemble a French bow. However, these Markneukirchen bows obviously did not have the same playing qualities as the French original. Considering Wettengel's conservative views, it doesn't come as a surprise that the famous violinist Louis Spohr, who was an advocate of the Viotti school, warned his students in his violin treatise of 1833 not to buy a German bow and recommends an original Tourte bow:

The price, however, of such a bow (80 francs) is very high, as we may purchase one in Germany for the eighth part of this sum, which, in appearance, is but little different. Yet most of these bows are destitute of the above men-

⁹ Cf. Gustav Adolph Wettengel, *Vollständiges Lehrbuch der Geigen- und Bogenmacherkunst*, Ilmenau 1828. This book obviously served as a model for J.-C. Maugin, *Manuel du luthier*, Paris 1834.

tioned advantages of TOURTE's, because the manufacturers are unacquainted with the true principles of making them.¹⁰

The Pernambuco violin bow N° 83 closely corresponds with Wettengel's illustrations. It was made by an unknown master in Markneukirchen around 1810 to 1830. The most obvious difference from a French bow is the "tongue and groove" seating of the frog, that Wettengel calls "Karniesführung" (cornice seating), and it seems adequate to use the historical term for this characteristic feature. From Wettengel's 1828 point of view, this was still a standard constructive element of the bows he describes and illustrates (see plate), although he does mention the alternative construction with eight facets. This cornice seating has been widely regarded as characteristic for early Saxon bows, maybe because the same construction can be found on cheap Saxon bows well into the 20th century. However, it is not a feature of Saxon bows alone, since it can be found on bows from Mittenwald as well.¹¹ It seems that up until the early 19th century, the cornice seating was used for quality bows all over the German-speaking world of bow-making.



N° 86: Violin bow of Pernambuco in the French style, Saxony ca. 1810–1830

A closer look does reveal significant differences between cornice seating concepts that distinguish the Markneukirchen style from the one in Mittenwald and other German traditions. The most reliable indicator is the diameter of the ridge or tongue of the cornice. In Markneukirchen it is significantly smaller than in other areas of Germany but consistent

¹⁰ *Louis Spohr's celebrated Violin School* (transl. J. Bishop), London 1843, p. 9.

¹¹ Cf. Klaus Grünke, *German Bow Making of the 19th and the Beginning of the 20th Century*, p. 10: www.afvbm.org/wp-content/uploads/2014/04/GERMAN-BOWMAKING-OF-THE-19TH-AND-BEGINNING-OF-THE-20TH-CENTURIES-Klaus-Grunke.pdf (retrieved 20.8.2015).

