



## Clementi & Co 1798–1830 Pianoforte Manufacture in London

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## Introduction

The cultural development in Europe from the Late Baroque period into Classicism and from there into Romanticism largely coincides with the industrial revolution. It is certainly one of the most interesting and dynamic periods not least in the history of music. The Baroque style gave way to Vienna Classicism in the 1750s at the same time as the development of the pianoforte was in its beginnings.

This development had gained impetus at the end of the 1700s when a new key player entered the scene of pianoforte manufacture. His name was Muzio Clementi, born in Rome in 1762 and adopted by Peter Beckford, a wealthy Englishman who took Clementi to London and supported him as a child of prodigy.

However, Clementi was not only highly talented in music as a composer, pianist, conductor and teacher. He was also a clever businessman and engaged himself in music trade and

the manufacture of pianos in Clementi & Co. At the same time as the industrial revolution feeds a growing middle class in England, music becomes *à la mode* in a wider social context and the piano reaches new categories of buyers. It becomes a status symbol not only in circles of nobility but also for the middle class as there were pianos for different categories of buyers.

A square piano (Fig. 2) could fit into a rather small room and cost much less than the big and expensive grand pianoforte (Fig. 3 and on cover), which only a very small percentage of the population could afford. This gave way to a production of square pianos in England that was enormous compared to the small quantities produced in Vienna, where the main competitors outside England were located.

During most of the 18<sup>th</sup> century the favoured keyboard instrument was the harpsichord, the sound of which was produced by quills plucking the strings. But the developing Vienna classicism demanded instruments with new properties.

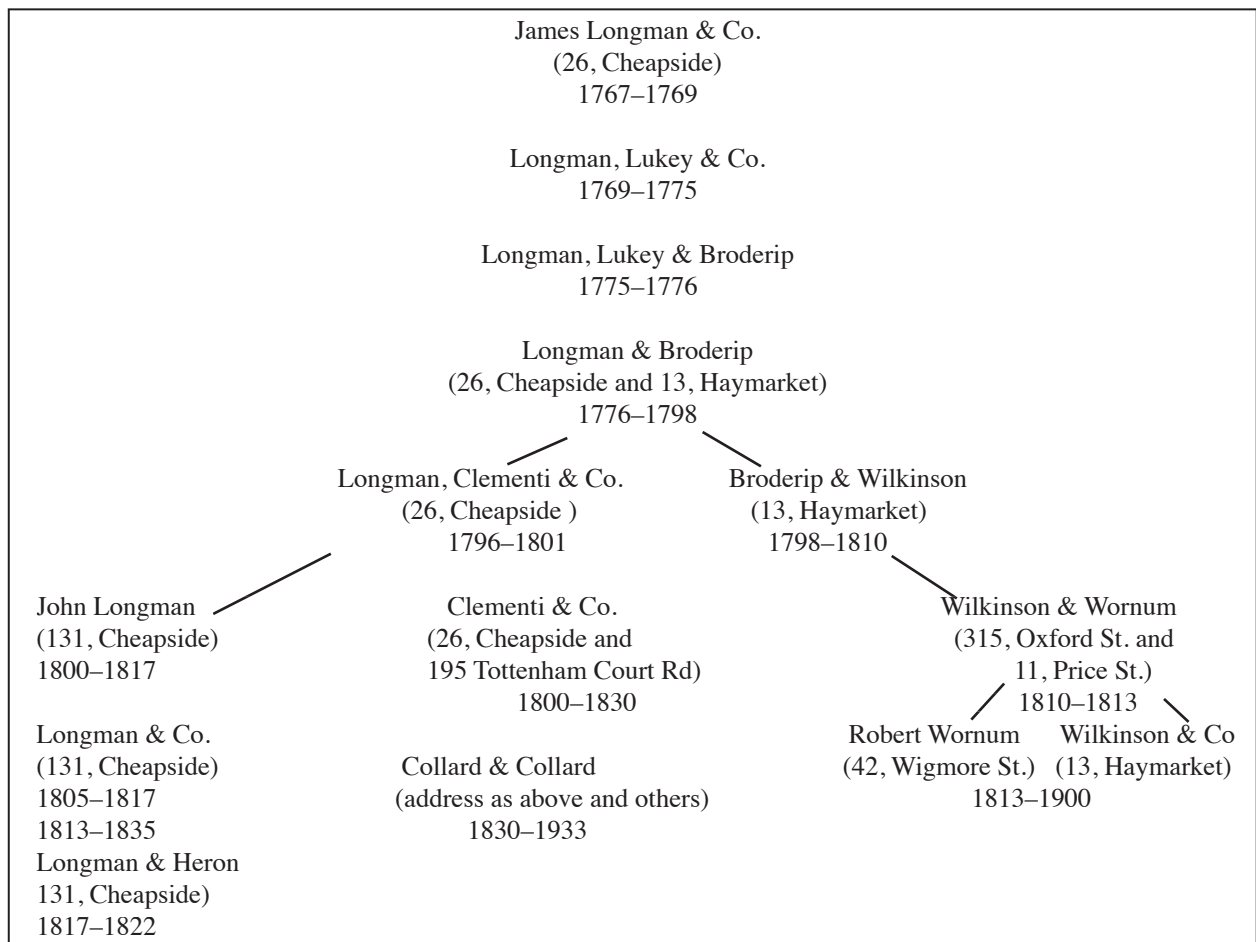


FIG. 1. English instrument manufacturers descending from James Longman & Co (compiled from The New Grove Dictionary of Musical Instruments).

The early piano – or pianoforte – was the answer. This new instrument was equipped with hammers striking the strings instead of quills plucking them. A more or less vigorous touch or strike on the keys of a piano resulted in a correspondingly more or less dynamic sound, a crescendo or a diminuendo, impossible to achieve on a harpsichord. Ludwig van Beethoven, in particular, eagerly assimilated and used such new features in his compositions. He and other composers also took advantage of a gradually extended compass, from an early 5 and 5.5 octaves in the late 18<sup>th</sup> century to 6 and 6.5 octaves in the early 1800s.

The beginnings of Romanticism in music were closely connected to Beethoven. But Muzio Clementi may have played a more important role in this development than hitherto acknowledged, and his compositions, although mainly classic, had romantic expressiveness as well. "Clementi's fugues in Op. 5 and 6 (1780–81) provide strong evidence of his fascination for Bach; they also mark the beginning of his participation in the growing tide of romantic music".<sup>1</sup>

We know that Clementi had personal contacts with both Haydn and Mozart as well as, and not least, with Beethoven.<sup>2</sup> Clementi and Beethoven made business agreements for the sales of Beethoven's music in England and Beethoven favoured the English pianoforte because of the dynamic qualities that the Viennese instruments were lacking.

We also know from Anton Schindler who wrote Beethoven's biography (1840) that Beethoven's regard for Clementi was significant. Schindler writes about Beethoven:



FIG. 2. Square pianoforte, sq 10208/–/3285bo from 1815. Mahogany case and satinwood nameboard with a rectangular cartouche. Private owner in London.

He had nothing by Haydn or Cherubini; of Mozart's music he had a part of the score of Don Giovanni and many sonatas. Almost all of Clementi's sonatas were at hand. He had the greatest admiration for these sonatas, considering them the most beautiful, the most pianistic of works, both for their lovely, pleasing, original melodies and for their consistent, easily followed form of each movement. Beethoven had but little liking for Mozart's piano music, and the musical education of his beloved nephew was confined for many years to the playing of Clementi's sonatas (Beethoven as I knew him 1966, p. 379).

Whatever influence Clementi had as a composer, the history of music would have looked very different if the technical development of the pianoforte had not been driven forward by innovative musicians like Clementi. During the first couple of decades of the 19<sup>th</sup> century Clementi was the most influential marketing manager of the pianoforte in Europe. He was the messenger of the latest news from England wherever he went on his long trips abroad. And the dynamic development of the pianoforte was very much concentrated to England at the beginning of the 19<sup>th</sup> century.

Clementi and his company is the topic of this paper, circling in the borderland between cultural and economic history. It may be linked to what has been called the 'material turn' in history<sup>3</sup>, if this is interpreted as looking upon objects (pianos) as a point of departure for an understanding of the cultural evolution in the music trade and music life of the early 1800s.

## Purpose, Method and Source Material

My purpose is to investigate Clementi's production of keyboard instruments and to answer the following questions: What was the scale of Clementi's production of keyboard instruments, in total and of different instrument types? How can we date surviving Clementi instruments? I will use the results of my investigation in a quantitative analysis in order to infer statistical data regarding Clementi's total production. I will also discuss the fluctuations in production in relation to contemporary events relevant to Muzio Clementi and Clementi & Co, such as sales and marketing activities, technical innovations etc.



FIG. 3. Grand pianoforte, g 638/–, FF–f4, from 1815. Figured mahogany case with crossbanding, gilt brass hinges and a lyre with three pedals. Maplewood nameboard with blackpainted, gilt cartouche, stylized swags and attached, profiled brass stick. The typically English profiled keyfronts are clearly visible. Owner and photographs: Leif Sahlqvist.

Clementi & Co., including Longman, Clementi & Co. (1/11 1798–May 1801), was active between 1798 and 1830 under different names, which will be described in the section *The Company's History*. Unfortunately, the company's historical records, after Clementi's death kept at the premises of Collard & Collard, were destroyed in a fire in 1964.

Thus, precise dating of specific instruments cannot, normally, be based on written material, so the instruments themselves represent not only the main, but more or less the only source material available. This is true in particular for research aiming at accurate conclusions about the quantities of instruments produced. For this purpose a sufficient number of Clementi instruments have to be found and dated.

In order to achieve my purpose I will therefore establish a *corpus* of preserved instruments (App. 2, 3). From this corpus I will create a *dating manual* (App. 1), useful for dating other instruments that may be discovered in the future and/or that exist without my knowledge. The results of my research involve both cultural and economic history and will hopefully be useful for further research into early 19<sup>th</sup> century music trade and music life.

Accurate dating is possible only if serial numbers and other inscriptions inside the instruments are correctly interpreted. Some chronological confirmation can in many cases be obtained by comparing the appearance of the instruments, for example the shifting styles of paintings or brasswork on the nameboard (Fig. 3, 4). This source material may lead to some

information that is not solely related to the scale of production. If and when this is of interest for the historical background of Clementi & Co, it will also be communicated here, mainly in *The Company's History* section.

There is no easy way of finding a sufficient number of preserved instruments as most of them belong to private persons all over the world. Thus, a researcher should preferably be known at musical museums or restorers, so that individuals contacting them to get their instruments evaluated and dated can be forwarded to the researcher, who can then collect the necessary data and, in due time, give a probably accurate date in return. This is precisely what I have done over many years. I have visited and corresponded with museums and private owners of Clementi instruments worldwide, collecting data and photographs of more than 300 fortepianos.

Every newly found instrument added to my corpus over the years has either confirmed or made me adjust my hypothetical dating manual. Gradually, changes have become fewer and today my manual is probably accurate to within a year, although there are still question marks for some details. In this paper I will give a detailed survey not only of Clementi's total production but also of separate types of keyboard instruments.

Whereas other manufacturers from this period used a single number series for all instruments, Clementi & Co applied several series in a system of their own, which – when understood – provide a key to the company's factual production. This will be explained below in the sections *Types of Instruments and Numbers, Analysis of*





FIG. 4. Left: Cartouche of the square pianoforte in Fig. 2 (sq 10208/–/3285bo from 1815). Its design was used on most squares from 1813–1815 but is not found on grands. Right: Cartouche of the grand pianoforte g 809– from 1809. This design, with or without overflowing flowers, book and instruments above, was in use during 1809–1812 on squares and sometimes on grands. It has a darker, greenish frame around the rectangle, the left limitation of which is seen on the photograph. It was also used on g 772/–/181bo from 1809, whereas sq 7087/8151 from 1809 in the Historical Museum of Gothenburg has this type of cartouche but without a painting above.

