

IN DEFENSE OF THE SERPENT

Philip R. Palmer

The serpent is a tenor-bass wind instrument used from the end of the 16th century through at least the middle of the 19th century. As it is played with a cup mouthpiece (approximately the size of that of the trombone), it falls into the classification of lip-vibrated aerophones (brass instruments). Under the Hornbostel-Sachs classification system the serpent is termed a trumpet. Constructed normally of wood covered with leather, its usual eight-foot length is pierced with finger holes (originally six), and its vibrating length varied by uncovering side holes as with woodwind instruments such as the flute, oboe, etc. It has a continually conical bore, placing it in that respect in the horn family. Long replaced by members of the tuba family of valved brass instruments, it is now beginning to enjoy a resurrection along with other historical musical instruments.

The performance problems peculiar to the serpent have adversely affected its revival compared with that of other historic instruments. Instructional materials have been generally unavailable and there has been little literature on the subject to guide the prospective student. Attempts to master the serpent have often failed because of this lack and because of the tendency to apply inappropriate techniques of modern brasses to an instrument that requires quite a different approach to tone production and performance practice. Those who have been able to master the serpent to greater or lesser degree have had to do so through trial and error, and many attempts to use its unique tone in historical performance have failed, mainly due to the lack of information concerning its inherent peculiarities.

It is the intent of this article to examine such available information on the serpent as the author is able to identify, with the purpose of establishing a historical perspective on the instrument's use and relative importance, with the goal of helping prospective students and performers better understand what can be a very interesting and valuable addition to the performance of period music. That there is increased interest in the serpent, as there has been recently in performance on most other historic instruments, is evidenced by the formation of United Serpents and by the first annual meeting of that international organization in August, 1986, as part of the Amherst Early Music Workshop at Amherst College, Amherst, Mass. The activities of this organization and the modern revival of the serpent have continued to grow rapidly since then. United Serpents currently publishes an annual newsletter and, in 1989, staged the first International Serpent Festival. This event presented four world premiere compositions, including the first concerto written for serpent (by Simon Proctor) and a "recently discovered" work by P.D.Q. Bach. The activities of Christopher Monk and the London Serpent Trio must be emphasized as the prime impetus to modern serpent playing. This fine ensemble has been extensively concertizing in the last few years and now has several commercial

recordings to its credit. In addition, all serpent activities seemingly culminated on July 13, 1990, with the Serpent Celebration 1590-1990, organized by Monk and staged in London. This event attracted 57 serpentists, the largest gathering of players in 400 years.

Origins

The serpent is one of the few instruments in use before the 19th century whose invention has been documented and may be reasonably attributed to a particular individual. A canon of Auxerre, France, Edmé Guillaume, has been credited with the invention of the serpent as a bass to the cornett family. First credited for this invention by Abbé Leboeuf in his *Mémoire concernant l'histoire ecclésiastique et civile d'Auxerre* (Paris, 1743),¹ the date given for its inception is 1590. Although Leboeuf referred to the new instrument as a bass cornett in serpentine form, the much larger bore of the more conical serpent establishes it as a separate instrument both in concept, and because of its darker tone quality, in its performance practice.

The serpent is commonly referred to as the bass instr. of the cornett family, but should perhaps more correctly be considered as allied to the cornetts and serving as their bass. (In 1730 Bailey wrote of it as "serving as bass to the cornet or small shawm.")²

Claims in other sources for earlier serpents, particularly in Italy, have been discredited by such scholars as Morley-Pegge, who have found such instruments to be more or less serpentine wound bass members of the cornett family which possess the thumb hole³ and smaller bore (in relation to its length) characteristic of that instrument.

The serpent obviously derived its name—used from its inception—from its tortuous shape, which was necessary in order to manipulate what in a straighter form would have been an otherwise completely unwieldy instrument. It is called *serpent* in French and English, *Serpentón* in Spanish, *Serpent* or *Schlangenrohr* (snake-tube) in German, *serpentone* (in one source *serpente*)⁴ in Italian, and, according to another reference, has also been known as the "black pudding" in the north of England.⁵ No matter what its

1 . Reginald Morley-Pegge and Philip Bate. "Serpent," *The New Grove Dictionary of Musical Instruments*. ed. by Stanley Sadie. Three Volumes. (New York: Macmillan Press Limited, 1984) Vol. III, pp. 349-350.

2 . Sibyl Marcuse, "Serpent," *Musical Instruments, A Comprehensive Dictionary* (New York: Doubleday, 1964) pp, 466 to 467.

3 . The serpent has no thumb hole.

4 . Moore, John W. *Complete Encyclopaedia of Music*,...Boston: John P. Jewitt and Company, 1854.

5 . Robert Dearling, "Serpent." *The Guinness Book of Music*. (Enfield: Guinness Books, 1986) p. 61.

name, its unique appearance has attracted a great deal of attention, as well as a variety of descriptions. Willi Apel, for instance, as recently as 1969, described the serpent as "...a draining pipe suffering from intestinal disorder."⁶

Baroque Period

The new instrument became an immediate success and was soon found throughout France in its role as supporter of Gregorian plainsong, a position it was to maintain in strength for at least the next two and a half centuries. As its creator, Canon Guillaume, claimed, "...the instrument gave a fresh zest to Gregorian Plainsong."⁷ "It was able to blend perfectly with men's voices at the expense of its own individual timbre."⁸ For at least the first century of its existence, if not longer, the serpent was exclusively an ecclesiastical instrument, doubling men's voices at the unison in liturgical chant.⁹ As far as is known, its first century of use was entirely in France, from which it subsequently spread to the low countries, England and Germany.

The importance of the serpentist in 17th-century French churches has been pointed out by Schultz.¹⁰ In comparing monthly wages for church musicians in France in the early years of that century, he gives the salary of a serpentist at Notre Dame des Doms Avignon in the year 1606 as 20 écus (60 livres), whereas the organist at Notre Dame in the year 1602 received a salary of 14.4 écus, and the Maitre de Chapelle at the latter institution in 1597 was paid 24 écus.

As a church instrument, the serpent nearly equaled the organ in performance, and was indeed often preferred for the accompaniment of male voices. Other wind instruments, such as the trumpet, and stringed instruments appeared in the church only on special occasions, while "...every service employed the serpent."¹¹

6. Willi Apel, "Cornet." *Harvard Dictionary of Music*. Second Edition, edited by Willi Apel. (Cambridge: 1969) p. 206.

7. Morley-Pegge, op.cit., p. 715.

8. L. Morton, "Los Angeles Letter." *Counterpoint*, Vol. XVII, August, 1952. p. 31. Quoted in R. A. Schultz, *The Serpent:....* Doctoral Dissertation. North Texas State University, 1978.

9. Although Schultz, without reference, states that: "In addition to its use in the church, the serpent was utilized in secular activities. Because of this the serpentists, who were usually priests, could earn an excellent living wage." (This quotation appears in context to be in reference to the earliest period of the instrument's use, at the beginning of the 17th century.) *Ibid.*, p. 2.

10. *Ibid.*, pp. 2 and 3. Schultz gives as his source: Westrup. "Side Lights on the Serpent." *Musical Times*, LXVIII (July, 1927), p. 635.

11. *Ibid.*, p. 2.

In the 18th century, four of the most important churches in Paris each had two serpentists (who were also bassoonists) as permanent members of their staff.¹² The names of two prominent players have come down to us. Abbé Aubert, who was serpentist at Notre-Dame of Paris from about 1750 to 1772, was said by Francoeur to have been the finest player of the serpent up to his time. He was succeeded by Abbé Lunel, who also possessed a fine reputation in his day. Both players confined their efforts to the ecclesiastical world, however, and seem to have been little known outside of that area.¹³

There are a number of references to the serpent still being used for liturgical purposes in provincial churches in France as late as 1925.¹⁴ There are very few references to uses of the instrument in non-liturgical settings before the middle of the 18th century, but Marcuse says that Trichet, writing about 1640, "...informs us the serpent was used for bass parts in instrumental consorts; he calls it the true double bass of the cornett..."¹⁵ Also, Marcuse states that:

The serpent was playing bass parts in instrumental ensembles outside the church by the mid-seventeenth century, and a century later it was employed in the orchestra of the Comédie Italienne, when a violinist named Simonet played one in fifteen performances of the *Chinois* (in 1756). Such frivolity was apparently short-lived, for Laborde (1780) states that serpents were relegated to cathedrals.¹⁶

Another reference that supports the probability of the serpent having been used in ensembles at least to some degree even earlier is found in Mersenne (1635), who discussed its ability

...to accompany as many as twenty of the most powerful singers and yet play the softest chamber music with the most delicate grace notes.¹⁷

12. G.Thibault, *18th Century Musical Instruments: France and Britain*. (London: Victoria and Albert Museum, 1973) p. 162.

13. Morley-Pegge, op.cit., p. 716.

14. For example: "Nombreuses sont, en France, les églises de villages où le s. [serpent] était toujours en usage dans le premier quart du XX^e s, et qui conservent encore des spécimens parmi le matériel liturgique." "Serpent." *Encyclopédie de la musique*. (Paris: Fasquelle, 1961) Vol. III, p. 1013.

15. Marcuse, op.cit., p. 467.

16. Sibyl Marcuse, *A Survey of Musical Instruments* (New York: Harper Row, 1975) p. 780.

17. Marin Mersenne, *Harmonie Universelle: The Books on Instruments*. English translation by Roger Chapman. (The Hague: Maartinus Nijhoff, 1957 [First appeared in Paris, 1635]) p. 345.

Mersenne further commented on the serpent's power, grace, and harmonious nature when used with cornetts or voices. Regarding its use with cornetts, he was very explicit in advocating the serpent: "...one without the other is a body without a soul."¹⁸

The above sources appear to support the historical use of consorts of the cornett/serpent family, but perhaps the writers were merely advocating what seemed to them a logical and harmonious possibility. There seem to be no actual such ensembles on record,¹⁹ and most modern authorities indicate that these instruments were not used in this fashion. For example:

Throughout the Renaissance and Baroque periods the cornett family was not played as a unit; rather, a cornett and/or cornettino used for high parts would be accompanied by sackbuts on the lower lines. The tenor cornett was occasionally substituted for alto sackbutt in such groups but does not ever seem to have been the instrument of choice. The serpent was from the first a continuo instrument, used in French choirs to support not cornetts but voices. There it remained throughout the seventeenth century....²⁰

As clumsy as it may have been, the serpent as a bass instrument had the advantage over all of its contemporary competitors in compass, power, flexibility of intonation, and dynamic range, and this fact began to be apparent to military band leaders during the 18th century. By the middle of that century it was beginning to be scored for in German military marches, while still maintaining its position in the church. This led eventually to its division into the "serpent d'église" and the "serpent militaire."

From the seventeenth through nineteenth centuries it was used as a band and orchestral instrument, and keys were added to facilitate playing. The serpent's chromatic ability and flexible intonation, achieved through the use of side holes, made the loud but mellow instrument a favorite until it was replaced late [?] ²¹ in the nineteenth century by more penetrating valved brasses.²²

The earliest documented serpent player known at present, apart from (presumably)

18 . Ibid., p. 352.

19 . With the single exception of the ensemble of Louis XIV mentioned later.

20 . Andrew Stilller, *Handbook of Instrumentation* (Los Angeles: University of California Press, 1986) p. 430.

21 . Perhaps completely, but the process started first with the advent of the ophicleide in 1817, and then with that of the tuba in 1835.

22 . Stewart Pollens, *Forgotten Instruments* (Katonah, N.Y.: The Katonah Gallery, 1980) p. 29. While the serpent did not begin to be used as a band instrument until at least the middle of the 18th century, or in the orchestra generally until the 19th century, and keys were not added until just before the beginning of the 19th, these statements are otherwise quite correct and indicate the high status of the instrument.

its originator, Guillaume himself, is Michael Tornatoris, appointed in the year 1602 as serpentist and bassoonist at the church of Notre Dame des Doms, in Avignon.

One of the earliest recorded uses of serpents in other than strictly religious institutions is their inclusion in one of the wind bands of the court of Louis XIV (reigned 1643 to 1715). As this band was under the administration of the *Chapelle*, and there were many other wind ensembles used for various other functions under other administrative wings, this particular group (consisting of serpents and cornetts) was in all probability used mainly if not entirely for religious services and ceremonies connected with the court.²³ The serpent without keys or other modifications became known as the *serpent d'Eglise* (church serpent) in France during the late 18th century, or *serpent ordinaire*, to distinguish it from later developmental forms using additional keys and different shapes.

That the serpent was soon used in the culturally related Low Countries is evidenced by the large number of instruments known to have been made in that area, and by many references. For example, Vander Straeten mentions a record of payment to a "serpentiste" at the Church of Saint-Martin in the town of Ieper in the year 1730.²⁴

By at least the final quarter of the 17th century, the pastoral chants in the royal chapel in Toledo were accompanied by four wind instruments: two oboes, a bassoon, and a small "bassoon-serpentine".²⁵ For the researcher into the history of the serpent the intriguing name bassoon-serpentine unfortunately can be interpreted in several ways, particularly as bassoon seems to have been a generic name for bass instruments of various sorts at this time as well as earlier. As tempting as it is to regard the reference to a small bassoon-serpentine as supporting evidence for a smaller (perhaps tenor) serpent having been used historically, the ambiguity of terminology and lack of other references does not justify such an assumption at present.²⁶ But that full-size serpents

23 . Marcelle Benoit, *Versailles et les Musiciens du Roi* (Paris, 1971), p. 36. Referred to in David Whitwell, *The Baroque Wind Band and Wind Ensemble* (Northridge, Calif.: WINDS, 1983) Vol. III of the nine-volume *The History and Literature of the Wind Band and Wind Ensemble*, p. 36.

24 . Edmond Vander Straeten, *La Musique aux Pays Bas* (Brussels, 1867), Vol. IV, pp. 272-273. Referred to in Whitwell, *ibid.*, Vol. III, p. 192).

25 . *Ibid.*, Vol. VIII, 194-195.