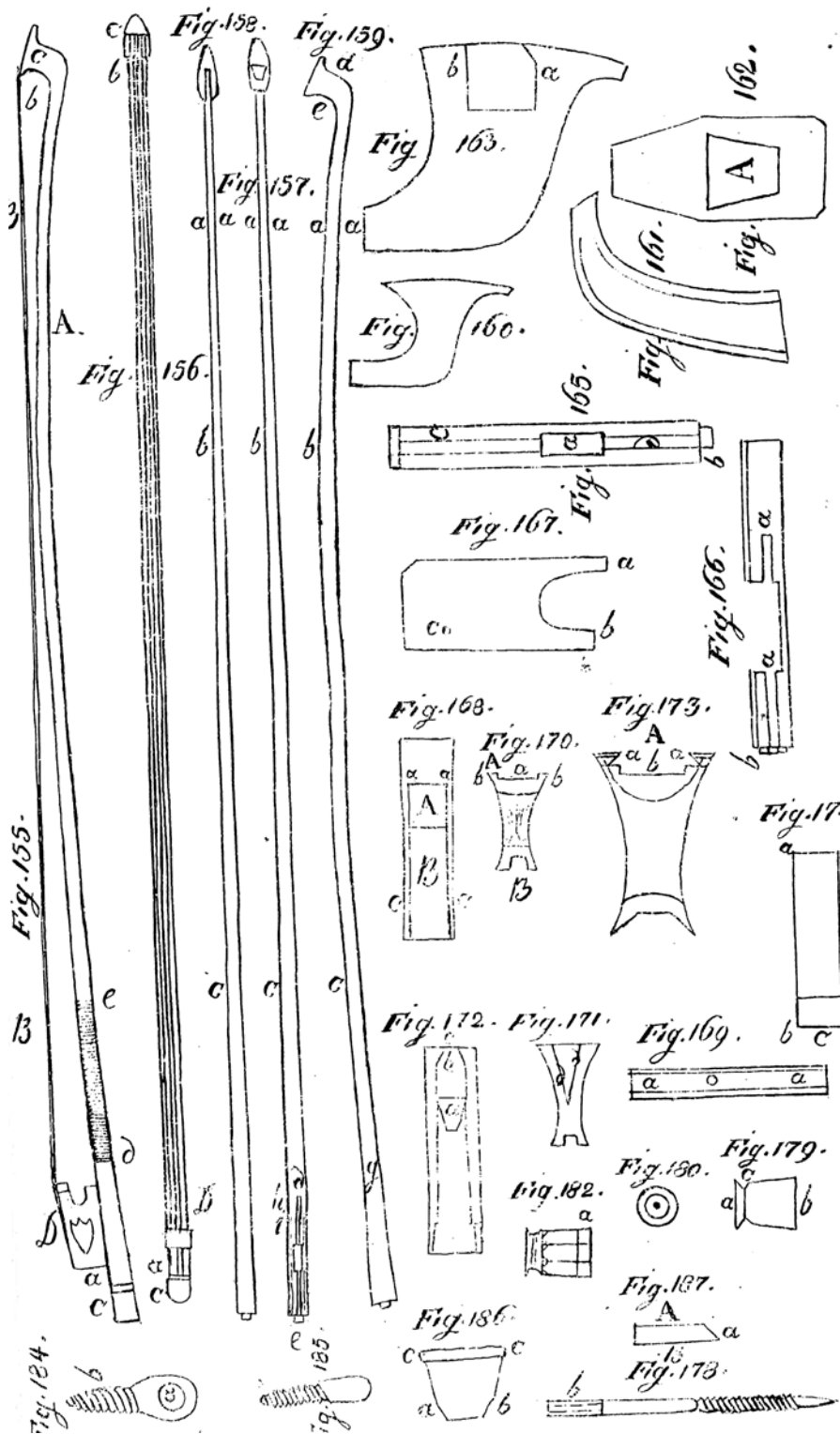
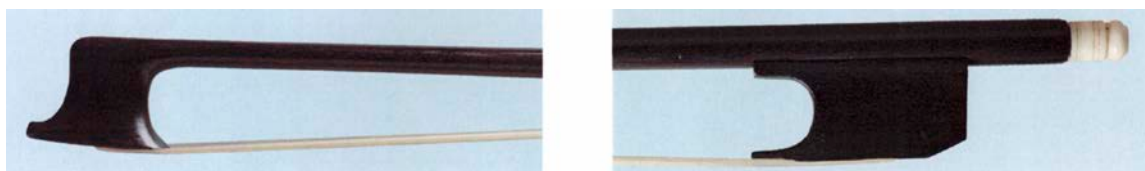


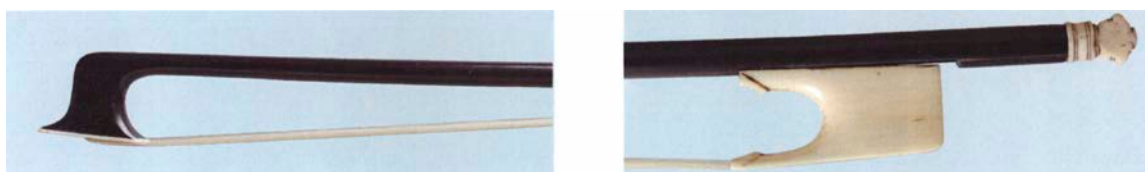
Figure 2: G. A. Wettengel, *Vollständiges Lehrbuch der Geigen- und Bogenmacherkunst*, Ilmenau 1828, plate XV.

throughout the Saxon output (ca. 2.3–2.7 mm), because bow parts were provided by different makers and had to match closely. The Pernambuco viola bow N° 66 for example has a much wider ridge or tongue that indicates an origin in Southern Germany.



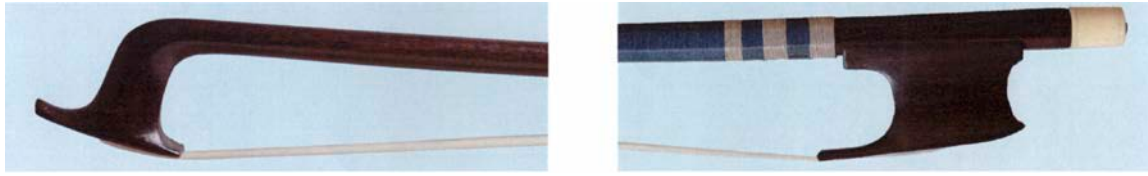
N° 66: Viola bow of Pernambuco, Southern Germany ca. 1790–1810

Another concept of cornice seating is found on a violin bow of snake-wood No 63. Here, the cornice is cut out of a completely round stick, so that the surface of the ridge or tongue (3.6 mm) is slightly curved instead of being flat like in the Saxon models. With this technique, the stick is not reduced in diameter by flattening the ridge. It is obvious that this concept served as a model for Jean-Baptiste Vuillaume’s characteristic frog seating system. On the other hand, this observation explains why the end of the stick is increased in height in the Saxon bow No 83: the flattened cornice needed a compensation to retain the diameter of the stick at the frog.