*Instrument Numbers, A and B Numbers and C Numbers.* I have explained this system as well as my dating manual in a lecture held at the Royal College of Music in London on 8<sup>th</sup> April 2003, but neither this lecture nor my ground data have hitherto been published or made available for the public.

As a general background I will provide a review of the company's history with particular emphasis on the changing company names. These names have chronological relevance as they occur in different forms on labels or painted cartouches on the instruments. Most of this information is clear from earlier research<sup>4</sup>, but I will be able to add a few pieces of information from the instruments.

### State of Research

The activities of Clementi & Co. in music publishing and trade are well documented by Leon Plantinga (1977) and David Rowland (2011). They have done excellent research from judicial archives, newspaper articles, letters written to and from Muzio Clementi during his many trips abroad etc.<sup>5</sup> Based on this material they also discuss the sales and marketing of pianos and understand that Clementi & Co. is the most important exporter of musical instruments from England.

Longman, Clementi & Co and Clementi & Co. were worthy successors to Longman & Broderip. In range of activity and international reach it is hard to imagine that there were any more significant music sellers in London at the time, and their domestic and overseas connections made their musical instruments known to some of the most important musicians of the era (David Rowland, *Clementi's Music Business*, London 2011, p. 34).

In 1810, Adam Stewart, who had been an employee of Clementi & Co., had started his own piano manufacture in Baltimore, Maryland. By then Clementi pianos were already well-known in the US. David Rowland cites a letter from Daniel Stewart in New York to James Shudi Broadwood in London, dated 4<sup>th</sup> September 1809, in which Stewart writes that "Clementi & Co. have sold a good many instruments to people in this country."<sup>6</sup>

Richard Burnett, well-known pianist and performer of early music on original instruments, has also published research based on the pianos of his own important collection, including some well restored Clementi pianos. He concentrates on highlighting the difference in musical qualities between English and Austrian (Viennese) pianos and on performance practice.<sup>7</sup>

However, the dates of many instruments have been unreliable or incorrect. This is the case also in the hitherto most extensive compilations of data on Clementi instruments, which are

Martha Clinkscale's books *Makers of the Piano 1700–1820* (1994) and *Makers of the Piano 1820–1860* (1999). They contain an impressive wealth of information on pianos from all over the world.

When it comes to Clementi & Co., however, although Martha Clinkscale knows very well that there are different types of numbers in a Clementi piano (Fig. 5), there is often no communication to the reader what type of number has been registered. This has been much improved in the on-line version, hosted by John Watson and the Colonial Williamsburg Foundation, but as this concept is based, as before, on the input of information from lots of people without consistent analysis and doublechecking it remains difficult to avoid mistakes and misinterpretations.

Martha Clinkscale's problem is understandable, since researching pianos from all manufacturers in the world, is a huge – I dare say impossible – task in view of the state of research in the field. Thus, her data have been the source of some confusion among museums, researchers and others looking for reliable information in order to date their Clementi instruments.

This confusion is partly due to the presentation of her data. Some dates are followed by a question mark, others a c. (circa) and others again are stated without any of these signs. If these distinctions had been consistently used and dates without a question mark had been relatively

certain, this system could have been helpful for the reader. But Martha Clinkscale writes:

One needs to view with particular caution any number inked, painted, or stamped on a case. In earlier times these did not always indicate serial numbers. Despite my own misgivings about doing so, I have frequently allowed such numbers to stand as serials; I will surely be criticized for this by a few. However, without absolute authenticity – probably more difficult to ascertain with pianos than with harpsichords – one must use one's judgement (1994, p. xi).

Thus, many Clementi pianos in her books are, unfortunately, unreliably or incorrectly dated as the numbers have not regularly been analysed by herself or anyone else knowledgeable in the field.<sup>8</sup> This, however, does not degrade her admirable ambition of offering the reader an overview of early piano production worldwide. In particular, the impressive compilation of data that she has produced can be followed up by other researchers.

As I have explained above, my intention is much less wide-ranging. I will concentrate on Clementi & Co. as a single manufacturer and analyse this production in depth. I will present a corpus of accurately dated instruments as well as a dating manual, clarifying how different serial numbers are related to each other and discuss my results in a quantitative analysis and in relation to contemporary events relevant to Muzio Clementi and his company.



FIG. 5. Square pianoforte, sq 9836/11905/2751/181, FF-f4, from 1814. Mahogany case with crossbanding. Painted, gilt cartouche with stylized swags. Stamped A number (9836) in the outer right hand corner, inked B number (11905) on the wrest plank, C number (2751) stamped on the bottom boards, D number (181) stamped at the back of the nameboard and repeated at the treble where the nameboard slides into its recess. Private owner in Kent, England.

## The Company's History

The forerunner of Clementi & Co. was the instrument manufacturer and music publisher Longman & Broderip in London, well-known for their production of harpsichords and pianofortes. This company was declared bankrupt on the 27<sup>th</sup> May 1795 but managed to stay in business and produce instruments until finally liquidated in 1798 (Fig. 1).

However, in 1796 John Longman, part owner of Longman & Broderip, had already started another company together with the composer and keyboard musician Muzio Clementi, which is confirmed by a contract signed on the 10th August 1796 between Joseph Haydn and F. A. Hyde for the publishers Longman, Clementi & Co.<sup>9</sup> By then, Muzio Clementi was already famous as a composer of piano music as well as an educator of talented pianists. He now also engaged himself in the sales and marketing of pianos but, as far as we know, never actively participated in the production.

Longman & Broderip's former premises at 26 Cheapside were taken over by Longman, Clementi & Co. on 1<sup>st</sup> November 1798. But soon, in June 1800, John Longman went on his own, starting manufacturing pianos in his new premises at 131 Cheapside in London.<sup>10</sup> Longman, Clementi & Co was at this point transformed into Clementi, Collard, Banger, Hyde & Davis and maintained as such until 21<sup>st</sup> September 1810, when Hyde retired and already enrolled Frederick William Collard's brother, William Frederick Collard took Hyde's place.<sup>11</sup> On the square sq 6921/7902/439 (cf. below: *Types of Numbers and Instrument Types*) from mid-1809 a label is still preserved with Hyde's name. The company's name was now usually abbreviated Clementi & Co.

As Hyde signed the contract ('Frederick Augustus Hyde') with Joseph Haydn in 1796, he apparently owned part of Longman, Clementi & Co already at this point. Also, there is a letter from 1798, addressed to the publisher Artaria in Vienna, in which Clementi mentions his business association with 'Longman, Hyde and others'<sup>12</sup>, so at least in 1798 all or most of the above-mentioned partners must have been present. Being referred to in particular, Hyde appears to have

had a special position, although Banger would have participated as early as Hyde, given the fact that he stands before him in the company's name. In any case, during the entire period of production, the company remained in 26 Cheapside, London, at the same premises where James Longman had already started in 1767, taking them over just before from the music publisher Harp and Crown.

In 1802 additional premises at 195 Tottenham Court Road were taken into use, but they were unfortunately destroyed in a disastrous fire in March 1807. Being financially solid even at this early stage, however, the owners restored the facilities surprisingly fast and production was allowed to continue at the same address. This would scarcely have been possible without the help from their most prominent competitor, Broadwood & Son, willing to help executing outstanding orders.<sup>13</sup> Muzio Clementi obviously had excellent personal relations with John Broadwood, whose extensive European network was employed in keen competition with German manufacturers, in order to market abroad Clementi's own pianos in the first place and, indirectly, also English instruments in general.

In 1817 or 1818 Banger was next in line to leave the company. When this happened, the style was altered into Clementi, Collard, Davis & Collard, a change which has been dated 1819<sup>14</sup> or 1820<sup>15</sup> but may have been earlier. Davis withdrew from the company in 1822 and the name was once again correspondingly modified.<sup>16</sup>

I have found a dedication to the British Royal Family, printed on the paper label of a grand pianoforte, now in Eidsvoll, Norway (g 1140/-), including the text 'To their Majesties, the Prince Regent, & all the Royal Family and to the Hon. East India Company.' 'Their Majesties' were King George III and Queen Charlotte of Mecklenburg-Strelitz, who must have been alive both, when the label was printed. It includes the name of the company: 'Clementi, Collard, Davis & Collard', so in any case Banger would have left the firm before the Queen died on the 7<sup>th</sup> November 1818.

The various names of the company are confirmed partly from paper labels (Fig. 18) on the instruments, partly from music published by Clementi & Co., a field where successful results were being obtained, among others several



first English music editions.<sup>17</sup> Obviously, such achievements also promoted instrument sales. Clementi communicated in several languages and was able to maintain personal relations with important acquaintances from his extensive sales visits on the continent. Such and other crucial assets probably led his company into the position as England's largest exporter of musical instruments, even during the continental blockade.

Clementi visited Paris, Vienna, St Petersburg, Berlin, Prague, Zurich and Rome during his eight-year trip 1802–1810, set out in the autumn just after the Peace of Amiens in March 1802. In connection with his return to England in 1810 a financial account of the company was made (24/6 1811), revealing that Clementi himself owned just over 40%, thus being the major partner.<sup>18</sup> The following years were expansive and successful, not least in publishing activities, such as the first editions of Beethoven's Imperial Concert and piano sonata 81a (*Les adieux*).

Even if Clementi had left the company's daily management with F. W. Collard, he corresponded regularly with his partner, directing him in matters of both economic and technical nature. Many of these letters are still in the hands of a Collard descendant and some excerpts have been published.<sup>19</sup> They contain intriguing information on Clementi's various commercial activities in Europe. Even if the Collard brothers ought to be justly credited for their technical innovations, it is made clear through these letters that Clementi initiated a lot from his experience as a keyboard musician and his excellent knowledge of what

the competitors could do elsewhere.

Around 1810 no association for regular performances of music existed to a broader public in London. Concerts of Ancient Music, surviving from the Napoleonic wars, performed mainly works by Handel and his generation, which was of little use for promoting sales of pianos and modern music.<sup>20</sup> The negative development of instrument sales (Fig. 6) during 1813–1815 (500–700/year), compared to the best years 1810–1811 (1100–1200/year), may have been one of the reasons for Clementi's starting the Philharmonic Society, holding its first concert on the 8<sup>th</sup> March 1813 in the Argyll Rooms. From then until 1816 he conducted regularly from the piano, performing his own works.<sup>21</sup>

He was elected a member of the Royal Musical Academy in Stockholm on the 21<sup>st</sup> December 1814, of which he regularly took note on the title page of his published music for many years to come.<sup>22</sup> A Clementi grand pianoforte from 1815 (g 638/– in Fig. 3), once donated to the University of Lund, Sweden, and now in private hands, may have come to Sweden as a consequence of this event.

From the end of 1816 until October 1817 Clementi stayed in Paris and subsequently in Frankfurt until June 1818, when he returned to London. He visited Paris again for a few months during 1820–21 and finally made a business trip to Paris and Austria during 1826–27. From the mid-1820s he was less active in his company. Whilst Clementi's previous letters to the firm had all been addressed to Messrs Clementi & Co., the

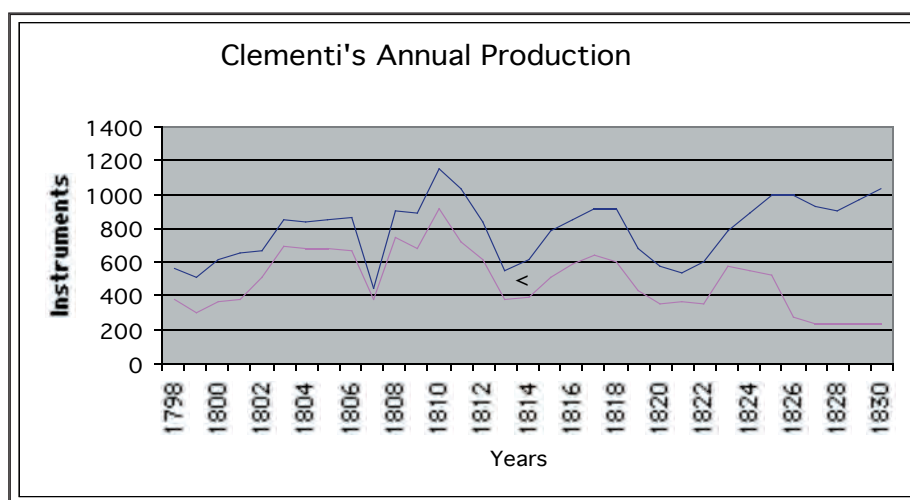


FIG. 6. The diagram shows Clementi's annual production 1798–1830 of New Patent (5.5 or 6 octaves and double action) square pianos (lower graph) and the total production (upper graph). The dip in 1807 is related to the fire at Tottenham Court Road. Statistics after research by Leif Sahlqvist.