26 . Gary Stewart refers to a *consort of Schlangen* (serpents) consisting of two discants, two tenors, and a bass, in a 1596 inventory of the instrument collection of Duke Ferdinand von Tyrol at Schloss Ambras, Innsbruck (now part of the Sammlung alter Musikinstrumente, Kunsthistorisches Museum, Vienna). He goes on to say that "considering the rest of the Ambras collection, which includes several unique and fanciful instruments that would seem to be stage instruments, the theory of a consort of serpents as novelties would seem a possibility. But the one surviving bass serpent, perhaps the bass of a consort of serpents, does not seem to support the theory; and even if the theory could be substantiated, it would not push the serpent's origin back any further. Also, the inventory may have been written by someone whose personal term for the usual consort of

were present in Spain during the 17th century seems probable, particularly as it is known that they were both being used and manufactured there (often in rather unusual shapes) during the following centuries.

Praetorius does not mention the serpent, which on the basis of present information appears to have been unknown in Germany until about the middle of the 18th century. The first detailed description of the serpent occurs in Mersenne's *Harmonie universelle* of 1636-7. The description of the serpent in Mersenne indicates that the early instruments were pitched in E, rather than the later D typical in France.²⁷ Kircher later (writing in Italy in 1650) included a drawing and brief description of the instrument, in which he indicated that at that time the only extensive use of the serpent was in France.

The period of the Counter-Reformation had a great deal of influence on the use of instruments in the Catholic Church, particularly in France. In 1662 there was issued in Paris the *Ceremoniale parisiense*, a document based on the conclusions of the Council of Trent, which recommended the exclusion of all instruments except the organ in the church. This does seem to have retarded the introduction of string instruments in particular in French church music, as violins were not introduced into Notre Dame in Paris until the end of the 17th century, or in most other major French cathedrals until the early years of the 18th century.²⁸

Despite such injunctions, however, wind instruments seem to have been in continual use to at least some degree, either out of necessity for choral support or for use in special ceremonies.

During the seventeenth century the clergy themselves in Nantes played the serpent, cornet, and crumhorns. The music master at the Chartres Cathedral taught the dozen or so boys not only singing and composition, but also bassoon and serpent. In Paris one heard since 1651 a serpent accompanying the plainsong at Sainte-Chapelle.²⁹

The serpent was present in England after the Restoration (1660), and was probably used primarily in churches whose organs had been destroyed under the puritanical

cornetti was *Schlangen*." Gary M. Stewart, "The Restoration and Cataloging of Four Serpents in the Arne B. Larson Collection of Musical Instruments." (Master's thesis, University of South Dakota, 1978) p. 4. Stewart gives as his source in the following footnote on the same page: "Alan Moore, in a letter of April 16, 1976, to the writer. Moore writes that he has a photostat of the inventory, and refers to Curt Wegerer, curator of the Vienna collection, who speculates that the serpent was first conceived as a stage instrument."

27. At least in terms of modern pitch standards.

28. The New Grove's Dictionary of Music and Musicians. Sixth edition, edited by Stanley Sadie. (London: Macmillan, 1980) Vols. XIV, p. 194; IV, p. 177; XIII, p. 21.

29. Whitwell, op.cit., Vol. III, p. 211.

influences prevalent during and after the Commonwealth.³⁰ England already possessed a rich tradition of using wind ensembles in the major cathedrals of the country. The reason for the almost exclusive use of winds as compared to strings can be found in both the historic association of these instruments with the church, and the contemporary opinion that the winds were better in tune!

...becaus *Entata* [stringed instruments] ar often out of tun; (Which sooetime happeneth in the mids of the Musik, when it is neither good to continue, nor to correct the fault) therefore, to avoid all offence (where the least shoold not bee givn) in our Chyrch-solemnities onley the Winde-instruments (whose Notes ar constant) bee in use.³¹

This heritage provided fertile ground for the rapid spread of serpents in church bands, particularly after the Restoration. Even after that event, puritanical influences were so strong that organs were suppressed and did not generally reappear until about 1860. During this 200-year hiatus "the music in many smaller churches was provided by church bands, consisting of a half-dozen or so wind instruments, with an occasional cello."³² Serpents were often members of these small wind ensembles.

Details and measurements given in the James Talbot Manuscript (c. 1695), reveal that the serpent he was familiar with changed very little if any during the next 100 years. It is interesting to note that Talbot indicates that half-holing was the technique used at

30. Stewart, however, qualifies this general assumption in the following passage: "The usual explanation of the serpent's widespread use in England is that the church organs destroyed during the Civil War and the Commonwealth (1649-1660) could not be quickly and easily replaced, so serpents and other instruments were used in the French manner [footnote referring to Morley-Pegge, "Serpent," Grove's, VII, p. 715.]. (While Cromwell and his fellow Puritans did destroy some church organs, it would seem their reputation as antimusical curmudgeons is generally undeserved. [footnote referring to Percy A. Scholes, *The Puritans and Music* (New York: Russell and Russell, 1962), Chapter VI.] Charles II, in exile at the court of Louis XIV during the interregnum, was exposed to the French-style of choral homophony with instrumental accompaniment as produced by Lully. [footnote referring to Scholes, *Puritans and Music*, p. 127.] When he returned to England as monarch, he brought a preference for that style of royal chapel. Though it is noted that the older style of unaccompanied polyphony was never ousted completely, the style of service in the royal chapel could not help having been affected, causing instruments—including serpents—to be used more liberally. [footnote referring to Scholes, *Puritans and Music*, p. 127.]" Stewart, op.cit., p. 8 and 9.

31. Butler, Charles. *Principles of Musick* (1636) quoted in Andrew Parrott, "Grett and Solomne Singing," in *Early Music* (April, 1978) VI, ii, 186. Quoted in Whitwell, op. cit., Vol. III, p. 194.

32. Whitwell, op.cit., Vol. III, p. 197.

that time to obtain chromatic intervals, and does not mention the later cross-fingerings preferred wherever possible. This manuscript also gives the names of the two leading serpentists of that time: Le Riche (or La Riche), and Lewis.

Other than for ecclesiastical purposes, the serpent seems to have attracted little attention until toward the end of the 18th century. According to Busby (*Concert Room and Orchestra Anecdotes*, London, 1825), Handel first heard the serpent in England, and although not terribly impressed, he did include it in the original scores of the *Water Music* (1717) and *The Royal Fireworks Music* (1749). There seems to be no other indication that the serpent was being used elsewhere than in churches at this time in England,³³ and it seems probable that it was not being used at all in Germany, since Handel seems to have been completely unfamiliar with the instrument.

On the occasion of first using this variety of bassoon, Handel, then a stranger to this newly invented machine, was so shocked and disgusted with the powerful coarseness of its tone, that he exclaimed, in a fury, "Vat de diffel be dat?" On being told that it was a newly-invented instrument, called the serpent, "O," he replied, "de serpent. Ay, ay! but, by Jove, dis is not de serpent dat tempted Eve, I am sure." He forthwith commanded its silence.³⁴

In reference to the identification of the serpent with the bassoon as indicated above, the following curious quotation is also of interest:

The serpent is said to have been invented by a French priest towards the end of the sixteenth century, and it is the ancestor of other instruments producing similar tones, such as the bassoon.³⁵

Classic Period

The serpent seems to have been first used in military bands in England in 1783, at least according to documented sources,³⁶ when an entire German band was recruited

33. Thibault, *op.cit.*, p. 162, states that: "In England, the serpent maintained a shadowy existence throughout the earlier part of the [18th] century in wind bands, and was known to Handel." The wind bands he refers to seem to have probably been church ensembles rather than military bands, however.

34. John W. Moore, *Complete Encyclopaedia of Music....* (Boston: John P. Jewett and company, 1854) p. 867.

35. E.R. Yarham, "Serpents In Church," *Music Journal* January, 1963) p. 86.

36. Possibly it had already been used in other military bands, however. There is a part for serpent in a march by Samuel Wesley written in 1777 for, it is supposed, a Guards band. Source: Clifford Bevan, *The Tuba Family* (London: Faber and Faber, 1978) p. 53.

from Hanover to serve with the Coldstream Guards.³⁷ This band included at least one serpent, and within 10 years so did most other English military bands. Doane's *Musical Directory* of 1794 lists four players attached to Guards' bands in London, as well as the famous serpentist Louis Alexandre Frichot, who had escaped from France during the Revolution to become a member of the Concert of Ancient Music orchestra in 1793.³⁸ Frichot is known too for his invention of the bass horn. It is also recorded that at about this time there was given in Nordhausen a performance of Haydn's *The Creation* with the part of the contrabassoon taken by a serpent.³⁹

Another serpentist who established quite a reputation as a musician was one Hurworth, who came from Richmond, Yorkshire, and held a post in the private band of George III. Dr. Stone reports that Hurworth actually played flute variations upon his unwieldy instrument, and was considered something of a virtuoso in his time.⁴⁰ Canon Dickson, who knew Hurworth when the former was a child, describes that serpentist's instrument "as painted light green, with a gilded imitation of a scaly skin, and a wicked looking head, with protruding forked tongue. Another instrument painted black, with

37 . The introduction of the serpent into the Bands of the Guards Regiments has been traced by H.E. Adkins in his *Treatise on the Military Band*, second revised edition (London: Boosey & Co., 1958) p. 5. The following quote is taken from the "Musical Memoirs" of W.T. Parke: "The Bands of the three Regiments of Guards consisted, in 1783, of only eight performers—two Oboes, two Clarinets, two Horns, and two Bassoons. They were excellent performers on their instruments, and were paid by the month, being well paid. They were not attested, and only played from the parade at the Horse Guards to St. James' Palace while the King's Guard was mounted, and back again from there to the Horse Guards. Lord Cathcart, an officer of the Coldstreams, desired the Band to play during an aquatic excursion to Greenwich. This the musicians deemed to be incompatible with their respectable musical engagements, and they declined to do it. The officers, who had to subscribe, and were responsible for, the pay of the Band, became desirous of having a Band which they could command on all occasions, and a letter to that effect was written to the Duke of York, Colonel in Chief of the Regiment. The Duke, who was at that time in Hanover, consented to the wish of his officers, and with the approval of the King, a Band of a much larger number than hitherto employed, and composed entirely of Germans, was sent over. It consisted of twenty-four members and included Clarinets, Horns, Oboes, Bassoons, Trumpets, trombones, and Serpents, while three Black men were employed to beat Tambourines and carry Crescents." Adkins goes on to state: "This was the forerunner of our present Military Bands, and was in fact, the same kind of Band as used in Germany at that time."

38 . Morley-Pegge and Bate, "Serpent," *New Grove Dictionary* Vol. III, p. 349.

39 . Marcuse, *Survey of Musical Instruments*, p. 780.

40 . Reported in several sources, including: Orland A. Mansfield, "That Old Serpent" *The New Music Review*, (New York, 1920) Vol. 19, No. 227, p. 363.

less decoration, was perhaps used on wet days."⁴¹ This was after the death of George III, and Hurworth had returned to his native town of Richmond. The instrument described was almost certainly, considering the description and the period (about 1830), a Russian bassoon — which as will be seen later was often constructed and decorated in zoomorphic fashion. It could possibly have been a serpentine constructed instrument, however, as the description given is not detailed enough to be *completely* certain.⁴² The description of the "skin" color and scale pattern seems to be unique in sources that have been researched. Two more serpentists of this period who seem to have been considered fine players both belonged to the Sacred Harmonic Society: Messrs. Standed and Pimlett.⁴³

In France the serpent continued to be mainly used in sacred music until the time of the Revolution, when it appeared in large numbers in military bands. The first of many bassoon-serpents (upright military serpents) was introduced in 1788. Although its inventor was the Frenchman, J.J. Règibo,⁴⁴ France seems to have been the last country to adopt types of serpents other than the serpent d'Eglise.

In 1795 French bands consisted of one flute, six clarionets, three bassoons, two horns, one trumpet, one serpent and several snare drums, effecting quite an improvement over the days of Louis XIV.⁴⁵

The eminent musicologist Karl Haas has discovered a number of military marches used in Germany composed between 1750 and 1764 containing serpent parts, but this appears to be the only evidence of such usage before the last quarter of the 18th century. Although some upright military serpents were in use in the 19th century in Germany, they were evidently discarded in that country earlier than elsewhere, most likely due to the earlier adoption of brass valved instruments. It should be noted, however, that it is dangerous to generalize too extensively on the historic utilization of instruments in a

41 . Ibid.

42 . No serpentine constructed instruments that incorporate such zoomorphic features are known to be extant, however, nor have descriptions of any such instruments been found.

43 . Mansfield, op.cit.

44 . Règibo was in England at the time, however.

45 . Arthur A. Clappé, *The Wind-Band and its Instruments* (Portland, Maine: Longwood Press, 1976 [reprint of 1911 edition]) p. 8. Note: Military bands at the time of Louis XIV consisted, according to Clappé, of oboes, bassoons and snare drums.

46 . According to the curator of the instrument collection at Colonial Williamsburg.

fairly large geographic area. For example, the serpent must have been present in Hanover, at least, in military bands for it to have been present in the band imported for the Coldstream Guards, even though it was evidently not used in other areas of Germany.

The serpent was present in Colonial America, and at least two instruments were in Williamsburg, Va., by the time of the Revolution.⁴⁶ The Marine Band in Washington, D.C., had, by the time of President Madison (1809-17) "...in addition to oboes, clarinets, bassoons, and horns — a bass drum, bugle horn, pair of cymbals, and that raspy predecessor of the bass tuba, the serpent."⁴⁷ Many other sources seem to accept that American military bands were modeled on their contemporary European, particularly English, counterparts, and that serpents were at least occasionally present. For example:

Early nineteenth century American and European bands consisted of pairs of clarinets, oboes, horns, and bassoons, with the possible addition of one or more of the following instruments; trumpet (without keys or valves), flute, trombone, serpent, and percussion (triangle, Turkish crescent, cymbals, drums).⁴⁸

In spite of the popular conception of military music during the American Revolution as consisting entirely of fifes and drums, Anderson has documented six "bands of music" (as distinguished from fifes and drums) in the Continental Army of Gen. George Washington. In summarizing the activities of these bands before 1800, Anderson states:

...a half-dozen of these full military bands have been documented ... the bands of Jackson, Proctor, Webb, Crane, Cortland, and Febiger. Others may have existed. The bands under the control of Proctor, of Webb, and of Crane held together through the entire duration of the War, and they were in great demand for all manner of special occasions.⁴⁹

Like their earlier and contemporary European counterparts, these American military musicians were hired professionals and played oboes, clarinets, bassoons, and horns, and sometimes flutes, trumpets, serpents, and drums. The colonel of the regiment, usually together with his officers, maintained a fund to hire them, provide them with uniforms and keep, and supply them with music and instruments. Another source worth quoting has also commented on the development of bands in America:

Even at the time of the Revolution, American marching bands were more complex than the simple militia corps of fife and drums illustrated in popular histories. Depending on the personal wealth of a regimental commander, he might well have a wind band of

47 . Elise K. Kirk, *Music at the White House* (Urbana, Illinois: University of Illinois Press, 1987) p. 41.