N° 59: Violin bow of exotic wood in the Italian style, Germany ca. 1790–1800

It is striking that all bows in the catalogue with such a cornice seating have a “Cramer” head (even the late bow N° 83 shows a “battle-axe” reminiscence), but not vice versa: The bow N° 47 for example does have a “Cramer” head but no cornice. It is likely that this bow was not made by a German maker, and the style of the frog points to a possible British origin. In general, “Cramer bows” that were made in France do not show the German cornice seating.



Nº 47: Violin bow of exotic wood in the Cramer style, England ca. 1790

From the illustration Woldemar provides in 1802, it is evident that he defines the “Cramer bow” not only by the “battle-axe” head alone, but rather in combination with an ornate ivory frog that likewise ‘swings out’ to both sides. This has been regarded as a pre-revolutionary style just like the above-mentioned ivory frog with ornamental holes in the shape of hearts etc. However, this kind of frog is described by Wettengel in detail, and the fact that he uses the present tense in his text indicates that this type of frog was still built in 1828, at the time of his publication:

Dieser [Frosch, Fig. 177] ist stets von Knochen oder Elfenbein, hat ausgefeilte Backen, in seiner Grundfläche eine Karniesfurche aber niemals ein Schieblättchen. Es ist leicht zu begreifen, daß er nur der Schönheit wegen so ausgeschnitten wurde, und daß er, weil die Stellen *a b c* desselben etwas rund sind und in ihrer Gestalt einige Aehnlichkeit mit einem sich zusammenringelnden, welken Laubblatte hatte, Laubfrosch genannt wird.¹²

[This frog is always made of bone or ivory, has hollowed-out sides, on its base a cornice groove but never a slide. It is easy to understand that it was cut out like this only for the purpose of beauty, and that it is called “leaf frog” because its parts *a b c* are somewhat rounded and in form similar to a wrinkled leaf that rolls in.]

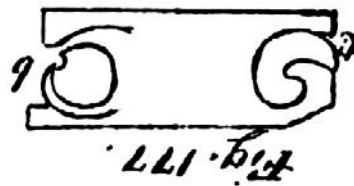


Figure 3: G. A. Wettengel, *Lehrbuch* 1828, Fig. 177: “Laubfrosch”

Wettengel also describes and illustrates a turned button of bone or ivory (Fig. 183) that could also be cut off at the end like a small peg to make it

¹² Wettengel 1828 (cf. footnote 8), p. 534.

easier to turn. This kind of button, which he calls “Flügelbeinchen” (p. 536), can be seen above in the bow N° 63 for example. Finally, it has been previously overlooked that even the “battle-axe” head in the style of the “Cramer bow” is described and illustrated by Wettengel in Fig. 160 (see above, plate XV). Like the construction of the old fashioned “Laubfrosch”, he describes this kind of head in the present tense and refers to it as “die Form der Wiener Bogenköpfe” [the form of the Viennese bow heads]. This really is a significant and singular information, because until recently, no substantial textual source has been known about bows used in Vienna in the first decades of the 19th century. From Wettengel’s description it is evident that Markneukirchen bow-makers were prepared to supply Viennese customers with a bow model that in other German speaking parts of Europe had already been replaced by a preference for the French model. So the “Cramer” model that was fashionable fifty years earlier in Paris was not only still in use in Vienna but could also be ordered from the export-oriented Saxon bow makers.

From these observations it is clear that the dating of early bows needs to be thoroughly revised. Contemporary with the use of the “modern” Tourte bow, traditional bow models continued to be in use among musicians and moreover, they also continued to be produced by bow-makers to meet the demands of their customers throughout Europe. This extends the time-span of dating these bows significantly. To narrow down this time-span again, it is necessary to characterize and localize the use of the bow. So a conservative model would be dated earlier if used in France, and later if it came from countries that were slower to adopt the French style of violin playing like Prussia, Austria or parts of Italy. Even in England, it is likely that the international musical orientation of major cities encouraged bow-makers like the Dodds to offer bows in the French, German or Italian style to their customers.

In conclusion, bows with a “Viennese” style of head continued to be in use wherever musicians were reluctant to adopt French revolutionary standards and the aesthetics of the Viotti school. This is why Woldemar’s notion of the “Cramer bow”, from a more informed point of view, does not seem appropriate to characterize early 19th century examples. The type of bow that did retain the “battle-axe” head of the south-western German tradition but combined it with a more massive frog, could rather

be described as a “Biedermeier bow”. This new definition acknowledges the parallels of German Biedermeier styles with this model as opposed to the French Classicism that clearly influenced the design of François Xavier Tourte’s bows.