FIG. 7. Cabinet piano in rosewood, cb1739/18443/–, CC-c4, from 1823. 114x56x180 cm. Private owner in Holland.

last one preserved from the 31<sup>st</sup> March 1830 was sent to Messrs Collard – (dash) but officially he stayed in the company until the 24<sup>th</sup> June 1831. The company's name then changed from Clementi, Collard and Collard to only Collard and Collard. Clementi died on the 10<sup>th</sup> March 1832 and was buried in Westminster Abbey in London with great honours.<sup>23</sup>

One of the most brilliant pianists of his time, Clementi certainly seems to have been the most successful international marketing manager of the early pianoforte. Together with his skilled partners he initiated and pushed forward a technical development particularly in the field of tone improvement.

Contemporary reviews estimated the pianos from Clementi & Co to be among the best in the world. In 1802 the London correspondent of the *Allgemeine Musikalische Zeitung* writes that Clementi & Co. 'produce without question the finest but also to be sure the most expensive instruments in the world, whose quality has been enhanced by Clementi's mechanical ability and artistic experience'.<sup>24</sup> The sound quality of Clementi's instruments has also been attested to

by modern musicians<sup>25</sup>, but whereas many square pianos have been carefully restored and thus regained good shape rather few Clementi grand pianos are in playable condition today.

Besides the production of keyboard instruments, Clementi & Co. resold many other musical instruments as well, in particular woodwind instruments, for which production was of minor importance – if any – <sup>26</sup>, whereas the wholesales were huge. An assessment of these activities is outside the scope of this paper.

I have included in my corpus the few barrel organs that I have found (App. 3), as they are also included in Clementi's number system. No evaluation of their total production can be made as, in my index, they belong to a group of 'others', which contain other instruments as well, such as 5 octave square pianos.

### Types of Instruments and Numbers

As I will now demonstrate, Clementi's serial numbers are useful for establishing both an accurate chronology and reliable statistics of the production of this second largest instrument maker of the early 19<sup>th</sup> century. Clementi's instruments were numbered according to a rather sophisticated system, apparently more elaborated than for other instrument manufacturers. If properly understood, analysed and chronologically calibrated, it offers a comprehensive overview of the production of different instrument types.

My corpus of instruments (App. 2–3) includes more than 300 Clementi pianos as well as a few Collard & Collard instruments for reference. The following types of numbers, by myself lettered A, B, C and D, can be found on a Clementi pianoforte (Fig. 5, 8):

- A=stamped serial number (type number);
- B=total serial number, handwritten in ink;
- C=stamped, factory's serial number;
- D=handwritten or stamped builder's code.

Abbreviations are also used to indicate where on the instrument available numbers are located: sp=spine (back of the case); pl=plug (nameboard support plug on each side, cheek-piece); rf=rear fascia (back of the nameboard);

bo=bottom boards. My abbreviations for pianoforte types are: *sq*=square (Fig. 2); *g*=grand (Fig. 3, 8); *co*=cottage; *cab*=cabinet piano (Fig. 7); *ug*=upright grand (or *cabinet grand*; Fig. 12); *us*=upright square. *Bo*=barrel organs are apparently also numbered in the same system, although they are no keyboard instruments.

In this paper every instrument is given a code, starting with the type abbreviation, such as *g* for grand or *sq* for square, followed in a row from left to right by its A and B numbers – with C and D as additional fourth and fifth, non-compulsory elements – and a slash between each number. A dash stands for non-existent or erased number (Fig. 8).

A full description would thus include A, B, C and D where available, although D numbers are not useful for dating and therefore not normally indicated in this paper. A few examples are *sq* 6319/7195/727sp, which is a square with A number 6319, B number 7195 and C number 727 on the spine and *g* 322/18498/–, which is a grand with A number 322, B number 18498 and non-existent C number.

All instruments in the different A series make up a total, indicated by the inked B number.



FIG. 8. Grand pianoforte, *g* 633/–/255bo/118, FF–c4, from 1806. Mahogany case with crossbanding, trestle stand with two pedals. Blue-painted, oval cartouche with painted flowers on each side. A number (633) on the wrest plank, B number missing/erased, C number (255) on the bottom boards, D number (118) on the action. Private owner, Östergötland, Sweden. Photographs: Odd Aanstad.

As an example, in 1805, according to my index (App. 1), Clementi produced 685 New Patent (5.5 octave double action) squares, 60 grands, 5 uprights and 100 others (mainly 5 octave single action squares), in total 850 pianos.

The D numbers can be found – handwritten or stamped – at the back of the nameboard, on one of the nameboard support plugs, on the spine, on parts of the action or underneath one of the keys (Fig. 9, 15). They represent individual workers in the factory and are sometimes found together with a name. I have discovered such rf numbers (D) exceeding 200 only after 1817. It is difficult to say with certainty, although, if this means that 200 people were employed at the same time. The A, B and C numbers will now be analysed and explained.

### Analysis of Instrument Numbers

My analysis of Clementi instruments with preserved inked B numbers has revealed a logical system of relative chronology, where alternative solutions are limited except in details if the available data from the instruments that I have







FIG. 9. Inside an instrument is sometimes found the name of the instrument maker as on this bronze comb of the hammer rail of g 638/- from 1815 (in the possession of the author), on which the name J Hoy and 110 is carved. 110 is the maker's "personal number" in the work force, here called the D number. This number is either a hand-written (as here) or stamped number with or without the name of the maker. The same maker is known from g 483/-1909, where he has dated the instrument as well: "Joseph Hoy - January 1814 - London". Photograph: Leif Sahlqvist.

found and registered (App. 2 and 3) are to fit into the system. This relative chronology can be calibrated into an absolute one with the help of instruments that are dated in another way than from their numbers.

Thus, a few instruments are dated inside: sq 4619/-/169sp from 1805, sq 5685/6448 from 11/7 1807, g 483/-/1909bo from January 1814, ug 998/- from 17/5 1816, g 156/17636 from 6/2 1822, gsq 188/- from 1826<sup>27</sup>, g 178/1780x from 16/9 1822, sq 16202/22841 from 23/4 1827, gsq 840/23593 from 1830, g 924/25256 from 1832 and Longman & Broderip sq 248/414sp from 1796 (where the spine number is the total).

Also sq 7338/8464 was bought for a wedding, taking place on the 18<sup>th</sup> August 1810 in Gothenburg. Clementi & Co changed its name to Collard & Collard in 1830 or at least before July 1831 (*The Company's History*, p. 7f), so here the labels help fixing the end of the Clementi numbers. Collard & Collard sq 234/40569 was shipped to C. Fisher & Co. in Mauritius on 16<sup>th</sup> November 1844 (information from the records to Mr. Colt before the fire in 1964), and gsq 7770/41535 was sold in January 1845 to a Mr. Ball for 50 guineas according to an inscription inside the piano.

As will be explained and analysed below, the corpus of instruments presented here (App. 2, 3) provides a stable base for my dating manual (App. 1). The dates should therefore, almost invariably, be accurate to within a year for Clementi & Co. Clementi's consecutive numbering were continued by Collard & Collard, but this period is not further discussed in this paper. All the same, some Collard & Collard pianos are included for reference with probably more or less the same accuracy, although the annual series may be adjusted when more instruments are added to the corpus.

### A (stamped) and B (inked) Numbers

According to my examination and analysis of the instruments that I have registered (App. 2, 3) and their numbers, the inked B number indicates the total amount of keyboard instruments, produced after the liquidation of Longman & Broderip in 1798, when this number system was started. The first serial numbers were placed on the spine, but from 1799 they are found on the wrest plank in the inner right hand corner of a Clementi square piano.

The earliest B numbers were stamped like A numbers, and not inked, so the location of these numbers is crucial for the interpretation. In 1800, possibly when Longman left the company, the B numbers begin to appear hand-written in ink, so if no such number is found on instruments later than this, it has most probably been erased over time.

The stamped A number in the outer left hand corner continues Longman & Broderip's old number series for New Patent squares, introduced in 1794, probably with number 1. From its introduction until 1802 only New Patent squares were regularly numbered here, single action squares being included in another A series (Others in App. 1). Broadwood started his consecutive numbering of squares two years later, in 1796<sup>28</sup>, his 5.5 octave squares, although, being introduced perhaps already in 1793.<sup>29</sup>

Thus, A numbers are also serial numbers, however not referring to the total production but to individual instrument types. On square pianos, during 1802-1810, the two last figures of the A number were nearly always repeated on the spine, whereas on grands the whole A number was often restamped on the damper rail.

The following A number series exist:





FIG. 10. Grand square gsq 461/22502 from 1827 with nameboard in rosewood and brass inlays. The Patent mentioned in the cartouche is James Stewart's patent from 1827, which is 'what is now the basis of modern stringing by doing away with the eye and using one continuous wire of double the length to serve for the two unison strings' (Rosamond Harding 1978, p. 186). This is one of the first instruments with this patent. The maker has signed with his D number and name: '136 Smith'. Private owner.

- A. One single series of *New Patent* (double action) *squares* 1794–1832, continued from Longman & Broderip and discontinued by Collard and Collard, starting anew in 1832 from 1 or 100 (App. 2).
- B. Three series of *grands* 1794–1809, 1810–1820 and 1821–, continued by Collard & Collard (App. 3).
- C. Three *upright* series, 1798–1807, 1808–1828 (these two possibly being one single with a break for the fire in 1807) and 1828–, continued by Collard & Collard (App. 3).
- D. One *grand square* (Fig. 10) series 1825–, continued by Collard & Collard (Fig. 14).
- E. Two *single action square* series (Other Sq in App. 1), one continued from Longman & Broderip until 1803 and another 1803–1812, where occasionally also double action squares with unusual characteristics are found, e. g. sq 633/9721 from 1811 with 6.5 octaves CC–f4. This compass was unusual for a Clementi square as early as 1811.

Finally, there is another series from 1824 deduced as a remainder within the total quantity and continued by Collard & Collard (App.1: Extra Q). It contains some grand squares, but since only few instruments belonging to this series have been found so far, I have not been able to reconstruct annual serial numbers.

Upright instruments, including cabinet grands (=upright grands; Fig. 12), upright squares, cabinet pianos (Fig. 7) and cottage pianos were normally numbered in a series of their own, although cabinet grands were occasionally included in the grand series or the upright series (App. 3). The cabinet piano with a sticker action, developed by Southwell in 1807, seems to have had no wider distribution until Clementi and Broadwood started serial production in 1812. W. F. Collard had then also patented his square upright model in 1811.<sup>30</sup> One of the earliest instruments of this type and the earliest known to have survived is su 356/10061 from 1811 at the Historical Museum in Gothenburg.