48 . Robert Garofalo and Mark Elrod, *A Pictorial History of Civil War Era Musical Instruments & Military Bands* (Charleston, W. Va.: Pictorial Histories Publishing Co., 1985) p. 9.

49 . Simon Vance Anderson, "American Music During the War for Independence, 1775-1783." (Ph.D. Dissertation, University of Michigan, 1965) p. 27.

from six to eight professional players. Such groups consisted of pairs of oboes, clarinets, bassoons and French horns; and their sound is well known to us from many arrangements of march music for harmoniemusik (wind bands) by composers such as Haydn and Mozart. Thomas Jefferson, when he moved into the White House, tried to convert his Marine musicians from fife and drums to the more musical wind band, but eventually he hired professional musicians.

Although the wind band remained the standard — gradually expanding with the addition of higher clarinets, flutes and piccolos, and lower-pitched serpents and ophicleides — by the 1840s the introduction of valves on brass instruments encouraged the creation of complete brass ensembles. Thus the reedy wind band was overwhelmed by the brazen sounds we associate with the mid-nineteenth century parade band.⁵⁰

The Hazens report that in 1806 the instrumentation of the Salem Brigade Band of Salem, Mass., consisted of five clarinets, two bassoons, one trumpet, triangle, and bass drum. They then go on to say that: “Eventually, a French horn, two trombones, and a serpent were introduced to fill out the ensemble.”⁵¹

As military bands began to expand their instrumentation during the last three decades of the 18th century, they began to constitute a musical ensemble capable of much more than strictly military functions. Indeed, many sources began to list the use of such ensembles to perform entertainments associated with various court and civic functions, participate in church and other religious services and ceremonies, and eventually to present full concerts in the modern sense. While it is outside the scope of the present work to consider the full development of the wind band, it is interesting to examine at least cursorily the history of such groups as it relates particularly to the use of the serpent. It is valuable to keep in mind that these professional wind players were usually the highest caliber of musician available, and were often exploited in the development of art music by composers of the Classical period — and on into the Romantic period.

Arrangements for wind ensemble of operatic material and other popular compositions for other media have always constituted a large proportion of the repertoire of the wind band since its emergence as a concertizing entity. Whitwell lists hundreds of such works, and indeed has many of them available for purchase.⁵²

Possibly the earliest reference to a serpent being used in Prussian military wind band music in the Classical period is in an early German opera arrangement of an aria:

50 . Frederick Selch, “The Great American Marching Band” *Ovation*, July 1986, p. 10.

51 . Margaret Hindle and Robert M. Hazen, *The Music Men* (Washington, D.C., and London: Smithsonian Institution Press, 1987) p. 7.

52 . A catalogue may be obtained from: Winds, Box 513, Northridge, Calif. 91328.

“Allegretto” from *La dama Soldato* by Johann Gottlieb Naumann (1741-1801). “Here it is called ‘Retiret’, suggesting its use in a typical evening concert, and is scored for pairs of oboes, clarinets, bassoons, horns, trumpets, and serpent.”⁵³ As most of the compositions and arrangements for such ensembles are undated, and even published works often do not carry dates, it is only possible to guess at the probable period of composition from other known data, such as the composer’s or arranger’s dates of birth and death, and known periods of employment associated with works that belonged to or had been used by particular ensembles at specified periods.

Sources as to the instrumentation of ensembles, even of the same ensemble at the same period of time, do not always agree. Perhaps this is due to different size groups and correspondingly different instrumentations having been used by the same organization for different functions, as well as the possibility of different instrumental forces having been scored for various compositions and concerts by the composers or arrangers. One of the most quoted sources gives the following instrumentation, which may be seen to differ somewhat from other lists from the same period which will be given later.⁵⁴ Typical French infantry bands in the year 1790 consisted of a piccolo, two oboes, four clarinets, two bassoons, two horns and four percussion. By the year 1795, the instrumentation remained the same, with the exception of the substitution of “bass horns” for bassoons.⁵⁵ “Bass horns” here in all probability refers to the serpent, as various serpent derivatives such as the English bass-horn or Russian bassoon were not otherwise known to have been used in France at this early date.

Military bands with the new clarinets and horns seem to have appeared in Italy only late in the eighteenth century.^[56] According to Mosto, it was only then that one found both the “band proper,” consisting of oboes, clarinets, horns, bassoons, and trumpets, and the “Bande Turche,” with oboes, clarinets, trombones, serpents, and percussion in the civic militia of Rome.⁵⁷

If indeed the “Bande Turche” in Italy always, or even usually, contained serpents, as seems to be implied in the above quotation, then a vast amount of compositions and arrangements whose instrumentation is indicated only as “Bande Turche” (and not specifying serpent) could be added to the hundreds of compositions listed in Whitwell

53. Whitwell, *Classic Wind Band*, Vol. IV, p. 101.

54. *Ibid.*

55. Ludwig Degele, *Die Militärmusik*, Wolfenbüttel, 1937. Quoted in Whitwell, *ibid.*, Vol. IV, p. 117.

56. Note, however, the picture (No. 26) of a “Serpentone” in the 1716 “Gabinetto Armonico” of Filippo Bonanni, published in Rome in 1723. (Reprinted as *The Showcase of Musical Instruments* by Dover Publications of New York in 1964.)

57. Whitwell, *Classic Wind Band*, Vol. IV, p. 118. Referring to Andrea da Mosto, “Milizia dello

as including serpents. Judging by the many references to Italian serpents, the number of extant instruments, and the small amount of music actually specifying serpents, rather than “bassi,” etc., this is probably the case. Since “Bande Turche” actually refers to the use of “Turkish” instruments—percussion instruments such as cymbals, the crescent, bass drum, etc.—however, it is not possible to assume that *all* music for groups termed as such necessarily also included the serpent.

As has already been noted, the first documented appearance in England of the serpent in military bands was in the entirely German band brought from Hanover by the Duke of York, colonel-in-chief of the Coldstream Guards, as a replacement for the civilian musicians previously hired by the month, and which had consisted of pairs of oboes, clarinets, horns, and bassoons. The new band, which was certainly the most influential military band of the time, arrived in England no later than 1785. Farmer states that the new band was comprised of at least 12 members: four clarinets, pairs of oboes, bassoons, and horns, one trumpet and one serpent.⁵⁸ However, another source says the band arrived in 1783, and consisted of 24 members, including clarinets, horns, oboes, bassoons, trumpets, trombones and serpents, “whilst three black men were employed to beat the tambourine and carry a crescent.”⁵⁹ Whitwell agrees with Farmer, who, although not giving sources, is supported by the extant military music of this period in England, some of which it is possible to identify as actual repertoire of this band.

Farmer is also the source for the instrumentation of various other military bands of the 18th century. Referring to the largest instrumentation listings he had seen for guards bands at this period, he states that the Grenadier Guards in 1794 had in their band a flute, six clarinets, three bassoons, two serpents, trumpet, three horns, and percussion. He also gives the instrumentation for the Royal Artillery Band in 1795 as being a flute, two oboes, four or five clarinets, two bassoons, two serpents, and a trumpet.⁶⁰

The most important military bands of the Classical period in England, Scotland and Ireland, in terms of the extant body of literature available to us, were not the admittedly pace-setting bands supported by the professional officer corps, but rather the much more numerous bands of the civic militia. The civic militia organizations were local, part-time civic volunteers, which appear to have almost universally maintained their own bands—even in the tiniest of villages. Found throughout the Classic Period, “In England these

Stato Romano,” *Memorie Storiche militari, Comando del Corpo di Stato Maggiore* (Castello, 1914).

58 . Henry George Farmer, *The Rise & Development of Military Music* (London, 1912) p. 63. Quoted in Whitwell, op.cit., Vol. IV, p. 122.

59 . W.T. Parke, *Musical Memoirs* (London, 1830) Vol. II, p. 239ff. Referred to in Whitwell, *ibid.*, Vol. IV, p. 123.

60 . Farmer, op.cit., p. 84. Referred to in Whitwell, *ibid.*, Vol. IV, p. 125.

local militia corps received new stimulus from the outbreak of hostilities with France during the 1790's and it is from this period that the majority of all extant titles of eighteenth century English military music dates."⁶¹ It was during this period that a great number of English and Scottish towns and villages were memorialized by compositions for their bands which were often published, to the pride of their citizens. Even a composer of Haydn's magnitude honored the Derbyshire militia with two original marches written for that group during his visit to England in 1794. This proliferation of wind bands of course provided for increased use of the serpent, both in its original form and very soon in the guises of its various offspring as well.

The most common duty of the military bands in any form was certainly participation in military reviews or parades. However, they also provided entertainment at balls, between the acts of stage productions, and during the intermissions of other concerts. It also became common for such bands to play concerts, or perhaps more accurately background music, at such "Pleasure Gardens" as Vauxhall and Marylebone. In such contexts the serpent became more and more used, leading eventually to its inclusion in more serious artistic ensembles, and even to a role as a soloistic and even virtuoso instrument in its original as well as various developmental forms.

When wind bands or ensembles were found in churches during the Classical period, they were usually appearances of either an aristocratic court ensemble or one supported directly by the church. In England, in particular, the "gallery"⁶² bands were still in existence in place of the earlier banned organ. These bands were made up of citizen volunteers instead of the traditionally regularly employed civic musicians (Waits, etc.) from earlier eras. No references have been found as to the earliest uses of serpents in these ensembles, but they were certainly being used by the last quarter of the 18th century in significant numbers. It is at this time, and in the context of the military and the church wind bands, that serpents seem to have first been used as an ensemble instrument as a standard practice. Serpents appear to have been used little or not at all during the Baroque period in connection with other instruments in ensemble, in spite of the reference in Mersenne that they formed the true bass to ensembles of cornetts.

In Europe when regular wind players were employed by the church during the Classic period they seem to have been used only for the support of choral music. Burney reported hearing a serpent together with two bassoons participating in a high mass while in Antwerp, but was evidently not completely pleased by the effect.

... a considerable part of the service was chanted in *Canto Fermo*, with only

61 . Whitwell, *ibid.*, Vol. IV, p. 129.

62 . Called "gallery" bands because of their location in the church.

a *serpent*, and two bassoons in accompaniment. ... The bassoon players in common use, are worse than those nocturnal performers, who, in London, walk the streets during winter, under the denomination of *Waits*; and for the *serpent*, it is not only over-blown, and detestably out of tune, but exactly resembling in tone, that of a great hungry, or rather angry, Essex calf. Before the service in the choir began with the organ, the canons and boys marched in procession round the church, with each a lighted taper in his hand, chanting the psalms, in four parts, with the two bassoons, and serpent above-mentioned; but all was so dissonant and false, that notwithstanding the building is immense, and very favourable to sound, which it not only augments, but meliorates, and in spite of two or three sweet and powerful voices among the boys, the whole was intolerable to me....⁶³

During a later visit to the same town, he mentions a procession using two horns and serpents:

At six o'clock this evening a splendid procession passed through the streets, in honour of some legendary saint; consisting of a prodigious number of priests, who sung psalms in *Canto Fermo*, and sometimes in counter-point, all the way to the church, with wax tapers in their hands accompanied by French horns, and *Serpents*....⁶⁴

This particular combination of horns and serpents constitutes a unique ensemble in the references researched, but is only one in a volume too extensive to enumerate supporting the extensive use of serpents at this time in ecclesiastical environs.⁶⁵

It should not be thought that Burney was always opposed to serpents, or found them objectionable. Indeed, what appears to be his first experience with them was reported in quite glowing terms:

In the French churches there is an instrument on each side the choir, called

63 . Charles Burney, *The Present State of Music in Germany, the Netherlands and United Provinces*, second edition, corrected. (London: T. Becket, 1775). Facsimile edition (New York: Broude Bros., 1969). Vol. I, p. 34.

64 . *Ibid.*, Vol. I, p. 43.

65 . Burney also is the source for a comment that at Notre Dame in Paris in 1770, little use was made of the organ, as the voices were accompanied by a serpent. *Ibid.*

the *serpent*, from its shape, I suppose, for it undulates like one. This gives the *tone* in chanting, and plays the base [sic] when they sing in parts...it mixes with them better than the organ...is less likely to overpower or destroy a bad temperament, that perfect one, of which the voice only is capable...The *serpent* keeps the voices up their pitch, and so is a kind of crutch for them to lean on.⁶⁶

During the Classical period, with the restructuring of society and the growing importance of the middle classes, the need for increasingly extensive musical entertainment at such places as the "Pleasure Gardens" in England was one of the factors contributing to the development of the new civic bands. These new civic wind bands were composed of amateurs—in contrast to the professional musicians of previous periods—and established a pattern characterizing the broad entertainment functions of civic bands to the present day.

In France these new civic bands began to be established at the end of the 18th century. Even though their activities were often interrupted in their earliest stages by the Revolution, the beginning of a number of famous societies can be dated from this period. The rapid spread of civic wind ensembles led to a corresponding increase in the use of the *serpent*, for this was certainly the most valuable bass instrument of the period. The *Musique municipale du Mans*, for example, founded in 1791, "...was such a well organized band in 1799 that the government commissioned it to serve under the national guard..."⁶⁷ This band consisted in that year of four flutes, one clarinet in F and 10 in C, three bassoons, two trumpets, three horns, two trombones, two *serpents*, *buccin* and eight percussion (1 *grosse caisse*, 2 *cymbaliers*, 1 *caisse roulante*, 2 triangles, 1 *bonnet chinois*, 1 *tambour chinois*). After the Napoleonic Wars, thousands of such societies began to flourish throughout Europe, modeled after and inspired mainly by the large bands developed as the center of civic activities and festivals, particularly in Paris, during the French Revolution.