FIG. 11: Satinwood nameboard of sq 5960/6766 from 1808 painted with swags of sweet peas surrounding an oval cartouche. This type of nameboard was used from c. 1802 until early 1808. During 1808 some occasional new models of design were tested. From 1809 Clementi & Co began to use painted black rectangles with flowers and instruments above, as in Fig. 6B. This design continued into 1816, although some instruments in 1814 have a more stylized design as shown in Fig. 4. Also, in 1815 and 1816 a circular cartouche with non-figurative swags on the side is used as in Fig. 3. From 1818 the design changes again and brass inlays are used as in Fig. 7B and 11. As everything was painted by hand, there are always individual characteristics to be found. Private owner. Photograph: David Hackett.



Clementi's production of cabinet grands appears to have started in 1801 on the basis of a patent from 1795 belonging to William Stodart.<sup>31</sup> Joseph Haydn had then already visited Stodart's music shop at Lad Lane in London to see Stodart's new invention and allegedly praised the quality of its tone.<sup>32</sup> What significance Haydn's opinion may have had for Clementi's decision to get involved in the business of producing pianos in general and upright grands in particular is difficult to say. But, in any case, Haydn's visit to London would hardly have passed unnoticed by Clementi.



FIG. 12. One of Clementi's earliest upright grand pianofortes, ug 30/1822, from 1801. This irregular, oval cartouche on a maplewood nameboard, is exceptional and only found on very early Clementi pianos. The picture to the left shows the boards inside the instrument. Private owner in Paris. Photographs: Leif Sahlqvist.

Moreover, Haydn owned a Longman & Broderip grand, produced in 1794, which must also have been known to Clementi. This piano is arguably identical with an instrument later found in Vienna and now in private hands in France.<sup>33</sup>

Broadwood is known to have started producing upright grands only in 1805 at a contracted manufacturer's, James Black (Percy Street), and not in his own factories<sup>34</sup>, so both Stodart and Clementi were well ahead of their most important competitor. Not many upright grands from Clementi's production seem to have survived, and the one in Fig. 12 is the earliest one that I have found.

In conclusion, instruments can be dated from either an A or a B number. Even if the inked B number is missing on a New Patent square, the year of production is easily found from its stamped A number with the help of the index in App. 1, since this instrument type was numbered in one single series.



If, on the other hand, the ink number is missing on other instrument types, where there is more than one number series in option, the correct choice of series will have to be established from the appearance of the instrument, such as the nameboard design (Fig. 4, 11). In addition, C numbers are also chronologically significant, as will be demonstrated below, whereas D numbers are not useful for dating.

The relationship between an ink number (B) and its stamped equivalent, the type number (A), can be further exploited in order to obtain statistical information. An example will clarify this. Taking two squares 1) sq 3710/3963/712 (mid-1804) from the Musée Instrumental in Brussels and 2) sq 4503/4953/802 (early 1806) from Kirkstall Abbey Museum in Leeds, the following calculation can be made:

$$(Asq2-Asq1)/(Bsq2-Bsq1)=793/990=0.801$$

where A=A number and B=B number

Thus, by subtracting the A numbers and the B numbers respectively of two pianos and divide the two remainders, we get a quotient representing the percentage share of squares as related to the total production. In the example above 793 squares were manufactured during the period between the two instruments, whereas 990 is the total number of instruments during the same time. The quotient 0.801 is the percentage share of squares, revealing that Clementi squares represented 80.1% of the total amount of numbered instruments from mid-1804 until early 1806. In this way an overview of Clementi's production

over the years can be obtained (Fig. 6, 13).

The available information on numbers for around 200 squares is sufficient to reach a good statistical survey of this development. For other instrument types the annual number of instruments can be calculated in the same way but also as a remainder after subtracting the squares from the total.

For the above-mentioned period (mid-1804–early 1806) other instruments than squares thus represent 19.9%. Since the existing grands and uprights must belong to two different series in order to fit the amount of instruments available within this remainder, the internal relationship between the two series is deducible.

When a series is discontinued and a new series begins, a correct assessment of when this transition takes place as well as of the number of instruments within each series will have to be made. This is sometimes problematic but is facilitated by the great number of instruments in the New Patent square series (A numbers), constituting a firm framework against which the other series can be calibrated and corroborated.

### C Numbers or Factory Numbers

C numbers (c. 12–13 mm high), stamped on the spine by Longman & Broderip (L & B) indicated the total number of instruments produced. A new series was started at 1 in 1796. In App. 1, C numbers are only listed for the years 1796–1798, when they were used instead of B numbers. Other C numbers are not shown in App. 1.

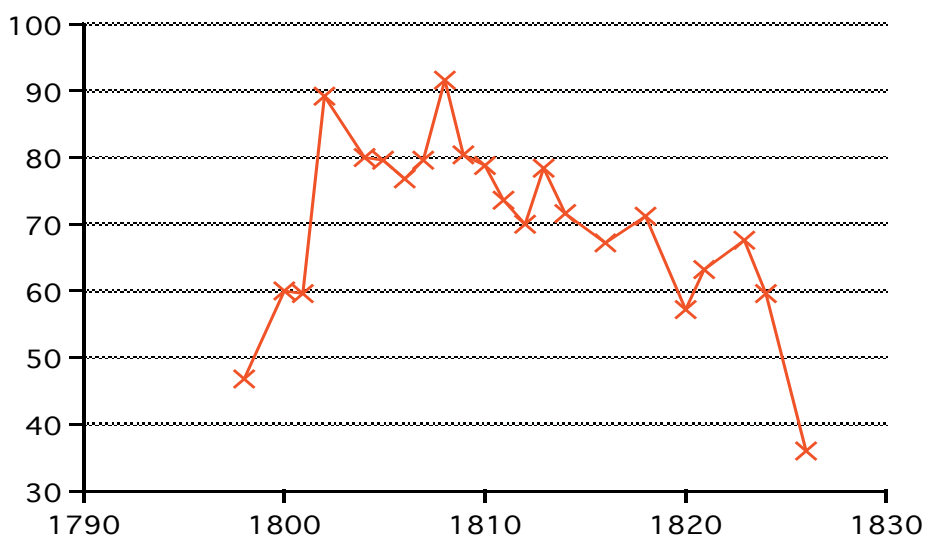


FIG. 13. The diagram shows Clementi's New Patent square pianos as a percentage share of the total production of keyboard instruments from 1798 until 1827. The single action square pianos are not included here as they were numbered in another series, but their production ceased around 1811–1812. The drastic decline in the 1820s is probably due to the increasing popularity of the grand squares and uprights.

From 1798, probably in connection with the final liquidation of L & B, the C numbers began to appear on the wrest plank in the inner right hand corner, where inked B numbers replaced them in 1800. L & B's A numbers were continued by Longman, Clementi & Co in 1798 except for upright grands, where a new series was started from 1 (App. 1).

Longman & Broderip has not been part of my investigation more than in order to understand the transition into the Clementi period. Nonetheless, the dates are probably accurate to within even a few months, as they are based on L & B sq 248/-/414sp, which is dated 1796 on its enamel nameplate. Thus, this piano is number 414 in L & B's total spine number system and 248 in their A numbering of New Patent squares.

In 1798 a new C number series was introduced, starting at 1 (App. 4, 5). These numbers were probably stamped on the spine of all square pianos when they passed the first part of the production, which would have been the carpentry. This part was completed at the Tottenham Court Road (TCR) premises from 1800, when these facilities were taken over by Clementi & Co. The grands are exceptional as they were veneered on the spine and the expensive wood could certainly not be damaged. Spine numbers therefore never appear on grands but most probably once in the company's original records, unfortunately destroyed in the fire in 1964.

C numbers started at 1 and continued to 1000, then recommenced at 1. This procedure was repeated in several series from 1800 until

late 1809 or early 1810, when consecutive numbers were introduced (App. 4). They started at 1 again and finally discontinued in 1817. The last known number 4855 has been found on sq 11372/14213, owned by the National Trust in Killerton, GB. The consecutive numbers were stamped either on the spine or on the boards underneath the instrument, from 1813 only underneath. C numbers are registered here with a *bo* or *sp* after the number, depending on where the number is located.

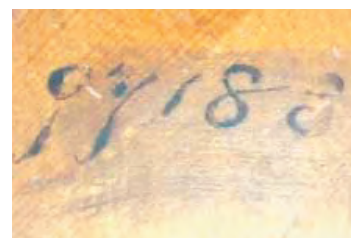
The total quantity of keyboard instruments counted from B numbers and C numbers respectively is principally the same over the years. I am showing this in App. 5, where I have calculated theoretical C numbers, based on the B number. As an example, from 1810 (sq 8016/9326/101) to 1813 (sq 9585/11544/2304) 2218 pianos (11544-9326=2218) were produced, when calculated from B numbers, and 2203 pianos (2304-101=2203) according to C numbers. From 1810 (sq 8016/9326/101) to 1816 (sq 10996/13937/2304) the corresponding quantity is 4611 pianos, taken from B numbers and 4638 pianos from C numbers.

Principally, the same calculations can be made for instruments between 1798 and 1809, if only 1000 instruments are added to the C numbers every time a new series start at 1. Assuming a regular flow of production and B No. 270=C No. 1 as a starting point, I have calculated theoretical B numbers for when the C series recommence at 1, then theoretical C numbers for all instruments with factual C numbers (App. 5).

There are only few instruments without



FIG. 14. After Clementi's death Collard & Collard continued to produce grand squares for many decades, but at the end of the 19<sup>th</sup> century, they became obsolete. This Collard & Collard piano from c. 1873 has the ink number 97188. Photographs: David Hackett.





a C number during this period. They may have been counted in the registers but just for some reason not been stamped. During a few months in 1809 and 1810 the pianos seem to have regularly left the factories without a C number.

The difference between the factual and the theoretical C numbers is shown in a special column (Diff.) in App. 5. A negative difference ( $\# = \text{minus}$  in App. 5) indicates that the instrument took more time to complete or sell, whereas a positive difference indicates that the instrument was completed/prioritised before others.

I assume C numbers were stamped at the carpenter's department (TCR) when the furniture work of the case was completed, whereas A numbers probably were added only when action, wrest plank, pins etc. had been installed. The B numbers would then have been the last ones to be marked on the instruments after their final finish and just before they were to leave the factories for sale. We know from a newspaper advertisement just after the fire in 1807 that the final finish of the pianos was not done in the Tottenham Court Road factory that had been burnt down but at the Cheapside premises.

FIRE. Clementi and Co. having unfortunately had their premises, in Tottenham-court-road, destroyed by fire, beg to inform the public, that through the generous exertions of their neighbours and friends, they have saved their grand and square piano-forte cases, and also a principal part of their dry manufactured and unmanufactured stock. It also affords them great consolation, under the pressure of their severe loss, to be enabled to state, that the finishing part of their manufacture has always been conducted at their extensive premises, no. 26, Cheapside, where their stock of grand and small piano-fortes, organs &c in an advanced state, will enable them to serve the public with every article of their trade in that perfection which has hitherto secured them general approbation...26, Cheapside, March 23, 1807 (The Times, 24th March 1807, p. 1, cited in David Rowland, Clementi's Music Business, p. 24).

Certain instruments may have been delayed on their way to completion, possibly due to fluctuations in the demand for different types of pianos. An instrument with an earlier C number than the theoretical one ( $\# = \text{minus}$  in the diff. column in App. 5) may have taken shorter time to complete than an instrument with a later C number. This is arguably the reason why the two number series do not match perfectly.

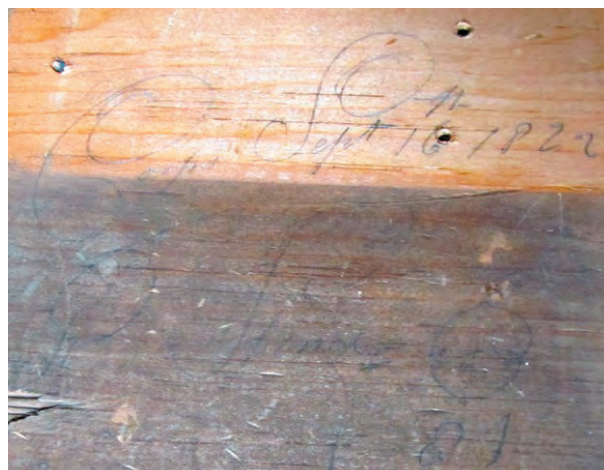


FIG. 15. G 187/1780x, dated in pencil on the keybed inside the piano. The inscription reads: 'Corps Sept 16 1822' and 'P Hind', which is the name of the maker, and finally the D number '81', which is his personal code. Cf. nameboard in Fig. 18. Private owner in NY/USA.