The famous Festival of the Federation of July 14, 1790, with its massed musical forces of a size never before attempted, had a great influence on the subsequent development of wind bands, particularly after the ending of the austerity measures during the Napoleonic period. It was at this very time that the *serpent* reached its pinnacle as the most effective bass instrument of its period—a position it would continue to command together with its various offspring for the next half century. The larger bands

66. Charles Burney, *The Present State of Music in France and Italy* (London: Becket et al., 1773). Facsimile edition. (New York: Broude Brothers, 1969) pp. 11-12.

67. Whitwell, *op.cit.*, Vol. IV, p. 150.

with their increased volume requirements led to the replacement or augmentation of the bassoon by the serpent, with its more powerful voice (particularly in the lowest register). That the serpent was not new to this function at the time of the Festival of the Federation in 1790 is evident from the fact that according to several accounts there were 50 serpents participating with the other 300 wind instruments and 300 drums present in the band!

The festival was such a tremendous success, and its popularity with the citizens of France so immense, that the politicians quickly moved to capitalize on its unforeseen implications. Many further festivals were organized to celebrate almost any possible occasion, event, or ideal: not only entertaining the citizens, but arousing patriotic support for the leaders and politics of the regime at the same time. This politicalization of music led to wide spread support for wind bands, and very quickly so! By Oct. 1, 1790, the Commune of the City of Paris had established a paid corps of musicians for the Guards. Named to be chief administrator of this band from its official inception, Bernard Sarette became a pivotal figure in the development of a free music school for the training of musicians for the Parisian National Guard, an institution subsequently begun by an order of the General Council on June 8, 1792. This wind instrument school of music, the beginning of the institution which later became the National Conservatory of Music in Paris, had from its beginning a number of instructors on the serpent.

The earliest existing document referring to the personnel of the school is a payroll memorandum dated November, 1793.⁶⁸ The faculty at this time contained two teachers, both "First Class," of the serpent: Jean Mathieu and Gaspard Veillard (who also taught bassoon). By Nov. 21, 1793, Jacques Cornu was added to the faculty on a provisional basis as a teacher First Class of serpent and bassoon. It should be noted that musicians often played both instruments, as their function was the same as a bass instrument in the early wind bands, and teachers similarly often instructed students of both instruments. Indeed, this association was so strong that the serpent has often been referred to historically as a type of bassoon.

The three bass instruments of the period in France were the bassoon, serpent, and bass trombone. The bass trombone joined the others mainly in heavily scored, very loud passages. The trombone rarely had an autonomous part. Like the serpent, the bass trombone usually doubled the bassoons, but it was more likely to have a modified (simplified) part. The trombone appears rarely, perhaps never, to have doubled the bassoon part at the same time the serpent had a modified part. On such occasions, the trombone would double the serpent. In Catel's "Overture in C," for example, the bass trombone part is actually a simplification of the serpent's simplification of the bassoon part.⁶⁹

68. Whitwell, *ibid.*, Vol. IV, p. 171. Gives source as: Constant Pierre, *B. Sarette et les origines du Conservatoire National de Musique et de Déclamation* (Paris, 1895) p. 36-37.

69. David Michael Guion, "The Trombone and its Music, 1697-1811." (Doctoral thesis, University of Iowa, 1985) p. 322-323.

It is interesting to examine the instrumentation of three works performed at a concert in the Feydau Theater on Nov. 7, 1794, at which the *Catel Overture in F* and the *Scène Patriotique* by Lesueur were both premiered. Also on the same program were performed the *Patriotic Ode*, by Catel; the *Overture* by Méhul; marches by Gossec and Lefevre, all for band; and a few compositions for the first time incorporating strings. Whitwell lists the instrumentation for three of these compositions which he was able to construct through extant copyist records.⁷⁰

	Lesueur	Catel <i>Ode</i>	Catel <i>Overture</i>
clarinet	20	6	14
flute	4	2	8
oboe	4	-	-
bassoon	6	6	8
horn	12	4	6
trumpet	4	2	2
serpent	3	3	4
trombone	3	3	3
tuba curva	1	-	-
timpani	1	1	2
contrabass	4	-	4

While, as Whitwell observes, these are not identical, they do give an indication of the relatively large forces being used in bands at this time—and of course also attest to the importance of the serpent in these ensembles.

After the fall of Robespierre and the conclusion of the period known as “The Terror,” the Institute was reorganized into a permanent institution under the name still used today, the Conservatoire. The organization of the conservatory is clearly delineated in the Convention’s decree, dated Aug. 3, 1795. While it is beyond the scope of this paper to examine this very interesting historical document in detail, it is nevertheless valuable to note the relative importance of the serpent.

Article 3 of the decree states that 600 pupils of both sexes would receive free instruction at the Conservatory, and would be *chosen proportionately in all departments*. The personnel list includes four professors of serpent out of a total of 21 in brass instruments (six first horn, six second horn, two trumpet, one trombone, four serpent, one bass trombone, and one tuba curva), and eight additional serpentists on the staff as part

70 . Whitwell, *op.cit.*, Vol. IV, p. 181.

of the "Performance Personnel"⁷¹ out of a total of 31 brass staff performers (six first horn, six second horn, eight serpent, three trombone, four trumpet, two bass trombone, and two tuba curva).

The above information translates into a staff of 12 serpentists out of a total combined staff of 176 professors and performers of instruments.⁷² If the proportion was actually maintained as prescribed in the decree, there would have been approximately 40 serpent students present at the conservatory at any one time. This number represents 7 percent of the student body. Similarly, an evaluation of the number of serpents used in the three compositions listed above shows a percentage of usage of serpents in each of the three compositions listed to be, from left to right, respectively 5 percent, 11 percent, and 8 percent. While it is not possible to draw any conclusions as to a standardized utilization of the serpent, because of the great variations in local ensembles as well as the different instrumentation requirements of individual compositions and arrangements, it is nevertheless evident that serpents were certainly not unusual instruments at this time.

To continue with our overview of the use of the serpent in France during this period, let us examine a concert presented in the Tuileries on July 4, 1794, to celebrate the battle which ended in the fall of Ostende. One of many such hastily organized celebratory programs, this particular performance was able to use a number of works already being rehearsed and prepared for the upcoming annual celebration of the fall of the Bastille on July 14. Of special interest was what was in all probability the premiere of a new work by Méhul, *Le Chant du départ*, a work which in its time was considered the only rival in popularity to the "Marseillaise." In contrast to the usual large instrumentation required for works performed in these popular concerts, it is scored for a relatively small ensemble of pairs of clarinets, bassoons, and trumpets, and serpent and timpani—leading Whitwell to comment that it was perhaps "...intended for field bands and not the large Guard Band in Paris."⁷³ If this is the case, it indicates that even the smallest of such ensembles included at least one serpent.

Many of the compositions performed at the above concert were repeated soon after at another concert also held at the Tuileries on July 14. This program was unique in that it was the first time an orchestra was included at one of these national festivals. Of particular interest is an extant document referring to the number of parts copied for the performance on this occasion of Catel's *The Battle of Fleurus*, a document that not only indicates the probable size of the forces used, but also the relative importance of the

71 . These performance personnel were necessary as the institution still supplied military ensembles for use in Paris at this time.

72 . There were also 49 professors and performers comprising those of Sol-fa, vocalization, chant, accompaniment, composition, directors (conductors), etc.

73 . Whitwell, op.cit., Vol. IV, p. 217.

serpent.⁷⁴

Chorus:

haute-contre	15
alto	15
bass	20

Band:

flute (first and second)	6
clarinet (first and second)	8
horn (first and second)	6
trumpet (first and second)	4
trombone (three parts)	3
bassoon (first and second)	8
serpent	10 [!]
string bass	6
timpani	6
bass drum and cymbal	6

On Aug. 10, 1794, another concert took place at the Tuileries, this time to celebrate the overthrow of the monarchy. Extant records of payments for copyists once again reveal the size of the band used during this celebration, and similarly also indicate the importance of the serpent. Following is the instrumentation for two of the works performed on this occasion—for both the Catel *Battle of Fleurus* and a new composition by Méhul entitled *Hymn of the Victories*.⁷⁵

	Catel	Méhul
flute (first and second)	8	6
clarinet (first and second)	14	14
horn (first and second)	6	6
trumpet (first and second)	4	4
trombone (three parts)	4	3
bassoon (first and second)	8	8
serpent	8	6
string bass	10	6

74 . Whitwell, op.cit., Vol.IV, p. 219. Quoting Pierre, op.cit., p. 333.

75 . Whitwell, ibid., Vol. IV, p. 223. Quoting Pierre, ibid., pp 333 and 353.

bass drum	1	1
cymbal	1	1
buccin	-	1

Almost any occasion became a pretext to stage another festival during the Revolution. During a festival held in 1795 celebrating the beheading of Louis XVI, a new composition by Lefèvre entitled *Hymn* was performed. Copyist's records indicate the instrumentation employed.⁷⁶

singers	35
clarinet	8
flute	4
oboe	4
bassoon	8
trumpet	2
horn	8
trombone	3
serpent	4
timpani	1

On Sept. 21, 1794, a multi-purpose celebration commemorating a variety of military victories as well as other occasions took place in the National Garden in Paris, followed by a procession to the Panthéon. One of the works premiered on this occasion was the *Hymn to the Panthéon* by Cherubini. Extant copyist's records for this composition, as well as for Gossec's *Hymn of Liberty*, which was repeated at this performance, reveal the size of the bands used.⁷⁷

	Gossec	Cherubini
clarinet 1	6	8
clarinet 2	7	8
flute 1	2	3
flute 2	2	3
horn 1	2	4
horn 2	2	4
bassoon 1	2	4

76 . Ibid.

77 . Whitwell, *ibid.*, Vol. IV, p. 226. Quoting Pierre, *ibid.*, p. 281 and p. 360.

bassoon 2	2	4
trumpet 1	1	2
trumpet 2	1	2
serpent	2	4
timpani	1	1
trombone	-	3
string bass	-	12
tuba curva	-	1
buccin	-	1
bass drum	-	1
cymbals	-	1

The importance of these festivals to revolutionary France, and the immense impetus given to (particularly) band music by them, is evidenced by the fact that the Convention ordered three compositions that were most probably performed at the National Garden in Paris to be published and distributed in great numbers to the other municipalities of France—more than 17,000 copies!⁷⁸ These compositions were Méhul's *Chant du départ* and *Hymn of Victories*, and Cherubini's *Hymn of Fraternity*. Although the day of the great festivals in Paris was largely over after this time, the scope of the Convention's involvement is an indication of the large number of musical organizations throughout France, and gives as well an idea of what must have been the vast numbers of serpents available everywhere in the country to participate in such numerous anticipated performances.

No information has surfaced during the course of the present investigation concerning the use of the serpent in military bands in such countries as Russia. France provided much of the culture (including the language) for the ruling classes, however, and it is quite probable that serpents were used in wind bands to at least some degree. That they were present in Russia at the time is evident in the following reference to an opera printed in St. Petersburg in 1791, composed jointly by Giuseppe Sarti, Carlo Canobbio, and Vasily Pashkeevich, on a libretto written by the Empress Catherine the Great. This opera, *Nachal' noe upravlenie Olega*, can hardly be an isolated incidence of the use of serpents.

This, the first opera published in full score in Russia, contains parts for flute, piccolo, oboe, clarinet, piccolo clarinet, bassoon, trumpet, horn, trombone, and serpent. The trombones participate in only one movement, a 36-measure march for four horns, two trombones, two serpents, and triangle. As in French military music, the trombones play a simplification of the serpent part.⁷⁹

78. Whitwell, *ibid.*, Vol. IV, p. 227. Quoting Pierre, *ibid.*, p. 345, 352, and 362.

79. Guion, *op.cit.*, p. 174-175. Guion gives as his source; Alfred Loewenberg, *Annals of Opera, 1597-1940*, third edition, revised and corrected. (Totowa, N.J.: Rowman and Littlefield, 1978) col. 484.

Romantic Period

The story of low brass instruments in the 19th century, the period of the greatest change and development in all of the brasses, begins with the serpent. Although still being used in its original form, it began to be supplied with additional keys around the end of the 18th century, and to undergo metamorphosis into other shapes and forms as well.

Unfortunately, many of the “improvements” added to the serpent did not necessarily accomplish their intended results.⁸⁰ Not only were some of its inherent weaknesses not alleviated, there was a tendency on the part of serpentists to rely on the new mechanical devices as being cures for the problems of their instruments, replacing the need for the long meticulous practice and understanding of their idiosyncrasies necessary to ameliorating them. This situation was further exacerbated by volume, technique, and range increments required by expanded compositional and performance goals. The serpent and its successors accordingly were not able to accomplish all that was now required of them, and soon became the object of extensive criticism—often rather vitriolic. Many such comments, particularly by such respected composers as Berlioz, have been quoted and re-quoted—resulting in a lack of appreciation of what the serpent’s role actually was (and still should have been) as an instrument used successfully for at least 250 years.

Berlioz called the serpent “Frigid and abominable blaring...essentially barbarous...,” but nevertheless he scored for it, as did Mendelssohn and Wagner. For the purposes of an orchestral brass bass in the much larger instrumental forces of the Romantic period orchestra, the serpent was just not adaptable enough in any of its forms. The instrument first developed from it, the bass horn, was little better—Berlioz observing that it “might be withdrawn from the family of wind instruments without the

80. In spite of such claims to the contrary as the following: “The holes are curiously disposed along the tube for convenience in reaching them with the fingers; in consequence they are of very small diameter, and this affects the intonation and timbre of the instrument adversely [true so far!]. With the application of keys to the serpent, which made it possible to place the holes approximately in the correct theoretical position, whereby the diameter of the holes was also made proportional to that of the tube, this defect was remedied and the timbre improved.” From “Serpent,” *The Encyclopaedia Britannica*, 11th edition, (New York: Encyclopaedia Britannica, Inc. 1911) Vol. XXIII, p. 675.

slightest injury to Art."⁸¹

The main contributory factors to the serpent's demise during the 19th century were attempts to use it in ways for which it was not suited, and, judging from such admonitions as J.B. Métoyen's in his manuscript tutor written (but rejected in favor of another one written by Gossec, the head of the Conservatoire) for the Paris Conservatoire, the ever-growing tendency to extend the instrument's range upward. In this tutor he complains of the common practice of ending up on a high d (the eighth partial of the French instrument in D) instead of on a "belle pedale," which vice he likens to "wind whistling through the clerestory windows." He is writing of course of the still quite common use of the serpent in church, and goes on to advise the pupil that he is supposed to be playing the serpent, rather than imitating the trumpet.

After several other developmental forms, the ophicleide began to be used in France from about 1821, soon spread to other countries, and found its way into the orchestral and operatic scores of such masters as Mendelssohn, Meyerbeer, Schumann, Berlioz, Verdi, Wagner, etc., not to mention numerous wind band scores. It was much superior to the serpent and its other earlier offspring, but appeared both "too late and with too little" (particular volume and accuracy of intonation), and soon the entire family was replaced by the tuba, which was patented in Berlin in 1835 by Wieprecht. This is not to say that the instruments immediately disappeared from the scene. There were too many still in existence for that to have happened, and they continued to fulfill their function nicely in the hands of older experienced players in many smaller wind ensembles. Therefore, as will be explored later, serpents and their family, and particularly ophicleides, continued to be manufactured, "improved" as evidenced in many patents, and played well through the 19th century, and even into the 20th.

It appears that the serpent, although used so extensively in France, England, the Low Countries, Spain and Italy, was a little late in realizing its potential in the military wind ensembles of Prussia and most of the other German states. That this was not necessarily true of all of the German states is evidenced by the presence of serpents in the band recruited in Hanover for the Coldstream Guards, as discussed earlier. Of course, it is always inadvisable to generalize about the use of the serpent in a comparatively large geographic area from evidence, no matter how strong, of its use in one particular city or locale. Records are simply not extensive enough, or have not been researched sufficiently, to make positive statements about specific or general influences of instru-

81. Hector Berlioz, *Traité d'instrumentation et orchestration* (Paris: Henry Lemoine et Cie, 1844) extended and revised by Richard Strauss. Translated by Theodore Frost. (Melville, N.Y.: Kalmus Press, 1948)

mentation usage influencing even quite nearby centers of musical performance from those few for which definite specific data is available.

In regard to Prussian military bands at the turn of the century, Kalkbrenner, without source, suggests that a typical infantry band instrumentation until 1805 consisted of pairs of large flutes, oboes, clarinets, bassoons, invention-horns, invention-trumpets, and bass trombones. To this instrumentation there was added in 1806 an Eb clarinet, serpent, contrabassoon, two trombones and percussion.⁸² The serpent must have been used earlier in other German bands, however. Baines cites, for example, the use of serpents by the Saxons in their *Jäger* "Horn music" together with trumpets in various keys, horns, and trombones around the year 1809.⁸³ Another source gives the typical regimental band instrumentation at the beginning of the 19th century in Prussia, Hanover, Saxony and Austria as being two or four clarinets, pairs of flutes, oboes, bassoons and horns, with trumpets, trombones, contrabassoon or serpent, and percussion.⁸⁴ This practice of using either contrabassoon or serpent points out once again the similar function of the serpent and the bassoons or contrabassoon. In all of the original scores for wind ensemble examined to date, the parts for the two instruments are either identical, double at the octave, or in some instances are elaborations or simplifications of each other. It can be assumed that the actual instrument used on any given occasion was that most readily available, and that serpents might have been used rather often to replace the contrabassoon scored for in so many German military and non-military wind bands, particularly after the end of the 18th century.

An official *Allerhöchste Kabinett-Order* dated Oct. 16, 1820, prescribes the instrumentation of the Berlin line infantry band in 1820, an instrumentation that is basically an extended Harmoniemusik.⁸⁵

82 . A. Kalkbrenner, *Wilhelm Wieprecht* (Berlin, 1882) p. 34. Quoted in Whitwell, *The 19th Century Wind Band and Wind Ensemble*, Vol. V of *The History and Literature of the Wind Band and Wind Ensemble* (Northridge, Calif.: WINDS, 1983.) p. 11.

83 . Anthony Baines, *Brass Instruments* (London: Faber & Faber, 1978) p. 189. Along with the natural trumpets appear bass trumpets (natural), and *Inventions* (hand-stopped) trumpets. The serpent part illustrated on the same page is on the same score as and doubles the second trombone.

84 . Kastner, op.cit., p. 173. Quoted in Whitwell, op.cit.

85 . Quoted in Whitwell, *ibid.*, Vol. V, p. 26. Whitwell gives a succinct explanation of "Harmoniemusik" in Vol. 3, op.cit., p. 1. "Harmoniemusik might generally be defined as ensembles of from 5 to 13 wind instruments, but always with a nucleus of either two oboes, two clarinets or all four, plus two horns and two bassoons. A five-part harmoniemusik drops one bassoon part; larger groups add to the nucleus. During the time of Mozart in Vienna, the term seems to have meant the 'Classical Octet,' of pairs of oboes, clarinets, horns, and bassoons." Also: "Earlier scholars, without the benefit of recent research, tended to declare this music as belonging to the military sphere. Now that a more comprehensive view is possible, it is quite clear that this repertoire was, for the most part, performed by court wind ensembles and had nothing whatever to do with the military." "Until fifteen years ago few scholars could have named more than ... [a]

2 flutes	2 oboes	2 clarinets in F
4 bassoons	contrabassoon	6 clarinets in C
2 trumpets	2 horns	3 trombones
basshorn	5 percussion (small and large drum, cymbals, triangle, Schellenbaum)	

The basshorn referred to would normally be a bassoon russe or other variety of military serpent, but might be upon occasion a true serpent, or an "English" basshorn.

Kalkbrenner, based on the extant scores of Neithardt, Weller, and Schick, suggests the following as a typical Prussian infantry band instrumentation of the 1830s—in other words immediately preceding the period of Wieprecht and his reorganization of all of the Prussian military bands.⁸⁶

large and small flutes
 clarinets in F and Eb
 clarinets in C, Bb and A
 bassethorns
 oboes
 bassoons
 contrabassoon
 English-basshorn
 serpent

4 chromatic horns [valved]
 4 chromatic trumpets [valved]
 chromatic altohorn
 tenor and bass trombones
 Harmoniebass⁸⁷
 large and small drum
 triangle
 cymbals

handful of works, but since that time a great number have been uncovered."

86 . Kalkbrenner, *op.cit.*, p. 34-35. Quoted in Whitwell, *op.cit.*, Vol. V, p. 28.

87 . This Harmoniebass is, according to Kalkbrenner, *op.cit.* a bass horn with nine keys, introduced in 1829, and should not be confused with the 1839 invention by Johann Stehle of Vienna, a metal contrabassoon called "Harmonie-Bass."

In reference to the Prussian Jäger bands under Johann Gottfried Rode (1797-1857), Whitwell quotes:⁸⁸

In 1832 Rode added the valved bass trombone (Vienna valves), finally arriving at a fairly stable instrumentation for the period 1837-1850;

- 3 Kenthorns [keyed bugles] in C
(after 1847, cornets)
- 3 chromatic trumpets
- 9-10 chromatic horns
- 1 alto horn (after 1847, alto cornet)
- 1 chromatic tenor horn
- 1 valve bass trombone
- 1 Harmoniebass (later, tuba)
- 1 bombardon (later, tuba)

According to a letter by Spontini,⁸⁹ the normal regiment of Prussian infantry had by 1848 a band constituted as follows:

- 8 or 10 clarinets given the melody, with two small clarinets.
- 8 or 10 clarinets serving as accompaniment
- 2 first oboes
- 2 second oboes
- 2 bassett horns (first and second)
- 2 flutes or piccolo
- 2 first bassoons
- 2 second bassoons
- 4 horns
- 4 trumpets; 2 "ordinaires," two valved
- 4 trombones (ATBB)

88 . Whitwell, op.cit., Vol. V. p.30. Quoting Theodore Rode, "Zur Geschichte der Kgl. Preuss. Int.-and Jäger-Musik," in *Neue Zeitschrift für Militärmusik*, XLXIX, pp. 149, 161, and 173ff.

89 . Quoted in Kastner, op.cit., p. 196-197. Source Whitwell, op.cit., Vol. V, p. 40.

serpent
 contrabassoon (often two)
 tuba, bombardon, or bass horn
 1 or 2 small drums
 cymbals
 triangle

Notice the use of contrabassoons (often two) in the above list. Bevan has suggested that the serpent took a longer time to be established in Germany than in France and England because of the fact that the double bassoon had been well established there as the bass of the wind band.⁹⁰

On Aug. 22, 1849, Wieprecht conducted a massed band performance in the Tivoli park in Berlin, using 300 singers and 452 musicians, including "serpents, and other bass instruments."⁹¹ In 1857, after years of struggle and recommendations, he received the authority to reorganize the Prussian military bands using a completely unified system. This reorganization resulted in the elimination of all serpents and related instruments.

A color lithograph of a "Regiments Bande" from 1823 located in the Heeresgeschichtliches Museum in Vienna pictures a band of at least 36 players on parade. This lithograph appears to be nearly identical to an instrumentation which Kastner gives as typical for the Austrian infantry after the year 1827:⁹²

piccolo in Db
 clarinets in Ab
 clarinets in Eb (four parts) [!]
 bassoon
 serpent
 trombones (three parts)
 horns (four parts in Eb and Ab)
 key-trumpets in Eb
 trumpets in low Eb
 trumpet in F
 trumpet in C
 trumpet in Eb

90 . Bevan, *Tuba Family*, p. 50.

91 . Whitwell, op.cit., Vol. 5, p. 41, footnote 121. Gives as source *Neue Zeitschrift für Musik* (1849), XXXI.

92 . Quoted in Whitwell, *ibid.*, Vol. V, p. 51. Referring to Kastner, op.cit., p. 195.

tambour

Examples of Austrian military band instrumentations from after about 1845 reveal no subsequent use of the serpent and its relatives.

To return to France during the Napoleonic period, it has already been discussed how the impetus of the extraordinarily large concert wind bands associated with the French Revolution at the end of the 18th century resulted in similarly large military bands as well by the beginning of the 19th century. An instrumentation list of the French imperial infantry bands for 1802 has been reported in a number of sources,⁹³ and reads as follows:

1 piccolo
 1 clarinet in F
 16 clarinets in C
 4 bassoons
 2 serpents
 2 trumpets
 1 bass trumpet
 4 horns
 3 trombones
 percussion

Under Napoleon, however, the size of military bands was drastically reduced. Napoleon's ordinance of 1807 limited infantry bands to nine players—an impossible limitation that forced the officer corps to bear the cost of hiring additional civilian musicians. The typical line infantry band remained rather small, even so, averaging about 22 players, half or slightly more of whom were hired civilian musicians. Kastner gives as a typical line infantry band for 1809 the following instrumentation:⁹⁴

piccolo
 small clarinet
 6-8 clarinets in C
 2 bassoons
 2 horns

93 . Farmer, *op.cit.*, p. 81, Kastner, *op.cit.*, p. 171, and quoted in Whitwell, *ibid.*, Vol. 5, p.70.

94 . Kastner, *op.cit.*, p. 171, referring to: Ludwig Degele, *Die Militärmusik* (Wolfenbüttel, 1937), p. 127. Quoted in Whitwell, *ibid.*

2 trombones
trumpet
serpent
percussion

Further growth was limited (even if it had been possible under Napoleon's orders) by the heavy losses to personnel experienced during his campaigns. It has been reported that more than 2,000 French military musicians lost their lives during the offensive in Russia alone.⁹⁵

After the first quarter of the 19th century ophicleides began to appear in scores and instrumentation lists. Serpents and their derivatives no longer appear in new compositions and arrangements. The ophicleide, deriving its name from two Greek words meaning serpent (ophis), and keys (kleis), certainly possessed the advantage in power, technical facility, intonation, ease and consistency of tone production, and durability and convenience of handling as compared to the awkward shape of the serpent. This is not to say that the serpent family was immediately entirely replaced in performance practice by the ophicleide (and soon after by the even superior valved tubas and bass saxhorns). There were just too many instruments and experienced players available for this to have happened overnight other than in the largest and most visible professional military and civic ensembles. It seems much more probable that the existing players normally continued to play the instruments with which they were already familiar, and that a complete changeover to the new brass valved basses would wait until the existing generation of players yielded to a new crop of musicians.

The same process of replacement was of course also taking place in other Western countries as well—either at the same time as in France, or in several instances a decade or more later. In Brussels, for example, a "Monster Concert" was conducted by Fétis in 1833. The forces utilized were reported to have included "a great number of ophicleides (including altos, basses, and Russian serpents)."⁹⁶

In England during the Napoleonic period, military music in general was much as it had been in the previous decades. At the beginning of the 19th century the military bands still continued to be completely supported by the officers, and not at all by the government.

...From an official governmental point of view, military music was almost non-existent during the Napoleonic period. No record of any

95 . Johannes Reschke, *Studie zur Geschichte der brandenburgisch-preussischen Heeresmusik* (Berlin, 1935), p. 46 and p. 99. Quoted in Whitwell, *ibid.*, Vol. V, p. 74.

96 . Kastner, *op.cit.*, pp. 317ff. Quoted by Whitwell, *ibid.*

bands, for example, is found in either the government or the regimental accounts for the famous Battle of Waterloo.⁹⁷

Continuing in the same paragraph the author states:

Private accounts, however, reveal that these privately supported bands were indeed present at the front, and even in the midst of the fighting, during these war years.

Despite the complete absence of government support, records from the very beginning of the 19th century demonstrate that the officers of at least some regiments supported fairly substantial bands. There exist documents showing, for example, that the Royal Irish Artillery Band in 1802 consisted of a bandmaster and 20 musicians.⁹⁸ The English Royal Artillery Band was even larger, and an extant document from about 1805 not only provides the complete instrumentation, but provides an interesting insight into the preference for the basshorn over the serpent:

Sir,

The General has asked for a description of the Band of Music which appeared at the Palace, so that he might request the Hon. Board (of Ordnance) for sundry new instruments in the place of those which are old and worn out. I have obtained (a list of) these from Mr. Eisenherdt the Master of the Band, who begs that you will have the goodness to approve of his wishes. The Band of Music has 26 musicians, counting the drummers, etc., 3 Tromboners, 2 Trumpetts, 2 French Horns, 2 Bassoons, 1 Serpent & 1 Bass Horn, 6 Grand Clarinets & 1 Small Clarinett, 1 Small Flute, 3 Hautboys, 1 Long Drum, 1 Small Drum, 1 Tamborin, 1 Cimbals ...Mr. Eisenherdt would like another Bass Horn instead of the Serpent.⁹⁹

By the year 1812 this same band had grown to 38 musicians including the percussion, according to Farmer.¹⁰⁰ Many other bands may have similarly grown at this time, due at least in part and perhaps mainly because of the public's interest in the

97 . Farmer, *op.cit.*, p. 90. Quoted in Whitwell, *ibid.*

98 . Whitwell, *ibid.*, Vol. V, p. 91.