An example of this is sq 9011/10792/837sp from 1812. No. 837 ought to have been stamped in early 1811 after sq 8087/(9) 415/210 but before sq 8465/9942/1042bo. Interestingly, this square has got a rare cartouche, which may have come out of regular use in 1812, although applied on the numberwise (A number) adjacent square 8087. This suggests the nameboard and painted cartouche in question were finished at an early stage in the chain of production.

C numbers should be distinguished from the stamped, so-called *repetition numbers*, consisting of the two last figures of the full four- or five-figure A number. Repetition numbers are found on many Clementi pianos until 1810. C numbers should also be distinguished from D numbers, always below c. 270 and often found at the back of the nameboard.

If two numbers are found on the spine, the C number is normally stamped vertically and the D number horizontally. Also, normally the D number is small size and the C number big size. The D number could be repeated or only found in handwriting inside the instrument (Fig. 15).

### Annual Statistics

According to my statistics (Fig. 6, App. 1) Clementi's instrument production culminated in 1810–1811 with an annual quantity of 1100–1200 pianos, numbers quite comparable to



FIG. 16. Satinwood nameboard of sq 1818/1427 from 1801. Clementi's earliest square pianos had white enamel nameplates with floral design on both sides and the text Muzio Clementi & Comp<sup>y</sup>, N° 26 Cheapside, London. New Patent is added above the company's name to the pianos with double action. This design was principally a continuation of Longman & Broderip's design with white enamel nameplates on satinwood or maplewood nameboards.

Broadwood's enormous output.<sup>35</sup> This capacity was not reached again until 1825.

In particular, the manufacture of grand pianos increased, probably due to large orders brought back by Clementi from his extensive continental visits in the years 1802–1810. During these travels "his correspondence to Frederick William Collard is full of detail of piano sales in Germany, Russia and elsewhere".<sup>36</sup>

One reason for Clementi's international competitiveness was the fact that he started regular production of pianos with a FF-f4 compass much earlier than Broadwood, his main competitor. In England pianos were regularly made with a CC-c4 compass whereas in continental Europe FF-f4 was standard. When David Rowland discusses this, he notices that even a Broadwood grand given to the famous composer Ludwig van Beethoven did not conform to what was used in Germany at the time:

Strangely, the anomalous situation of two parallel six-octave compasses persisted for many years so that, for example, the six-octave piano that Beethoven received from John Broadwood & Sons in 1818 was out of step with the six-octave instruments made by local makers. Although some English makers persisted with their own six-octave compass, after Clementi arrived back in London in the summer of 1810 his company began to produce continental-style six-octave instruments (Rowland 2011, p. 150).

My corpus of instruments (App. 2 and 3) shows that Clementi & Co. produced FF-f4 pianos from 1809/1810, the earliest one being sq 7087/8151 from 1809, now at the Historical museum in Gothenburg. This is probably an important reason why Clementi's production peaked during 1811 and 1812 (Fig. 6).

Over the years 1801–1806 the annual out-

put oscillated between 650 and 850 instruments. The lower number in 1807 (450) is explained by the fire. The still intact premises at 26 Cheapside must have been taken into extended use during the restoration of the destroyed buildings. The production of grand pianos seems to have continued without problems, whereas the output of squares was severely lowered.

The principal reason for starting production at the new Tottenham Court Road premises in 1802 may have been the demand for an increased amount of *New Patent* (N. P.) squares (Fig. 2, 16, 17). A New Patent square was a five and a half octave – or later six octave – square with double action, i. e. larger than the old five octave squares with single action, however, still to be produced for many years to come. The latest known Clementi five octave square is sq 390/6818 from 1808, but a few may have been produced as late as 1811–1812, when already serial production of the new six octave squares had started (from 1809).

The New Patent squares (Fig. 13) accounted for about 90% of the total output of Clementi pianos in 1803, which can be compared with 60% over the period from early 1801 until autumn 1802. After this initial Tottenham Court Road phase, when Clementi apparently responded to a dammed up demand for New Patent squares, the pace of square production slows down and revolves around 80% during 1803–1807.

From 1808, after the fire in 1807, a slow decrease is discernible in the New Patent square share of the total production, oscillating just below 70% in 1811–1812. After a peak during 1823, the subsequent fall can be explained from the introduction of the larger grand squares,



FIG 17: New Patent square pianoforte sq 2461/-/310sp, FF-c4, double action, from 1802: cartouche (left) and interior (right). Satinwood nameboard with mahogany crossbanding and geometrical stringing, four square, tapered legs. 168x59 cm. B number erased, C number (310) on the spine. Photographs: Renlunds Museum, Gamla Karleby, Finland.

introduced on the market by Clementi in 1825.

Regular production of six octave squares started in 1809. The oldest preserved instrument of this type that I have found is sq 7087/8151 at the Historical Museum in Gothenburg, but Clementi & Co also experimented with larger keyboards. A square upright piano us 402/10662 from 1812 at the Musical Museum in Stockholm has got CC-e4, i.e six and a third octaves, as well as the name Gompertz inscribed inside, which could refer to, if not the Miss Gompertz to whom Clementi dedicated one of his works, at least one of her relatives. This instrument is unique in another respect, as it demonstrates that Clementi & Co were experimenting with iron reinforcements in their pianos already in 1812. In this piano a large, seemingly original iron hitch pin block has been installed, possibly one of the earliest preserved of its kind.

### Grand Pianoforte Manufacture

The grand pianos were apparently produced at a relatively constant level in the years 1803–1809, around 60–70 pianos per year or 7–9 % of the total production (App. 1). During 1810–1811 a sharp increase took place, possibly as a consequence of the new six octave instruments being introduced with their more modern appearance, such as turned, screwed-in legs instead of the earlier trestle stand. Clementi & Co ought to have started producing a six octave compass in 1809 rather simultaneously for squares and grands.

The nearly tripled production of grands in 1810 coincided with Muzio Clementi's return from his long trip to the continent, which is hardly fortuitous. During these first two years after Clementi's return the production of grands rose to 17% of the total production or 100–125 pianos per year (App. 1). The subsequent fall, decreasing the share of grands from 17% to 13% of the total, was probably due to the general economic situation in England during the later Napoleonic war years.

Conversely, the post-war boom in 1816–1817 may be reflected in higher production figures during these years. The share of grands, although, seems to have been lagging behind, not turning upwards again until 1818, when the high numbers from the earlier period 1810–1812 were repeated. The years 1818–1823 were to become the overall most successful period in the company's history for sales of grand pianos, when their share amounted to 20–23% of the total production.

The short relief in England after peace in 1815 was soon followed by the severe post-Napoleonic depression.<sup>37</sup> Rising unemployment and increasing social unrest made the political situation unstable and the times of prosperity waned. The demand for Clementi's instruments in general declined during 1819–1822, except for grand pianofortes.

After 1815 continental piano makers were more and more successful and gradually offered harsher competition, not least Erard, who had produced a grand piano for Napoleon and Haydn in 1801<sup>38</sup>, and Pleyel & Cie in Paris. When Ca-



mille Pleyel visited London in 1815, he bought mahogany wood and samples of ivory keys for his father's piano manufacture, Pleyel & Cie in Paris, instead of buying pianos for wholesale as he had done earlier. English pianos in general had also become too expensive, at least for the German market, because of exchange rates, according to several letters from 1817 onwards between Clementi & Co. and the music publisher Breitkopf & Härtel in Munich.<sup>39</sup>

However, Clementi's production of grands was not affected in the same negative way as were the squares during 1819–1822, in spite of this keen competition. This could probably be explained from the technical development of these exclusive instruments, implemented under the auspices of the Collard brothers, although certainly inspired and perhaps initiated by Clementi himself. Long afterlengths of the strings had been introduced on grands in order to achieve a richer sound, loosely fixed iron struts had been applied in the treble and in 1821 W. F. Collard had patented his 'harmonic swell', a device for tone improvement, on the instruments referred to as *Imperial Patent* (Fig. 18).

In the company's sales catalogue of 1816 the following lines can be read concerning the grand pianofortes: 'These instruments are now brought to the highest perfection; the tones are full, rich and brilliant; the touch is so complete

that the most fastidious finger has nothing more to desire; and the movements are so constructed as to be entirely free from noise, and unaffected by change of weather.'

At the same time Broadwood pianos seem to have suffered a decline, furthering themselves from previous high standards of tone production, particularly characteristic of Broadwood's earlier instruments from 1800–1805. In fact, Broadwood grands during the 1810s do not possess the distinct brilliance and overtone richness of which Clementi & Co were so proud in their catalogue.<sup>40</sup>

This background is crucial for an understanding of Clementi's great success in sales of grand pianos during a period of war crisis as well as a general decline in his own production. The charm of innovations such as the harmonic swell (1821; patent no. 4542)<sup>41</sup> would have remained only for a short time, since a decline in the production of grands is clearly visible already from 1823 (App. 1).

During the subsequent seven years grand pianos represented only around 10% of the total production. Competitors such as Kirckman and Erard were becoming more and more aggressive on the market and apparently forced Clementi's export sales considerably downward. From 1830 the grands' share stabilized at approximately 15% of the total production.



FIG. 18. Above: Rosewood nameboard of g 187/1780x from 1822 with brass inlays and the text Clementi & Comp<sup>y</sup>, London. The Imperial Patent is the harmonic swell. Cf. inscription in Fig. 11. Below: Paper label on the damper rail of g 187/1780x: 'Patent Harmonic Swell and Bridge of Reverberation. Clementi & Co. Patent Piano Forte Makers to the King and Musical Instrument Makers to the Hon. East India Company.' Private owner in NY/USA.



## Conclusion

Muzio Clementi was a composer who made an impact in many fields, not only because of his skills but also as a result of his exceptionally long career. He participated in the dynamic evolution of music in its transformation from Classicism to Romanticism.

By virtue of the extraordinary length of his career alone, Clementi resists classification according to the most usual of our historical categories. Like his contemporaries Goethe and Beethoven, he stood astride the conflicting (but often intermingled) artistic currents of his time. One of the earliest exponents of a 'classic' musical idiom, he was also an influential participant in 'romantic music' (Plantinga 1977, p. 305).

Clementi's role in music trade and the manufacture and marketing of the pianoforte was even more significant. Clementi & Co was most probably the world's largest exporter of keyboard instruments and even rivalled Broadwood in total production for some years. The company's achievements in the field of tone improvement were outstanding and well acknowledged not only in the British Isles but also on the continent. Contemporary reviews estimated the pianos from Clementi & Co to be among the best in the world.

However, the company's records were destroyed in a fire in 1964, and a proper assessment of the company's role in music trade and in the development of the pianoforte has been complicated by an insufficient corpus of accurately dated instruments. In this paper such a corpus has been established as well as an index by which Clementi pianos can be reliably dated almost invariably to within a year.

I have also discussed my results in relation to Clementi's role as a marketing manager of the pianoforte as well as to other events related to Clementi & Co. Hopefully, future research into early 19<sup>th</sup> century music trade and music life, in the marketing of pianos among the growing middle class as well as other related fields of research could benefit from the data and analyses presented here.

As this paper is published on the Internet, it will be easily and regularly updated. Thus, any

new information on Clementi pianos that is not yet available in the present paper is important and will be gratefully received by the author for analysis and later addition into an updated version. Among other things, more information is needed on instruments from the crucial years around 1798-1800 when some instruments may have been taken over from the bankruptcy of Longman & Broderip and only relabeled Clementi & Co or Longman, Clementi & Co.