99 . Whitwell, *ibid.*, Vol. V, p. 92. Quoting Henry George Farmer, *Handel's Kettledrums and other Papers on Military Music* (London, 1965), p. 4.

100 . Farmer, *The Rise...*, p. 85. Quoted in Whitwell, *ibid.*

Napoleonic Wars. The following quotation supplied by Whitwell points out this trend:

The *military bands of music* have been much enlarged, and the serpent, trombone and the German flute, as well as the different kinds of smaller flutes, have been introduced in them, which formerly were not generally used. England therefore has at present a great number of performers on the different wind instruments.¹⁰¹

Even though this appears to be at least 20 years too late for the introduction of the serpent in the guards bands in London, perhaps it does represent a general expansion into the smaller field bands of that instrument.

The Battle of Waterloo seems to have been the prime cause of the ophicleide's invention.¹⁰² It was also an opportunity for a fortuitous international congress of military bands. Morley-Pegge suggests that Régibo's upright serpent reached Paris via Waterloo and the Prussian bands present there in which it was used.¹⁰³ Bevan states that the English bass horn was also first introduced to the Continent at the same time, although instrumentation lists using the name bass horn (admittedly possibly referring to different instruments) appear earlier.¹⁰⁴

The post-Napoleonic era saw in Austria, Prussia, and France a period of extensive experimentation with new instruments, and a corresponding series of changes in the instrumentation of military bands. In England, however, the situation was quite different, primarily, according to Whitwell, "because she lacked during this period a strong personality, like Wieprecht in Prussia, Leonhardt in Austria, or Sax in France, to influence the thinking of the military as a whole."¹⁰⁵ Therefore, many bands in England seem to have changed but little during this time, other than gradually increasing in the number of players. Whitwell gives for example the instrumentation for the Royal Artillery Band in both the years 1820 and 1839:¹⁰⁶

101 . Whitwell, *ibid.*, Vol. V, p. 92. Referring to an article in *Quarterly Musical Register* (London, 1812) Nr. 3.

102 . See the section on ophicleide beginning on p. 58.

103 . R. Morley-Pegge, *op.cit.*, p. 333.

104 . Bevan, *op.cit.*, p.53.

105 . Whitwell, *op.cit.*, Vol. V, p. 92.

106 . Whitwell, *ibid.*, Vol. 5, p. 93. Quoting Farmer, *The Rise....*, pp. 98 and 114.

1820

2 flutes
 3 oboes
 11 clarinets
 3 bassoons
 2 trumpets
 3 key-bugles
 2 horns
 3 trombones
 1 ophicleide
 2 serpents
 2 bass horns
 5 percussion

1829

1 piccolo, 2 flutes
 2 oboes
 11 Bb clarinets, 3 in Eb
 4 bassoons
 4 trumpets
 3 cornets
 2 horns
 4 trombones
 1 ophicleide
 2 serpents
 2 bass horns
 4 percussion

Once again, these are by no means “official” governmental lists, which indeed limited the regimental band to 10 members in 1822, and 14 in 1823.¹⁰⁷ No further indications of the use of serpents or their relatives have been found in extant instrumentation lists for English Military Bands as of this time. However, it should be noted that there remains a tremendous amount of un-researched music and records extant in various sources in England and the rest of Europe. To emphasize this fact, it is interesting that there is *no* information available on the use of serpents, bass horns, etc., in Italian military bands in the 19th century—an area that could provide a great deal of as-yet-unresearched historical documentation in many areas of organology and music history.

The Serpent in Concert

Military bands have had a long history of being used to play concert (other than functional) music, and to participate in church as well as community events. The serpent of course figured prominently in performances of this type since the late 18th century. Non-military uses also contributed directly to its subsequent presence in the scores of major orchestral composers as well. Another influence leading to the continual expansion of its use was the fact that, during the first half of the 19th century, the serpent took the place of the contra-bassoon in France. France did not manufacture that instrument until later in the century.

The serpent often took the place of or reinforced the bassoon, which was rather too weak if unsupported to play the bass line in the expanded military bands, particularly out

107. Ibid.

of doors. The serpent was often considered a contra-bassoon as well, even though playing in the eight-foot register rather than the 16-foot one, because of its depth of sound in that range.¹⁰⁸ As Montagu has pointed out in referring to bands of the Classical period:

A number of parts survive in military music labelled *contrafagotto* and it is far more likely that these were played on the serpent than on the double bassoon; it is normally assumed that where no separate part existed the serpent doubled the second bassoon part.¹⁰⁹

Towards the end of the 18th century the civic wind bands, with their continuous tradition since the Middle Ages (together with the ancient guilds which had supported them), began to fade from the musical scene. This was primarily due to economic pressures, but two other factors also influenced their demise in many localities. First, the rising popularity of civic orchestras; and second, the presence of military bands quartered with their units in or near many towns, particularly during the Napoleonic wars. This latter factor offered a considerably less expensive alternate source of wind musicians for those functions previously fulfilled by the civic bands. As has already been touched upon, during the period of 1785 to 1815 civic militia began to be formed in countries such as England ("Volunteers") and Germany ("Schützenkompagnien"). The bands formed within these units seem to have been sometimes quite fine, judging by their often formidable reputations.

These militia bands should be thought of as civic bands, and not as authentic military bands, although some of the characteristics of the military they imitated would remain characteristics of German civic bands to the present day (such as the style of uniforms).¹¹⁰

Due to their military discipline of practicing and rehearsing, the military and civic bands of the first half of the 19th century were generally not only superior in execution when compared to their contemporary non-military counterparts, but were often the only vehicle available for performing large works by major composers—who not only authorized many transcriptions of their works for such ensembles, but often requested them from the best-known arrangers. And, it should not be forgotten that some of the

108. The contra-bassoon could be an F or G instrument (quartbassoon or quintbassoon) a fifth or fourth below the ordinary bassoon, and not necessarily a full double bassoon an octave below the latter instrument. In those cases parts written for the resulting range could be played on the serpent using the similar range obtained by "lipping" the fundamental C downward. It would seem however that the octave above these lowest notes was the usual range utilized, and was quite sufficient to perform the *contrafagotto* parts.

109. Jeremy Montagu, *The World of Baroque & Classical Musical Instruments* (London: David & Charles, 1979) p. 101.

110. Whitwell, *op.cit.*, Vol. 5, p. 143.

best known composers went even further and composed for these wind ensembles themselves, a situation that enabled them to become familiar with the possibilities of such instruments as the serpent which had been heretofore used mainly in the wind ensemble.

The caliber of military wind musicians accordingly being as high as or higher than their purely orchestral colleagues of the 18th and first half of the 19th century, the former were often called upon to play the wind parts in the performances of the latter.¹¹¹ Most of the modern conservatories were not founded until the second quarter of the 19th century, and few orchestras other than opera orchestras or court orchestras were formed until the second half of the century. Against such a background of orchestral development, the importance of the wind bands of the period, both as an entertainment and development force, becomes even more evident, not to mention their role as a pace-setter in the area of quality performance. One composer—Felix Mendelssohn—was so impressed by a public band concert he heard in northern Germany during the summer of 1824 that he composed the original version for 11-part military band later expanded into the *Overture*, Op. 24.¹¹² Mendelssohn referred to the band he heard as a "Harmoniemusik," and scored his new work for flute, pairs of clarinets in C, oboes, bassoons, and horns, one trumpet, and one bass horn.

Let us return to the development of the civic wind bands in France, one of the most fertile grounds for the contemporary growth of the serpent. We observe once again that the great surge of civic band music begun in Paris in 1790 and the resultant great civic festival compositions for band and chorus, as well as numerous serious and important overtures and "symphonies" for concert use, unfortunately came to a sudden end just before the beginning of the 19th century. This was of course due to the advent of Napoleon and his instigation of relative austerity measures in order to better support his military buildup and conquests.

The extreme popularity of these events and their corresponding political importance made it difficult to curtail them entirely, however. There continued therefore to be occasional civic fêtes offered to the populace in the spirit of those of the revolutionary days. One of the major works composed for such a festival was the *Requiem for Louis XVI* by Bochsá, a massive work in 15 movements for ATB chorus, pairs of flutes, oboes,

111. Corroboration of this statement may found in Whitwell, *ibid.*, Vol. V, p. 112, where he quotes the famous critic Hanslick.

112. Whitwell, *ibid.*, in Vol. V, p. 119, footnote no. 271, states that: "The autograph score of the eleven-wind version has now been discovered in BRD:B [the Staatsbibliothek in West Berlin]." Referring to David Reed, "The Original Version of the *Overture for Wind Band* of Felix Mendelssohn-Bartholdy" (*Journal of Band Research*) Fall, 1982, pp. 3ff.

clarinets and bassoons, four horns, four trumpets, trombone, serpent, and percussion. A second major work was commissioned of Berlioz—the *Symphonie Funèbre et Triomphale*—for a ceremony that took place on July 28, 1840, at the newly constructed monument in the Place de la Bastille. While the final version of this work calls for two ophicleides in C, and one in Bb, it is reasonable to conjecture that other members of the serpent family might still have put in an appearance at the time of the original performance.

While details of the instrumentation of particular French civic bands between 1815 and 1850 are rare, Whitwell lists the instrumentation of the *Musique des Canonnières de Lille* in the year 1817. At this time the band had two flutes, 10 clarinets, four “basses et hautbois” (bassoons and oboes), serpent, buccin, four trombones, three horns, two trumpets, and percussion.¹¹³ A similar instrumentation is given for the *Musique municipale du Mans* at the beginning of the 19th century: four flutes, clarinet in F, 10 clarinets in C, three bassoons, two trumpets, three horns, two trombones, two serpents, buccin, and percussion.¹¹⁴

France adopted the valved brass instruments earlier and in more varied forms than most other countries, and also manufactured numerous ophicleides from the invention of that instrument in 1821.¹¹⁵ It is therefore likely that it would have been very unusual to find a member of the serpent family still being used for other than ecclesiastical purposes in a few provincial locales much after the middle of the century.

With the conclusion of the Napoleonic Wars, the strongly established tradition in England of local civic militia bands began to give way to more regular civic bands. Termed “reed bands” by present English writers to distinguish them from the more recent tradition of the modern brass bands that subsequently replaced them, some of these ensembles were still called “Waits” after the traditional shawm-based band of the many centuries before the 18th. This transition from “reed” to the modern brass band can be traced in the example given in Grove’s of the York Civic Waits which disbanded in 1835, while two members had already begun double duty in helping to form a new civic brass band in that same town.¹¹⁶

113. Whitwell, *ibid.*, Vol. V. p. 163.

114. *Ibid.*

115. This is the date given as that of the original patent. However, Paul Garnault gives in his article entitled “Notes sur le serpent et l’ophicléide” in the *Encyclopédie de la Musique et Dictionnaire du Conservatoire* (Paris: Librairie Delagrave, 1927, p. 1681), the date of origin as 1816, and that the ophicleide first was found in the orchestra of the Opéra in 1817, in a performance of *l’Olympie* by Spontini.

116. Grove’s. Vol. III, p. 210; and Russell and Elliot, *The Brass Band Movement* (London, 1936) p. 47.

trumpets, plus trombone and bass horn (at this period of course a serpent family member).¹²² Another famous Harmoniemusik was established in 1801 by Duke Friedrich of Mecklenburg-Schwerin. Originally of nine members, there was later added a flute, trombone, alto clarinet and bass horn (member of the serpent family).¹²³ Whitwell quotes an article that appeared in the *Allgemeine Musikalische Zeitung* of 1812, Nr. 20, listing the members of the above Harmoniemusik by name and instruments, and including the name of a serpent player—Seipoldsdorf.¹²⁴

The last important private aristocratic wind band in the tradition that began during the Middle Ages was that of George IV of England (1762-1830). A talented musician himself, he had been an active cellist in his youth. He had established his band at least by 1811, while still Prince of Wales. After this date, and up to 1820, the group was called the Prince Regent's Band, reflecting its sponsor's change in status. In 1818, contemporary sources had described it as the finest band in Europe. The instrumentation has been described as follows:¹²⁵

8 clarinets
2 oboes
3 flutes
4 bassoons
4 serpents (1 obbligato and 3 ripieno)
4 trombones (SATB)
4 horns
4 trumpets
timpani

This is quite an interesting list, as it not only indicates the use of the very rare soprano trombone, but also is the only mention of a separate serpent obbligato player; one who could probably be compared to holding a soloist's chair in a modern ensemble.

The above band was also famous for exceptional players, many recruited from abroad, particularly Germany. One outstanding band member, however, was the serpent player, F. André, a Frenchman. He was a recognized virtuoso on his instrument, and was compared as a soloist with the famous double bass player, Dragonetti.

After the coronation of George IV in 1820 this ensemble became the King's

122 . Whitwell, *ibid.*, Vol. V, p. 212.

123 . *Ibid.*

124 . *Ibid.*, Vol. V, p. 214, footnote no. 443.

125 . *Ibid.*, Vol. V, p. 231.

Household Band for the next 10 years, and was stationed at Windsor Castle. An article in the *Brighton Gazette*, quoted by Adam Carse, gives the instrumentation for this latter period as being somewhat larger, although bass trombones seem to have partially supplanted the earlier section of four serpents:¹²⁶

12 clarinets
 3 oboes
 3 flutes
 4 bassoons
 2 basset horns
 4 horns

 2 serpents

 4 bass trombones
 alto and tenor trombones
 2 percussion

After the death of George IV in 1830 the band was dismissed. Soon reorganized by William IV's wife, Queen Adelaide, it continued to exist under Queen Victoria, although reduced in size to 17 players. In 1840 Prince Albert reorganized the ensemble with the addition of stringed instruments, and from that date it lost its character as a wind band.

The Decline Begins

The serpent family generally remained in the graces of the military bandmaster until it was eventually replaced by the tuba. In 1835, the year of the introduction of that instrument, Gustav Schilling could still write (*Universal Lexikon der Tonkunst*) that the serpent should "not be lacking among instruments of bass register."¹²⁷ Many bands, for example those of the Danish army, retained their serpents through the mid-19th century, and Spain reportedly had serpents in at least three bands as late as 1884. The relatively late survival of the serpent in England has also been pointed out by Eric Halfpenny:

English serpents were made in great quantity until at least the mid-19th

126 . Adam Carse, "The Prince Regent's Band," *Music and Letters* (July, 1946) p. 147. Source Whitwell, *ibid.*, Vol. V, p. 234.