## Acknowledgements

Finally, I am indebted to many people who have shared their information and photographs with me on Clementi pianos that they own, have owned, restored or come across in another way. I would like to mention in particular David Hackett and Tom Strange who are now hosting web-sites, where my research has been published and will be regularly updated, as well as Alastair Laurence, David Hunt, Lucy Coad, Kenneth Mobbs and Andrew Garrett who have taken specific interest in my research. Also, I have picked up many pieces of valuable information that I have followed up from the Clinkscale website, today hosted by John Watson and the Colonial Williamsburg Foundation. But there are so many more, people who have not only forwarded their information but also encouraged me on the way. This paper would never have been realised without all of you.

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21. Plantinga, p. 232.
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25. Burnett 2004.
26. cf. Rowland, Clementi's Music Business, p. 148.
27. Gsq 188/– is one of the earliest instruments in the grand square series that was started in 1826. It has the text 'Caledonian Patent. Muzio Clementi & Comp<sup>y</sup>. Makers to His Majesty and the Royal Family.' There is also an inscription on the top key: '124 1826'. I have not examined this instrument myself, but 124 is probably the D number and 1826 obviously the date. There are no other numbers in the instrument, so the B number has been erased. It has one tubular iron strut, which may be part of the 'Caledonian Patent', which I have seen nowhere else. From 1827, what is called just 'Patent' is James Stewart's Patent, described in Fig. 10.
28. Wainwright, *Broadwood by Appointment. A History*, London 1982, p. 326.
29. David Rowland, "Piano music and keyboard compass in the 1790s", *Early Music*, May 1999, pp. 283–293.
30. Photograph in C. F. Colt and Anthony Miall, *The Early Piano*, London 1981, p. 55.
31. Patent no. 2028 in Harding, p. 318.
32. Harding, p. 60f.
33. Photograph in Robbins-Landon, p. 116.
34. Wainwright 1982, p. 329.
35. <http://www.piano-tuners.org/broadwood/index.html>.
36. Rowland, Clementi's Music Business, p. 150.
37. cf. Samuel Hollander, Malthus and the post-Napoleonic Depression, *History of Political Economy Vol. 1*, 1969; Richard Saville, *Bank of Scotland: A History 1695–1995*, Edinburgh 1996, p. 484.
38. Edwin M. Good, *Giraffes, Black Dragons, and Other Pianos*, Stanford 1982, p. 72.
39. Rowland, Clementi's Music Business, p. 27f.
40. cf. Burnett 2004
41. Harding, p. 342; Burnett pp. 169–170.

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### Web-page

<http://www.piano-tuners.org/broadwood/index.html> (2012-12-10)

Appendix 1: Index for Dating from A and B numbers.

YEAR	TOTAL (B)	TOT Q	SQ	SQ Q	GRANDS	G Q	UPRIGHTS	U Q	OTHER SQ	O Q		
1793		450	-	-	-	-			2900-	450		
1794		520	1-	80	1-	40			3350-	400		
1795		580	80-	180	40-	50			3750-	350		
1796	1-	660	260-	220	90-	50			4100-4230, 1-	390		
1797	420-	500	480-	270	140-	40			260-	190		
1798	920-1205	265	750-	385	180-	40			450-	135		
1798	1-	280	Longman, Clementi & Co.				1-	5				
1799	280-	530	1135-	340	220-	40	5-	10	585-	140		
1800	810-	600	1475-	330	260-	45	15-	10	725-	215		
1801	1410-	650	1810-	380	305-	45	25-	10	940-	215		
1802	2060-	670	2190-	510	350-	50	30-	5	1155-	105		
1803	2730-	850	2700-	690	400-	50	35-	5	1260-1280, 1-	100		
1804	3570-	840	3390-	680	450-	70	40-	5	80-	85		
1805	4420-	850	4070-	685	520-	60	45-	5	165-	100		
1806	5270-	830	4755-	715	580-	55	50-	5	265-	55		
1807	6100-	470	5470-	335	635-	80	-	-	320-	55		
1808	6570-	900	5805-	740	715-	55	100-	55	375-	50		
1809	7470-	890	6545-	680	770-845	75	155-	60	425-	75		
1810	8360-	1150	7225-	920	100-	90	215-	80	500-	60		
1811	9510-	1035	8145-	720	190-	125	295-	90	560-	100		
1812	10545-	840	8865-	620	315-	100	385-	115	660-	5		
1813	11385-	545	9485-	370	415-	65	500-	110				
1814	11930-	610	9855-	395	480-	85	610-	130				
1815	12540-	780	10250-	505	565-	90	740-	185				
1816	13320-	855	10755-	585	655-	80	925-	190				
1817	14175-	865	11340-	600	735-	105	1115-	160				
1818	15030-	700	11940-	465	840-	130	1275-	105				
1819	15730-	550	12405-	380	970-	120	1380-	50				
1820	16280-	500	12785-	300	1090-1215	125	1435-	75				
1821	16780-	620	13085-	430	1-	140	1510-	50				
1822	17400-	800	13515-	520	140-	150	1560-	130				Extra Q
1823	18200-	1100	13995-	765	290-	120	1690-	180	GSQ	GSQ Q		
1824	19300-	1100	14760-	620	410-	120	1870-	160			1-	145
1825	20400-	1050	15380-	520	530-	110	2030-	100	1-	140		270
1826	21450-	900	15900-	160	640-	70	2130-	70	140-	270		330
1827	22350-	500	16060-	145	710-	30	2200-	60	410-	130		135
1828	22850-	370	16205-	110	740-	30	2260-	40	540-	150		
1829	23220-	280	16320-	80	770-	30	2300-	30	690-	140		
1830	23500-	700	16400-	70	800-	50	2330,-; 1,-	170	830-	310	1-	100
1831	24200-	800	16470-	60	850-	60	120-	190	1140-	310		180
1832	25000-	900	16530-	50	910-	80	310-	200	1450-	150		130
1832	Collard&Collard	1-	290									
1833	25900-	1200	290-	300	990-	120	510-	190	1600-	500		190
1834	27100-	1200	590-	280	1110-	130	700-	190	2100-	500		150
1835	28300-	1200	870-	270	1240-	140	890-	190	2600-	500		150
1836	29500-	1200	1140-	250	1365-	185	1080-	200	3100-	500		115
1837	30700-	1200	1390-	240	1550-	190	1280-	200	3600-	430		140
1838	31900-	1200	1630-	220	1740-	190	1480-	200	4030-	430		160
1839	33100-	1250	1750-	220	1930-	200	1680-	200	4460-	500		130
1840	34350-	1250	2180-	220	2130-	190	1880-	200	4960-	500		140
1841	35600-	1300	2400-	200	2320-	200	2080-	200	5460-	520		180
1842	36900-	1300	2600-	220	2520-	200	2280-	200	5980-	520		180
1843	38200-	1300	2850-	250	2720-	210	2480-	190	6500-	520		130
1844	39550-	1350	1-	250	2930-	210	2670-	190	7010-	500		150
1845	40850-	1350	250-	250	3140-	210	2860-	190	7510-	500		150
1846	42050-	1300	500-	250	3350-	210	3050-	190	8010-	500		150
Notes: B numbers are given on the left (B No). All other numbers are A numbers.												
SQ=Squares, GSQ=Grand squares, Q=quantity. TOTAL Q=SQ Q+G Q+U Q+O Q(or GSQQ)+Extra Q.												
Number series before 1800 belong to Longman & Broderip (-1798) and Longman, Clementi & Co (1798-1800) and from 1830/31 to Collard & Collard.												
Principally, SQ is a series for double action squares, whereas OTHER SQ is for single action squares.												
									Updated 2013-07-17			
									© Leif Sahlqvist			



Appendix 2: Corpus of Square Pianos

(A. 5.5 and 6 octave squares; B, C and D: grand squares, E: 5 octave squares and others)

	A No	B No	C No	Comp	Date	Location	Size	D No
sq	771			FF-c4	1798	P UK	163.8x58.4	
sq	775	-	966sp	FF-c4	1798	P UK		
sq	916	-	977sp	FF-f3	1798	P USA/GA		
sq	944	-		FF-c4	1798	P Australia	157x57	56
sq	1073	-		FF-c4	1798	destroyed UK		
sq	1109	224	-	FF-c4	1798	Kings Lynn Museum UK		48
sq	1123	262		FF-c4	1798	Rest UK	164.1x59	65
sq	1155	322	48sp	FF-c4	1799	P UK	164x61	92
sq	1162	341	28sp	FF-c4	1799	P UK		98 or 86
sq	1355	748	287sp	FF-c4	1799	Rest, Tom Strange, USA		71
sq	1608	1137	740sp	FF-c4	1800	P UK		
sq	1711			FF-c4	1800	Ch. Ramezay Museum, Montreal		
sq	1818	1427		FF-c4	1801	P UK	163.8x58	
sq		1463		FF-c4	1801	Rest UK		
sq	1848	1484		FF-c4	1801	Germ. Nationalmus., Nürnberg	165x58.7	
sq	2040			FF-c4	1801	P UK		
sq	2177		799sp	FF-c4	1801	P USA		
sq	2183		-	FF-c4	1802	Museum of the Amer. Piano, NY		
sq	2449	2496		FF-c4	1802	Palazzo Sassatelli, Imola, I		
sq	2461		310sp	FF-c4	1802	K H Renlunds Mus., G Karleby SF	168x58.2	
sq	2480	2539	200sp	FF-c4	1802	P UK		73
sq	2636	2546	475sp	FF-c4	1802	Existing		
sq	2697	2644		FF-c4	1803	Eric Feller Coll, Germany		
sq	2814	2816		FF-c4	1803	Existing		
sq	3127	3238	819sp	FF-c4	1803	P UK		
sq	3145	3256		FF-c4	1803	British Piano Mus., Brentford UK	170x59	
sq	3312	3468	35sp	FF-c4	1803	M. A. Sigal Coll., MA/USA		
sq	3346	3503		FF-c4	1803	P UK		
sq	3359	3524	114sp	FF-c4	1803	P UK		
sq	3443	3627		FF-c4	1804	Existing		
sq	3564	3779		FF-c4	1804	P UK		
sq	3698	3945	-	FF-c4	1804	Existing		21, 43
sq	3710	3963	712sp	FF-c4	1804	Musée Instrumental, Brussels	166.5x58.5	41
sq	3721	3974	692sp	FF-c4	1804	Rest UK		82
sq	3841	4122		FF-c4	1804	P Miami, USA		
sq	3896	4197		FF-c4	1804	P UK		
sq	3999	4318	750sp	FF-c4	1804	P UK		94
sq	4095	4447		FF-c4	1805	Deutsches Museum, Munich		
sq	4137	4495	183sp	FF-c4	1805	P UK		
sq	4254		317sp	FF-c4	1805	P UK		
sq	4293	4676	404sp	FF-c4	1805	P France	168x58	
sq	4417	4839		FF-c4	1805	P Florence		
sq	4439	4865		FF-c4	1805	P UK	167.1x58	
sq	4503	4953	802sp	FF-c4	1805	Kirkstall Abbey Mus., Leeds UK		
sq	4550	5015	80sp	FF-c4	1805	P UK		
sq	4619		169sp	FF-c4	1805	Sotheby's 1986	166.4x59.7	140
sq	4739	5253	-	FF-c4	1805	P USA		89
sq	4865			FF-c4	1805	P UK		
sq	4936			FF-c4	1806	University of California, LA USA		
sq	4996			FF-c4	1806	Rest UK		
sq	5028	5628	-	FF-c4	1806	P Holland	167.5x59	62
sq	5191	5827	675sp	FF-c4	1806	Villnäs Castle, SF	169x60	126
sq	5333			FF-c4	1806	P UK	169.5x60.3	
sq	5337		810sp	FF-c4	1806	P London		47
sq	5453	6073		FF-c4	1806	Existing		

Appendix 2: Corpus of Square Pianos

(A. 5.5 and 6 octave squares; B, C and D: grand squares, E: 5 octave squares and others)

sq	5468	6143		FF-c4	1807	Washington & Lee Univ, VA/USA		
sq	5472	6197	325sp	FF-c4	1807	P UK		
sq	5492	6232	6sp	FF-c4	1807	P Sweden	167.4x58.5	43
sq	5609		23sp	FF-c4	1807	Royal Acad of Music, Dublin		118
sq	5657	6415		FF-c4	1807	P UK		
sq	5659		165sp	FF-c4	1807	Sunderland Museum UK	168.5x51.8	178 T Dove
sq	5685	6448		FF-c4	1807	P UK		
sq	5801	6582		FF-c4	1808	Museum of London		
sq	5810	6591		FF-c4	1808	Existing		
sq	5832	6616		FF-c4	1808	P Bath		
sq	5858	6649	140sp	FF-c4	1808	Rest UK		
sq	5958	6771	303sp	FF-c4	1808	P Belgium	167.3x58.8	
sq	5960	6766		FF-c4	1808	P Oxfordshire, UK		
sq	6046			FF-c4	1808	P USA		
sq	6082	6922		FF-c4	1808	P Bristol UK		
sq	6109	6952		FF-c4	1808	Existing		
sq	6137			FF-c4	1808	Sotheby's 1/12 1978	167.7x59.7	
sq	6178	7030		FF-c4	1808			
sq	6188	7040		FF-c4	1808	Existing		
sq	6192			FF-c4	1808	Existing		
sq	6196	-	692sp	FF-c4	1808	P UK		
sq	6244	7104	-	FF-c4	1808	P UK		
sq	6273	7140		FF-c4	1808	Sotheby's 1984	167.6x60.5	
sq	6283	7152	730sp	FF-c4	1808	P UK	168x59.5	192
sq	6298	7171	684sp	FF-c4	1808	P USA		
sq	6319	7195	727sp	FF-c4	1808	Beatrix Potter Mus., Saurey UK	167x58.7	37
sq	6354			FF-c4	1808	Palace Pianos, UK		
sq	6472	7374	45sp	FF-c4	1808	M. A. Sigal Coll., MA/USA		163
sq	6681	7641		FF-c4	1809	Existing		
sq	6747	7721			1809	Existing		
sq	6831	7825			1809	P UK		
sq	6921	7902	439sp	FF-c4	1809	Rest UK		
sq	6948			FF-c4	1809	Existing		60
sq	6976	8001		FF-c4	1809	P Holland	167.4x58.9	92
sq	7066	8111			1809	Existing		
sq	7087	8151	-	FF-f4	1809	Historiska museet, Göteborg		
sq	7138			FF-c4	1809	P NY/USA		
sq	7265				1810	Rest BG		
sq	7338	8464	45sp	FF-c4	1810	Musical Museum, Stockholm		
sq	7340	8467		FF-f4	1810	Smithsonian Inst., Washington	166.4x61.5	
sq	7454			FF-c4	1810	Duke University, Durham UK	167x58.9	
sq	7483	8651		FF-c4	1810	P UK		
sq	7531	8728			1810	Existing		
sq	7598	8797		FF-c4	1810	P UK		
sq	7621	8822	51sp	FF-c4	1810	Existing		186
sq	7630		683sp					30
sq	8012				1810	P Amsterdam	167.8x59.5	76
sq	8016	9326	101sp	FF-f4	1810	P UK	167.4x59.6	153
sq	8071	9395		FF-f4	1810	P San José, USA		
sq	8087	9415	210sp		1811	P Scotland	167.5x59.3	27
sq	8089			FF-c4	1811	P UK		
sq	8101				1811	P Sweden		
sq		9764			1811	Rest UK		
sq	8355	9791		FF-f4	1811	P UK	167.0x59.3	
sq	8377				1811	Existing		
sq	8461			FF-f4	1811	Sotheby's 1984	169.5x61	

Appendix 2: Corpus of Square Pianos

(A. 5.5 and 6 octave squares; B, C and D: grand squares, E: 5 octave squares and others)

sq	8464	9941		FF-f4	1811	Ringve Museum, Trondheim N	167.3x59.6	
sq	8465	9942	1042bo	FF-f4	1811	Metropolitan Museum of Art, NY	167.2x59	
sq	8470			FF-c4	1811	La Biblioteca LAA, Bogotá		
sq	8559	10091		FF-c4	1811	P Germany		
sq	8791	10445		FF-c4	1811	P UK		
sq	8821	10494		FF-f4	1811	Existing		
sq	8854	10528	1333sp	FF-f4	1812	Musical Museum, Stockholm	167x59	184
sq	8860	10594		FF-c4	1812	P UK		15
sq	8983	10761		FF-c4	1812	P UK		121
sq	9011	10792	837sp	FF-f4	1812	P UK		170
sq	9096	10895	1625sp	FF-c4	1812	P UK		
sq	9149	10963		FF-c4	1812	Existing		
sq	9239	11103			1812	Sotheby's 1980		
sq	9262			FF-c4	1812	P UK, Sold by Lucy Coad		
sq	9408	11353		FF-c4	1812	Palazzo Sassatelli, Imola, I		
sq	9569			CC-c4	1813	University of Waterloo, Canada		
sq	9551	11504		FF-f4	1813	Existing		
sq	9585	11544	2304bo	FF-c4	1813	Romsdahls museum, Molde N	167x59.5	103
sq	9590	11550			1813	Existing		
sq	9615	11577		FF-c4	1813	P Bologna		
sq	9791			FF-c4	1813	Alec Cobbe Coll., E.Clandon UK	167x59.3	
sq	9836	11905	2751bo	FF-f4	1814	P UK		181
sq	9856		-	FF-f4	1814	P Holland	167x58.5	115
sq	9868		2789bo	FF-c4	1814	P UK		196
sq	9873	11953		FF-f4	1814	P UK		
sq	9902	11985	2809bo	FF-c4	1814	P Zaragoza, Spain		26
sq	9905	11988	2827bo	FF-c4	1814	P Austria		34
sq	10142			FF-c4	1814	P UK	167x59	78
sq	10162	12388			1814	rest UK		
sq	10199			FF-c4	1815	Sotheby's 22/5 1986	169.7x61	
sq	10208		3285bo	FF-c4	1815	P Japan		
sq		12487			1815	P UK		
sq	10297			FF-c4	1815	Sotheby's 23/10 1980	170x60	
sq	10383				1815	Auction UK 1977		
sq	10384	12684		FF-c4	1815	Essex Institute, Salem, MA/USA	170.2x54.2	
sq	10558				1815	Museum of the Amer. Piano, NY		
sq	10674	13160	4016bo	FF-f4	1816	P France	166x59	
sq	10799	13217		FF-c4	1816	P Existing		
sq	10828	13418		FF-f4	1816	Museo Instrumental, Barcelona	169x61	190
sq	10917	13520	4131bo		1816	Museum of the Amer. Piano, NY		
sq	10996	13608	4267bo		1816	P UK		
sq	11229	13937	4739bo	FF-c4	1816	Horsham Museum UK	167x59	181
sq	11290	14067			1817	Sotheby's 1981		
sq	11362				1817	P Italy	171.5x62	
sq	11372	14213	4855bo	FF-c4	1817	National Trust, Killerton UK	171.4x61.6	203
sq	11650				1817	Conservatorio di Pesaro I		
sq	11738		-	FF-c4	1817	P France		205
sq	12230			CC-c4	1818	Museo degli strum. mus., Milano		
sq	12351	15536		FF-c4	1818	M A Sigal Coll, MA/USA		
sq	12358	15576			1818	Rest UK		
sq	12545		-(-)	FF-c4	1818	Sotheby's 1986	174x63	
sq	12638	15972	-(-)		1819	Ringve Museum, Trondheim N		
sq	12694	16064		FF-c4	1819	P Milano		
sq	12761	16134		FF-c4	1819	Mus. of Fine Arts, Boston, MA/US	171.2x62.5	
sq	12862			FF-c4	1819	Sotheby's 2000	173.3x62.5	
sq	12920				1819	Existing		

Appendix 2: Corpus of Square Pianos

(A. 5.5 and 6 octave squares; B, C and D: grand squares, E: 5 octave squares and others)

sq	12937			FF-c4	1819	P Belgium		173x63	
sq	12998			FF-c4	1819	P UK			
sq	13016	16604			1820	Auction UK 1982			
sq	13083	16781	- (-)	FF-c4	1820	P UK			
sq	13125	16824		FF-f4	1820	Finchcocks Musical Museum, UK	174x62		
sq	13160	16910		CC-c4	1820	P USA?			
sq	13242	17023		FF-c4	1820	Ravensmoor House, UK			
sq	13463	17359			1821	Sold UK			
sq	13495	17445			1821	P UK	171.8x64	10, 96	
sq	13517				1821	Colt Collection UK	174x64		
sq	13647	17713			1821	Existing			
sq	13723	17789			1821	Palace Pianos, UK			
sq	13733	17799			1822	P UK	171.8x65		231
sq	13741				1822	P UK	174.0x62,6		
sq	13791	17877		FF-f4	1822	P Bristol, UK			
sq	14000				1823	Colt Collection UK			
sq	14009	18305		FF-c4	1823	Sotheby's 1984	174x63,5		
sq	14052	18368			1823	Period Piano, Kent, UK			
sq	14063			FF-c4	1823	East Anglia Univ., Norwich UK			229
sq	14071	18387			1823	Auction UK			
sq	14157	18493			1823	Existing			
sq	14356	18754		FF-f4	1823	Riversdale Mus., Goulburn, AUS			263
sq	14614	19091			1824	P Scotland	175.0x62.3		
sq	14619	19096			1824	P UK			
sq	14703	19286		FF-f4	1824	P UK	"H Scott 124", 53, 83		
sq	14739			FF-f4	1824	Victoria & Albert Mus., London			
sq	14772			FF-c4	1824	Royal College of Music, London			88
sq	14911	19592		FF-c4	1824	Finchcocks Musical Museum, UK	174x62.5		
sq	14943			FF-c4	1824	Sotheby's 1980			
sq	14944	-		FF-c4	1824	P Sweden			
sq	14999	19762		FF-f4	1824	P UK			184
sq	15196			FF-f4	1824	Existing	174x65		
sq	15197	20068			1825	P UK			
sq	15271	20223			1825	Existing			194
sq	15314	20263			1825	Existing			
sq	15374	20367		FF-f4	1825	P UK			67, 122
sq	15430	20524		FF-f4	1825	Roy. Nat. Coll f.t.b., Hereford, UK			
sq	15514	20608		FF-f4	1825	P VA/USA	172x64.4		
sq	15553	20707			1825	Existing			
sq	15725			FF-f4	1826	Louisiana State Museum, New Orleans			
sq	15790				1826				35
sq	15822	21377			1826	Existing			
sq	15826	21411		FF-f4	1826	P Florence			
sq	15896			FF-f4	1826	P VA/USA			
sq	16046	22222		FF-f4	1827	Period Piano, Kent, UK			
sq	16141	22637		FF-f4	1827	P Florence			
sq	16202	22841		FF-f4	1827	P Cambridge MA/USA	172.1x68.3		
sq	16477	24229		CC-c4	1829	P Spain			
B. Grand squares									
gsq	770			FF-f4	1832	P England			
gsq	1018			FF-f4	1833	Kenosha County Museum, WI/USA			
gsq	1355			FF-f4	1835	Smithsonian Inst, USA	177.8x68.2		
gsq	1659	32029		FF-f4	1836	P UK			
gsq	1772	32654		FF-f4	1836	P Italy			
gsq	2387	36445		FF-f4	1840	Metropolitan Museum of Art, NY			