127 . Marcuse, *Musical Instruments*, p. 467.

century, long after the wind band had acquired its ophicleides and valved tubas. There must have been a considerable demand for the instrument, to judge by the number which still survive.¹²⁸

As has already been mentioned, serpents were still present in some French provincial churches as late as circa 1925, and Angul Hammerich reported having heard it played in a Paris church in 1870.¹²⁹ The passing of the serpent as a church instrument in England was undoubtedly due to the reappearance of the organ in that country about 1860, after an absence of approximately 200 years. This resurgence of the organ resulted in the gradual demise of the gallery bands and the church and village orchestras in many small towns in that country. Nevertheless, at least a few serpents were in use for some time. There was one in regular use in the Wesleyan Methodist Church of Poole, Dorset, at least as late as 1870.¹³⁰ It has been reported to the author by a traveler in a rural area of Bavaria that he heard a serpent in a church there in 1956, but was not aware whether its presence was part of a continuing historical tradition or a modern revival.

The reasons for the decline of the serpent and its offspring have already been discussed: its inability to compete with the new valved brasses and their concomitant superiority of technique, volume and intonation. Another reason has been advanced by Mansfield, however.¹³¹ He believed (or at least affected to believe) that in addition to the above technical reasons, that the name of the instrument itself, "the terrible and unfortunate name of the instrument" with its many pejorative connotations, tended to alienate prospective performers. Mansfield continues:

It is not pretty to be dubbed a "serpentist," and the title of "church serpent" is a very doubtful one to bestow upon any man. Then to allude to any poor orchestral player as a "serpent" although it may be taken as a recognition of his wisdom—is calculated to be resented as an imputation of insincerity; while to speak of an elderly performer on the instrument as "that old serpent" is so shockingly suggestive that we doubt whether anyone would have the assurance to pronounce the title in the poor fellow's hearing, or the courage to "cast the same in his teeth."

The Serpent in the Orchestra

During the first decade of the 19th century, the serpent began to find its way into the

128 . Eric Halfpenny, "Playing the Serpent," *Symphony* (April, 1952) p. 9.

129 . Marcuse, *Musical Instruments*, p. 467.

130 . Mansfield, *op.cit.*, p. 362.

orchestra, as well as the opera orchestra. Used, as it was in the wind band, to strengthen or sometimes to replace bassoon or contra-bassoon parts, it occasionally had another function as well:

It is a brass instrument of a loud and coarse tone, much used, formerly, in military bands, and sometimes introduced into the orchestra, where it is employed to strengthen the double basses in forte passages. Slow passages produce the best effect on this instrument. The best keys for it are those of C, F, Bb, Eb, and Ab.¹³²

The serpent has also been used orchestrally in unison with the bass trombone and to supply an independent bass to the woodwinds or brass. And, besides strengthening the bassoon parts, it was also used to play in octaves above the contra-bassoon. When used to strengthen the double basses, as mentioned in the quotation above, it also plays in the eight-foot octave, usually in a simplified version.

The serpent possessed more power than the bassoon or contra-bassoon, and a great deal more flexibility than the bass trombone of the period.¹³³ The bass trombone at this time was inadequate because of its ponderous tone and lack of agility, both due to the stage of development of metallurgy and the awkward reaches involved requiring a slide extension lever. The serpent was therefore used by composers at the beginning of the 19th century who were looking for an agile bass instrument whose tone projected well. In other words, the serpent was used, not necessarily for its tone quality, but primarily for its volume of sound and facility of execution in the lowest range of the orchestra.¹³⁴

Although it would be difficult to make a case for the proposition that because the great masters occasionally introduced a particular instrument in their scores it should from thenceforth be regarded as a necessary constituent of the symphony orchestra, it should be pointed out that the use of the serpent in the orchestra was more than a passing whim or isolated case. Its use extended from the days of Handel through those of Wagner

131 . Ibid., pp. 363-364.

132 . Moore, op.cit., p. 866-867. Note: it seems to be much easier, however, to play in the keys of G, D, or even A on the author's own Moeck instrument, rather than in Bb, Eb, or Ab. Perhaps this refers to a serpent in D, however, considered as a transposing instrument, which appears to lead to the same results as the author's. Other serpentists, on the other hand, have communicated that they find Bb and Eb (but not Ab) to be better on their instruments than the sharp keys. The differences found are probably due to the response of the individual instruments being used.

133 . Adam Carse, *History of Orchestration* (New York: E.P. Dutton & Co., 1925) p. 216.

134 . Adam Carse, *The Orchestra from Beethoven to Berlioz* (New York: Broude Bros., 1949) p. 34.

and his so-called "music of the future."

In "classical" orchestral scores the serpent was introduced in the original manuscript of Handel's *Fireworks Music*, and, although the part was subsequently scratched out, Schoelcher was of the opinion that "very probably the composer could not find anyone clever enough to please him upon it; but he evidently wished to use it."¹³⁵ The serpent is also found in Beethoven's "March in D," written for military band and first performed in a parade in Vienna on June 4, 1816. In opera, the serpent appears in Rossini's *Siege of Corinth*, in Auber's *Masaniello*, in Verdi's *Sicilian Vespers* and in Wagner's *Rienzi*. It is also included in Sir William Sterndale Bennett's *May Queen*.

When examining scores specifying serpent or bass horn, or any other of the many serpent varieties, it should be remembered that both terminology and usage were quite ambiguous, and can be very misleading. It is, for example, very unlikely that the "bass horn" Spontini saw at the opera in Milan in 1816 was of the English variety usually associated with that term.¹³⁶

The August 1825 issue of *The Harmonicon* shows a plan of the orchestra at La Scala which includes a serpent. Early nineteenth-century Italian operas often included a serpent in the score, and the instrument seen at La Scala was probably the first to which the title *cimbasso* was applied. Lichtenthal's musical dictionary, published in Milan in 1826, devoted one and a half pages to the *serpentone*, an indication of its importance in Italy at that time.¹³⁷

Prout states that the last important use of the serpent was in Wagner's *Last Supper of the Apostles*, but that its most effective use in oratorio is unquestionably to be found in Mendelssohn's *St. Paul* where, in the chorus "The nations now are the Lord's," there occurs the Bb below the low C.¹³⁸ In *St. Paul* the serpent is used in the overture and most of the principal choruses, occasionally with the contra-bassoon. Bevan points out in the following amusing passage that, if the serpent and bass horn were used but rarely in the symphony orchestra in England,

...they came into their own during the English music festivals, the orgies of oratorio that have offended sensitive ears for a century and a half. The orchestra lists year after year include a serpent or two. The apotheosis was at York in 1825 and 1828 with eight serpents and bass horns; in 1835 there

135 . Quoted in Mansfield, op.cit., p. 363.

136 . Bevan, *Tuba Family*, p. 54.

137 . Ibid. p. 54.

138 . Quoted in Mansfield, "That Old Serpent" (see note 40).

were three ophicleides, four serpents and a Hibernicon played by a Mr. Hull who traveled all the way from Brighton. They liked bass instruments in York. In 1840 two brothers named Wood made a contrabass serpent,¹³⁹ twice normal size, which was played in the Minster and elsewhere.¹⁴⁰

Mendelssohn also scored for the serpent in his *Meeresstille* Overture, in which that instrument and the contra-bassoon are found on the same score line and rarely used separately. But whatever Mendelssohn did was as always in consummate taste, and his uses of the serpent are certainly no exception. Contemporary comments made it clear that the results were not always satisfactory, however, and that even the bass horn was preferable.¹⁴¹ Mendelssohn scored for *Corno Basso* in his *Ouverture für Harmoniemusik* of about 1830, and *Corno di Basso* in his *Trauer-Marsch* of 1836, both for wind band. Spohr specified bass horn in his *Notturmo* and his Ninth Symphony of 1840. It appears that the last use of the serpent in the orchestra was in Klose's *Das Leben ein Traum*, composed as late as 1899. It is not known who could have been available to play Klose's part at this late date, if indeed he expected it to be played on a serpent. Ebenezer Prout recounted about 1895 how he had tried to find a serpent player in London for a performance of *St. Paul*, with no success. The part had to be played, as serpent parts normally are today, on the tuba.¹⁴²

That it was necessary for the tuba to replace the serpent in the above-mentioned instance, is by no means only a relatively modern problem. Indeed, regardless of what a composer might specify in the way of serpent varieties or ophicleide in his scores, what he actually got in practice could be quite different. In referring to the development of the upright varieties Baines provides us with the following passage, also interesting in regard to instruments actually used:

These various three-keyed instruments were still sold on the Continent in the 1840s, as were ordinary serpents and Frichot-pattern Bass horns in England. When *Rienzi* was produced in Dresden in 1842 the Serpent part may have been played on anything of these kinds. Berlioz recalls among adventures over his ophicleide parts at that time how in Brunswick he had to assent to a *basson russe* called by the performer *Kontrafagott* which

139 . "The Anaconda," which will be discussed in detail later.

140 . Bevan, *Tuba Family*, p. 54.

141 . *Ibid.*, p. 54.

142 . *Ibid.*, p. 55.

replaced the ophicleide after a fashion, and was obliged to since though the orchestra (he continues) possessed a magnificent *bass-tuba*, the young man in charge did not seem to understand how to play it.¹⁴³

The serpent must have had a quite established presence in the United States during the first half of the 19th century. Anthony Philip Heinrich (1781 to 1861), considered America's first "professional" composer, and dubbed by critics "the Beethoven of America," was the featured composer in a number of festival concerts that included several of his large orchestral works, and regularly used serpents in his scores.¹⁴⁴ At a concert on May 5, 1832, at the Masonic Temple in Philadelphia, the orchestra lists the serpentist as Mr. Pierce. Heinrich's first concert in New York City was fashioned on a lavish scale after the great Handel Commemoration Festivals in England, and has been referred to as "America's first Grand Music Festival."¹⁴⁵ The orchestral forces used were the largest heretofore used in America, and consisted of:

...6 double basses, 6 violoncelli, 8 violas, 24 violins, primo and secondo, 4 trumpets, 4 horns, 1 cornetto, 1 bombardon, 1 ophicleide, 1 serpent, 1 bass horn, 3 tromboni, 1 contra-Fagotta, 2 Fagotti, 2 oboes, 3 clarinetti, 1 petite-clarinet, 2 flauti, 1 piccolo, timpani, bass and side drums, tambourins, cymbals, triangle, gongs, etc.¹⁴⁶

Although it is impossible to tell from the programs listed in Upton's book just which specific numbers used the serpent, it is known that Heinrich himself scored for it extensively. For example, his composition *The Jubilee*, "a grand national song of triumph, composed and arranged for a full orchestra and a vocal chorus," composed in New York in 1841 with a full orchestral score of 48 parts, includes a significant part for the serpent. Judging by the demands of the part, competent players must have been available in that city by this comparatively late date.¹⁴⁷ Another writer who has recently praised Heinrich gives information as to another composition using serpent:

143 . Baines, op.cit., p. 199.

144 . "Heinrich, Anthony Philip" Grove's Dictionary of Music and Musicians, 1947 edition. p. 441.

145 . William Treat Upton, *Anthony Philip Heinrich* (New York: Columbia University Press, 1939) p. 163.

146 . Ibid.

The orchestral works of A.P. Heinrich (1781-1861) are currently available only on microfilm from the Library of Congress. Study of their brilliant and unorthodox orchestration well repays the effort of finding them. The serpent part in *Manitou Mysteries* probably represents the peak of the literature for that misbegotten instrument.¹⁴⁸

The author also mentions that:

The Heinrich example cited below [*Manitou Mysteries*] uses ophicleide and serpent side by side in parts of differing character.¹⁴⁹

Although it must be admitted that the serpent was never a ubiquitous member of the symphony orchestra, it is apparent nevertheless from the above discussion that it was certainly used, and at a time when other brasses were already beginning to supplant it. It certainly does not merit the casual dismissal so often conferred upon it. One example of this attitude can be found in a recent extensive work on the development of the orchestra, where the "cornett/serpent" family (in a section entitled "Technical Development of Musical Instruments: Brass," written by Barbara Lambert), is touched upon in the following quotation:

Only the bass member of the family, the serpent, survived into the nineteenth century—and then *only in church ensembles and military bands*.¹⁵⁰

This misapprehension of the role of the serpent is continued in the same work, where in a section entitled "Orchestral Texture and the Art of Orchestration," R. Larry Todd discusses the *Diapason général de tous les instruments à vent* (1772) of Louis Joseph Francoeur.

Instruments no longer in common use, such as the musette, are not treated, though Francoeur does include a chapter for the serpent, then primarily a musical participant in church processions. Francoeur argues that a niche should be found in the orchestra for this instrument, on account of its singularly strange sounds, a quality most suitable, he adds, for certain pieces in the pathetic manner.

147 . Ibid., p. 246-248.

148 . Andrew Stiller, op.cit., p. 431.

149 . Ibid., p. 430.

150 . Joan Peyser (editor), *The Orchestra—Origins and Transformations* (New York: Charles Scribner's Sons, 1986), p. 157. (The italics in the text are the present author's.)

Francoeur's ultimately unsuccessful plea for the serpent contrasts with his influential and lengthy discussion of the clarinet, still a novelty in 1771 and not yet a regular member of the orchestra.¹⁵¹

It should be mentioned that both of the articles cited above are by very knowledgeable individuals, and that both are written in general terms that must be accepted in context. The passages cited in no way imply a criticism of their work, but are only given as examples of the type of impressions of the serpent that must ordinarily be gained by the casual reader of "non-serpent-oriented" general writings on the history of music and musical instruments. It might be further pointed out at this juncture that the appellation "obsolete" so often applied to the serpent, no matter how correct in a given context with its proper technical interpretation, is too often equated with a pejorative connotation of "useless," or at least "unusable."

A Soloist's Instrument

That the serpent was not only an ensemble instrument is attested to by several references naming outstanding, even virtuoso players, particularly in England. In the United States this seems to have similarly been the case. Ritter, quoting an *American Musical Journal* article written in 1834 (no author given), states that:

A Mr. Young played at the Park Theatre a concerto on the keyed serpent; and, though the critic (our authority in this case) thinks that "the serpent is the last instrument in the world, we wish to hear figuring in a concerto within doors," yet Mr. Young was found to play really beautifully.¹⁵²

Ritter goes on to discuss the article, which notes the public's predilection for brass instrument soloists at that time (particularly the trumpet and trombone), following the same trend in England and Germany with the eminence of such revered soloists as Harper in England on trumpet, and Schmidt in Germany—"...the best trombone that ever existed," with a further quotation:

If Mr. Young adds himself to this triumvirate next season, we may fairly expect New York *will be blown away*.¹⁵³

The serpentist who is referred to most often as a virtuoso player in England was

151 . Ibid., p. 192.

152 . Frederic Louis Ritter, *Music in America* (New York: Charles Scribner's Sons, 1883) p. 214.

153 . Ibid.

André, at one time a member of George IV's Household Band, and most likely the serpent *obbligato* who, together with the three serpents *ripieno*, made up the serpent section of that famous ensemble. In writing about André, Bevan states:

He had been a member of the Montpellier Spa Military Band at Cheltenham where he sometimes played an arrangement by Christian Kramer of a Corelli concerto. On one occasion the virtuoso double-bass player Dragonetti was in the audience. He knew the Corelli well—it was one of his own showpieces—and he congratulated André on the serpent version.¹⁵⁴

By 1840 André had retired, and his successor at Cheltenham, Collins, had begun to double on ophicleide.¹⁵⁵

Bevan is also one of a number of sources for material on two other well-known English players. Mr. Jepp, a member of the Coldstream Guards Band, and who was a member of a select band conducted by Sir George Smart at the Guildhall for a performance upon the occasion of Queen Victoria's visit to the City of London on Lord Mayor's Day in 1837, was also known as a concert artist. Also in 1837, during October, he is recorded as having taken the serpent part in a performance of Neukomm's *Septetto* for flute, clarinet, oboe, horn, trumpet, bassoon and serpent. William Ponder, the first of the famous ophicleidists, had played the serpent in the 1830 series of Oratorio Concerts at Covent Garden and Drury Lane. By 1834 Ponder was playing ophicleide in Westminster Abbey along with Hubbard, and in the same year participated in the Birmingham Music Festival. His name appears throughout the 1830s as a soloist, for example in *The Death of Nelson*.

It is beyond the scope of this work to trace the complete history of the ophicleide. However, it is generally considered to be yet a further development of the serpent,¹⁵⁶ and players often used both. Indeed various versions of each were often used interchangeably, regardless of the specifications in musical scores. It therefore is impossible to finish the story of the serpent without considering to at least some degree its "step-child." There exists enough material on the ophicleide (and its much more extensive use in art music than the serpent) to create a lengthy book just on that instrument. For that reason, no attempt will be made to consider all of its forms, the vast number of compositions in

154 . Bevan, *Tuba Family*, p. 55.

155 . Ibid.

156 . Although some early organologists have placed the serpent in the woodwind family, and considered only the ophicleide as a brass.

which it appears, or the many literary references that are easily obtainable.¹⁵⁷

Similarly, there will be no attempt to treat the *additional* families of instruments that have upon occasion been considered to be derived from the serpent! H. Bouasse, for example, writing (in French) in 1929, considered the following three families to have evolved from the serpent:

There exist three families of instruments with keys of similar form and which differ only in the type of mouthpiece used; they have a conical bore which is relatively wide (which forms a rather large angle to the apex.).

ophicleide	horn type of mouthpiece
saxophone	clarinet type of mouthpiece (single vibrating reed)
sarrusophone	bassoon type reed (double vibrating reed)

The intonation of the notes of the ophicleide is found to be doubtful; the saxophone is considered as having the best tone quality and is better in tune than the sarrusophone; proving that the tolerance between partials, very little with a single reed, and greater with a double reed, can be varied enormously with the embouchure of the horn type (with the lip).¹⁵⁸

To continue our survey of the ophicleide, after Ponder's death in 1841 while playing in a festival in Gloucester, his mantle as premier ophicleidist was assumed by Prospère (born Jean Prospère Guivier in Lithuania in 1814), who went to London about 1840 with Jullien, and was known as one of the stars of the latter's famous orchestra for many years. In 1846 he was listed as soloist on a new instrument, the serpentcleide.¹⁵⁹ Subsequently Samuel Hughes, who played with Jullien during his famous American tour (which so

157. For those wishing an overview of the ophicleide, the excellent treatment by Clifford Bevan in *The Tuba Family* is highly recommended.

158. H. Bouasse, with the collaboration of M. Fouché, *Instruments A Vent* (Paris: Libraire Delegrave, 1929) Vol. I, p. 376. Translation from the French by this author.

159. A wooden ophicleide, rather than a serpent.

influenced the establishment of symphony orchestras in this country), and later J.H. Guilmant became the leading ophicleidists. Guilmant participated in the Royal Aquarium Concerts conducted by Sir Arthur Sullivan in 1876, and was still listed as professor of the ophicleide in the 1901 *Musical Directory*.

The ophicleide first appeared in the stage band of Spontini's *Olympie* in a performance Dec. 22, 1819, two years before it was patented. It was used a great deal as an orchestral and operatic instrument through much of the rest of the century. There was an ophicleide in the Hallé orchestra as late as the 1870s, and in the Crystal Palace Orchestra in London as late as 1880. The brass section of the 100-piece orchestra Offenbach used for his 1876 season in New York consisted of two cornets, three trombones and ophicleide. Despite the advent of the tuba, the ophicleide remained a valued member of the orchestra and wind band for quite some time. Berlioz wrote in 1843: "Most modern scores include a part for either ophicleide or bass tuba, sometimes for both."¹⁶⁰

In France the ophicleide was considered obsolete in the symphony orchestra by about 1860 and in bands by 1885. It was still present in the Paris Opéra in 1874, however.¹⁶¹ Perhaps it *and* the serpent were both used in England much later than is now considered to be the case, judging from the following passage!

It comes as something of a shock to read the following in Banister's *Music* (1892): "Several other brass instruments ...are occasionally used in ordinary orchestras, as the BASS-TUBA, the EUPHONIUM &c. But the above specified [serpent and ophicleide] are those in most common use" (p.229). When had he last been to a concert?¹⁶²

The ophicleide was generally supplanted by valved brass basses in military bands by about 1850,¹⁶³ although they continued to appear in instrumentation lists along with bass saxhorns even after the reorganization of wind bands in 1845 using the Sax families of instruments. The reason for this earlier demise of the ophicleide in the band than in the orchestra was primarily the delicate construction, particularly of the mechanism, which made it much less suited to use in the field than the heavier, more durable brass basses. Nevertheless, it still appeared at least sporadically for nearly 100 years after its introduction at the Paris Opéra in 1817—

...the send-off for four generations of players up to Bandsman Lydyard of the 1st Battalion, Connaught Rangers, marching with his band across India

160 . Berlioz, op.cit.

161 . F.-A. Devaert, *Nouveau traité d'instrumentation* (Paris: 1885, translated by Suddard as *A New Treatise on Instrumentation*, Paris: no date) Referred to in Bevan, *Tuba Family*, p. 67.

162 . Bevan, *Tuba Family*, p. 68.

down to Bombay in 1914 to embark for Europe, playing the BB flat Bass part on the ophicleide.¹⁶⁴

The ophicleide as well as the serpent has been subjected to indignities in the form of scurrilous comments concerning both its tone quality and intonation. As with the serpent, however, the author would like to advance the opinion that it can be a completely satisfactory instrument in every regard within its design limitations in the hands of a competent, dedicated performer. The ophicleide is capable of nearly the agility of a woodwind instrument with more satisfactory tonal results at faster speeds than the serpent, and certainly possesses a delightful lighter tone quality very much more suitable to period music at proper volume levels than that of the modern euphonium or tuba—which instruments usually replace it in compositions for which it is scored.

Collections and Catalogs

Serpents are numerous in museums and private collections throughout the world. Sales catalogs of dealers in instruments and of antiquities and art objects in general are another interesting indication of the numbers of instruments that have been preserved. One of the most interesting of the dealers who included serpents in his catalogs was the infamous Leopoldo Franciolini. A number of his extant catalogs have been accumulated in a book by Edwin M. Ripin.¹⁶⁵ Contained in six of his catalogs are a total of eight "serpentone" listed for sale, all of which contain the sole description as "recoperto in Pelle" (covered in leather). Two illustrations are given, both in catalogue 3A. One of the above, No. 25 of Series H of that catalogue, shows an ordinary keyless serpent of the serpent d'Eglise type, but with a cord tied around the body in two places to form a supporting sling to be evidently placed around the neck. This is interesting as one of the few pieces of evidence that such a sling was used with the traditional serpentine instrument.¹⁶⁶ While it is not possible to say that such slings were actually used at any given period, it at least adds weight to the argument that the practice was not necessarily

163 . In most countries other than France, as noted above.

164 . Baines, *op.cit.*, p. 199.

165 . Edwin M. Ripin, *The Instrument Catalogs of Leopoldo Franciolini* (Hackensack, N.J.: Joseph Boonin, Inc., 1974).

166 . Also see the illustration of a "Serpentone," plate XXVI in *The Showcase of Musical Instruments* (all 152 Illustrations from the 1723 "Gabinetto Armonico") of Filippo Bonanni (New York: Dover Publications, Inc., 1964) p. 26. The standing player is shown supporting his rather fanciful instrument with a substantial sling around his neck.

historically unauthentic. This point is brought up because of a recent question regarding the admissibility of using such a sling on a (keyless) serpent d'Eglise in a Revolutionary War period band in the Washington, D.C. area. (Sling hooks are of course present on almost all of the 19th-century upright military varieties, and on a number of English military keyed serpents.)

Another interesting reference in the Franciolini catalogs is the only known use of the term "Basso di foca," which instrument is pictured in catalogue 3A, Series I, Number 4; and which, judging by the shape of the body and the long coiled bocal, is probably a bassoon russe. It might be mentioned that Franciolini is well-known as perhaps the premier example in all of history as a forger of instruments, and concocter of unusual (and often improbable or even impossible) instruments out of parts of others, or complete fabrications, and representing them as unusual (and of course valuable) instruments. Unfortunately, many such spurious instruments originating in his workshops are still to be found in major museum collections today, although most of these have been identified as such.

The records of instruments sold in *The Glen Account Book* of 1838-1853 also yield insight into the relative importance of serpents at a time when many writers assume the instruments to have nearly vanished from the musical scene. In the period represented there are sales listed for 49 trumpets, two alto trombones, about 60 tenor trombones and 83 bass trombones, six tubas (three valve ophicleides, three Sax tubas or bombardone), approximately 400 cornets (including cornepeans, etc.—all with valves) and numerous other instruments of all sorts. There are also included sales of 11 serpents (all with keys), seven bass horns, one bass Hibernicon, one tenor ophicleide, and 77 bass ophicleides (both C and Bb). The comparison of 97 serpent and ophicleide family members to five tubas is particularly interesting when we consider the Glen store was in Edinburgh, a major metropolitan area, and by no means a city where we would expect to find relatively little influence by modern developments.¹⁶⁷ One of the "Sax Tubas," a new instrument, was sold on Sept. 27, 1848 for 6 pounds and 6 shillings, plus a "packing case" for an additional 4 shillings. Serpents during the period were going for about 1 to 2 pounds, but as might be expected were all used instruments. Ophicleides continued to bring as much or more than the tuba, however, whether new or used. Brass bass horns were worth about 2 to 3 pounds, and the bass Hibernicon was purchased second-hand from the Edinburgh Wind Instrument Society on July 11, 1840, for 2 pounds.¹⁶⁸

Although the serpent and bass horn were obviously losing favor during this period, comparison of the prices given to those of many other instruments in the same source lead to the assessment that they were certainly not completely obsolete, and must have been

167 . Arnold Myers, *The Glen Account Book, 1838-1853* (Edinburgh: Edinburgh University Collection of Historic Musical Instruments, 1985).

168 . *Ibid.*

considered to still be player's instruments. In any case, they certainly had not as yet been replaced extensively by the valved brass basses, however much they had been forced to yield to the ophicleide.

Conclusion

A survey of the historical use of the serpent emphasizes the importance of the instrument during its distinguished career of over two and one-half centuries of uninterrupted contributions to the churches, the military, and both professional and amateur instrumental bands and orchestra. Its better players were even recognized for their contributions in solo and ensemble performances. Far from being the laughing-stock often portrayed by later writers who could not have heard it played well, it can be as well-played as any other period instrument, as is now being demonstrated by a number of expert practitioners. While the serpent does, in this writer's opinion, present the greatest challenge of any Western instrument, it is by no means impossible to conquer its idiosyncracies; and the result is an added resource for the performance of old music. Not only is the distinctive tone of the serpent capable of contributing greatly to instrumental ensembles and choral accompaniment, it also possesses a visual appeal to audiences second to no other instrument, past or present. The defense rests.

Acknowledgements

I would like to acknowledge my debt to several individuals, without whose contributions and cooperation the process of compiling this work would have been much more protracted, if not impossible. Christopher Monk, serpent savant supreme, provided superb reproduction instruments, information, and inspiration. Craig Kridel provided a valuable checklist of sources in the bibliography he included in the April, 1986, newsletter for United Serpents. He was also directly responsible for the week-long serpent workshop conducted by Christopher Monk at the Amherst Early Music Festival of August, 1986. Dr. and Mrs. Robert Wagenknecht, fellow members of the Saturday Serpent Society (SSS) as well as professional research librarians, have been of invaluable assistance in obtaining research materials from throughout the world. Both have also contributed greatly through the performance and evaluation of hundreds of musical sources—as has my wife, Connie, lead serpentist with the SSS, proofreader and critic. David Whitwell's monumental nine-volume work *The History and Literature of the Wind Band and Wind Ensemble* is the major source for the historical use of the serpent in wind ensembles. And finally, my thanks for his help and suggestions to George Kafig of Columbia Pacific University, my mentor during the process of completing my dissertation in 1987 for partial fulfillment of the degree of Ph.D., from which this article was abstracted.

Philip Palmer is a retired high school band director and former owner/operator of a chain of music stores, Boykin's Music shop, Inc. He received his PhD in 1987 from Columbia Pacific University at San Rafael, California.