Appendix 2: Corpus of Square Pianos

(A. 5.5 and 6 octave squares; B, C and D: grand squares, E: 5 octave squares and others)

gsq	73	39504			1843			181.4x72.9
gsq	234	40569			1844	shipped to Mauritius		
C. Grand squares (James Stewart patent from 1827), continued by Collard & Collard								
gsq	149	21676		FF-f4	1826	P Umbria, Italy		
gsq	188				1826	P UK		
gsq	290				1826	P UK		
gsq	411	22350			1827	P UK		
gsq	461	22502		FF-f4	1827	Existing		
gsq	517	22619		FF-f4	1827	Musée Instr, Brussels		179.5 x71.8
gsq	840	23593			1830	Existing		
gsq	905	23615			1830	Abbot Hall Art Gallery, Kendall		
gsq	1162	24340			1831	P UK	Patent. Clementi & Compy, London.	
gsq	1202	24402			1831	Existing	Patent. Clementi & Compy, London.	
gsq	1388	24819		FF-f4	1831	Existing	Collard&Collard/Late Clementi, C&C	
gsq	1561	25378			1832	P UK		
gsq	1576	25820			1832	Existing		
continued by Collard & Collard								
gsq	1949				1833	Existing		
gsq	3241	30196			1836	P UK		
gsq	3756	31107			1837	auction UK 1979		
gsq	4328			CC-g4	1838	Existing		185.5x83.5
gsq	4446	33045		FF-f4	1838	P UK		
gsq	7333	40572		CC-f4	1844	P France		
gsq	7754	41431			1844	Brighton Piano Centre, Brighton		
gsq	7770	41535			1844	Welsh Folk Mus., Cardiff, UK		182x76
gsq	9614	46296			1851?	Existing		
gsq	11135	55302			1859?	P UK		
gsq	11325	56707			1860?	Existing		
gsq	12680	73586		CC-a4		P Australia		
D. Other grand squares.								
gsq	506	24629			1831	Existing		
gsq	523	24821			1831	P UK		
continued by Collard & Collard								
gsq	644	25873			1832	P Bristol		
E. Other squares: 5 octave squares and occasionally unusual others.								
sq	916	977		FF-f3	1800	P GA/USA		
sq	6	3086	905sp	FF-f3	1803	Musical Museum, Copenhagen		159.5x58
sq	88			FF-f3	1804	Existing, earlier P CA/USA		
sq	390	6818	131sp	FF-f3	1808	P UK		161x58.7
sq	402				1808	P UK		
sq	531	8728	98sp	FF-c4	1810	Rest UK		168x59
sq	633	9721		CC-f4	1811	P Germany		
Note: P=Private Person; UK=Great Britain; Rest=found when being restored at a workshop								

Appendix 3: Corpus of Grands, Uprights and Others

	A No	B No	C No	Compass	Date	Location	Size
A. Grands: 1st grand series							
g	38	-		FF-c4	1794	Alex Cobbe Collection, UK	
g	229	397		FF-c4	1799	Sutton Place, Guildford, UK	
g	370	2332		FF-c4	1802	Finchcocks Collection, UK	228.5x107.5
g	504			FF-c4	1804	P UK	
ug	517	4410		FF-c4	1804	Finchcocks Collection, UK	258 x108.5
g	544			FF-c4	1805	P USA	221x105.4
g	547			FF-c4	1805	P USA	225.4x106
g	633		255bo	FF-c4	1806	P Sweden	225.5x108.1
ug	650	6090		FF-c4	1806	Mobbs Keyboard Coll., Bristol	
g	662	6213		FF-c4	1807	San Franc. State College, USA	
g	710			FF-c4	1808	P USA	227.4x106.2
g	761	7393		FF-c4	1808	P UK	
g	772		181bo	FF-c4	1809	National Trust, Saltram, UK	227.5x106.2
g	809		-	FF-c4	1809	P Spain	230x106
ug	830	8144	-	FF-c4	1809	Colt Coll. , Bethersden, UK	261.6 x107.6
2nd grand series							
g	303			FF-f4	1811	P Geneva	
ug	392			FF-f4	1812	P Australia	261.5 x113.5
g	409		1774bo	FF-f4	1812	Colt Collection, Bethersden, UK	
g	443		*	FF-f4	1812	Finchcocks Collection, UK	234x116.5
g	483			FF-f4	1814	Washington Lee Univ, VA/USA	
ug	521	12168	2770sp	FF-f4	1814	Mus. of Fine Arts, Boston, USA	244.5 x113.2
g	540	12027	2898bo	FF-f4	1814	Museo degli str. mus., Rome	230x115
g	638		-	FF-f4	1815	P Malmö, Sweden	235x115
g	931	1556x		FF-f4	1818	Accademia di S. Cecilia, Rome	
g	1008			CC-c4	1818	Smithsonian Inst., Washington	236x114.8
g	1076			FF-f4	1819	Chicago Historical Society, USA	
g	1140			FF-f4	1819	Eidsvoll Museum, Norway	236x115
*3454 stamped on the damper rail together with 443.							
3rd grand series							
g	132			CC-c4	1821	Finchcocks Collection, UK	
g	156	17626		CC-c4	1822	Finchcocks Collection, UK	244x114
g	187	1780x		FF-f4	1822	P Trumansburg, NY/USA	
g	322	18498	-	CC-f4	1823	Nordiska Museet, Stockholm	
g	340	18427			1823	Museo degli str. mus., Rome	
g	395			CC-f4	1823	House of Ickworth, UK	
g	733				1827	Musée du Conserv., Paris/sold	
g	839	23958		CC-f4	1830	Gemeente Museum, Hague, NL	245x121
g	924	25256		FF-f4	1832	P USA	
g	949	25442		CC-f4	1832	P UK	
Continued by Collard & Collard:							
g	1029			FF-f4	1833	Finchcocks	
g	1142			FF-f4	1834	Attingham Park, UK	
	1160	27588		FF-f4	1834	Existing	
g	1236	28178			1834	Colt Coll., Bethersden, UK	
g	1477	30180		CC-f4	1836	Stadtmus., Munich (Colt Coll.)	
g	2123	34207		FF-f4	1839	P UK	
g	3181	40266			1844	P Holland	
g	3221	40362		AAA-a4	1844	P Sweden	

Appendix 3: Corpus of Grands, Uprights and Others

g	3339	41978	1029	FF-g4	1845	Finchcocks Collection, UK	244.5x123.5
g	3493				1846	Sutton Place, Guildford, UK	
g	3521	42573			1846	P USA	
g	4602	49418			c. 1850	Colt Coll., Bethersden, UK	
g	5614	57182	604bo	AAA-a4	c. 1855	P Sweden	
g	7887	74061	2938	AAA-a4		Sotheby's 1981	252.7x146
g	9192	83146				P Holland	
B. Uprights: 1st upright series							
ug	30	1822		FF-c4	1801	P France	
g	47	5137			1805	P UK	
2nd upright series							
su	356	10061	1227sp	FF-f4	1811	Historical Mus., Gothenburg, S	
su	402	10662	1643sp	CC-e4	1812	Musical Museum, Stockholm	
co	408		1538sp	FF-f4	1812	Finchcocks Collection, UK	
su	461	11236	1476sp	FF-f4	1812	Colt Coll., Bethersden, UK	
co				FF-c4	c. 1815	Colt Coll., Bethersden, UK	
ug	998		481(sp?)	FF-c4	1816	Colt Coll., Bethersden, UK	
ug	1154		*	FF-f4	1817	Shrine to Music M., Vermillion USA	
su	1410			FF-f4	1818	St.Musikk-s främj., Stockholm	
cb	1412	15813		FF-c4	1818	Nat. Folk Mus., Saint Fagans, UK	
ug	1505			FF-c4	1820	P UK	
cb	1602	17536			1821	P UK	
cb	1739	18443		CC-c4	1823	P Holland	
cb	1801	18975?		FF-f4	1823	Royal Albert Museum, Exeter UK	
cb	1922	19441		FF-f4	1824	St.Musikk-s främj., Stockholm	
cb	2342	23750	1215		1830	Mus. & Art Gallery, Bristol, UK	
*3434 stamped on the stand; this is probably not a C number.							
3rd upright series							
cb	372			FF-f4	1832	1832	
cb	482			FF-f4	1832	P UK	
co	614	25356		FF-f4	1832	Marlowe A. Sigal Coll, MA/USA	
continued by Collard & Collard							
cb	3057	42189			c. 1846	Colt Coll., Bethersden, UK	
u	7919	154928	554			Bows Mus., Barnard Castle, UK	
C. Barrel organs							
	RHS	LHS					
bo	488	-			1798	P UK	
bo	129	291			1800	Birmingham City Museum, UK	
bo	155	317			1800	Musical Museum, Copenhagen	
bo	189	352			1800	Belle Skinner Coll., Mass, USA	
bo	259	398			1801	P UK	
bo	1222	23			1802	P UK	
bo	4	1004	902sp		1803	Musical Museum, Copenhagen	
bo	5511	352	-		1806	Royal Academy of Music, London	
Note: I have found no barrel organs with numbers in ink. Thus, as it seems, they are not included in the total quantity of keyboard instruments. I interpret the RHS (right hand side) number as an A number. The LHS (left hand side) number is unclear. Barrel organs may have been produced elsewhere and resold by Clementi & Co. My dates for barrel organs are uncertain.							

Updated 2013-07-17

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Appendix 4: A, B, C and D numbers

Type	A	B	C	Compass	Year	D	
sq	248	–	414sp	FF-c4	1796		Longman&Broderip
sq	740	–	898sp	FF-c4	1797		Longman&Broderip
sq	775	–	966sp	FF-c4	1798		Longman, C & Co
sq	944	–	–	FF-c4	1798	56	"
sq	1109	224	–	FF-c4	1798	48	"
sq	1123	262	–	FF-c4	1799	65	"
sq	1155	322	48sp	FF-c4	1799	92	"
sq	1162	341	28sp	FF-c4	1799	98 or 86	"
sq	1355	748	287sp	FF-c4	1799	71	"
sq	1608	1137	740sp	FF-c4	1800		"; "Loud"
sq	1848	1484	–	FF-c4	1801		
sq	2177	[2063]	799sp	FF-c4	1801		
sq	2183	[2071]	–	FF-c4	1802		
sq	2461	[2443]	310sp	FF-c4	1802		
sq	2480	2539	200sp	FF-c4	1802	73	
sq	2636	2546	475sp	FF-c4	1802		
sq	2814	2816		FF-c4	1803		"Collies N68", 2
sq	6	3086	905sp	FF-f3	1803		
sq	3057	[3170]	202sp	FF-c4	1803		
sq	3127	3238	819sp	FF-c4	1803		
sq	3312	3468	35sp	FF-c4	1803		
sq	3359	3524	114sp	FF-c4	1803		
sq	3710	3963	712sp	FF-c4	1804	41	
sq	3721	3974	692sp	FF-c4	1804	82	
sq	3999	4318	750sp	FF-c4	1804	94	
sq	4137	4495	183sp	FF-c4	1805		
sq	4254	[4645]	317sp	FF-c4	1805		
sq	4293	4676	404sp	FF-c4	1805		
sq	4503	4953	802sp	FF-c4	1805		
sq	4550	5015	80sp	FF-c4	1805		
sq	4619	[5101]	169sp	FF-c4	1805	140	"Zimmermann 1805"
sq	5028	[5621]	–	FF-c4	1806	62	
sq	5191	5827	675sp	FF-c4	1806	126	
g	633	[5897]	255bo	FF-c4	1806	118	
sq	5337	[6018]	810sp	FF-c4	1806	47	
sq	5472	6197	325sp	FF-c4	1807		
sq	5492	6232	6sp	FF-c4	1807	43	
sq	5609	[6295]	23sp	FF-c4	1807	118	
sq	5659	[6437]	165sp	FF-c4	1807	178	"178 T. Dove"
sq	5685	6448	?	FF-c4	18/7 1807		
sq	5858	6649	140sp	FF-c4	1808		
sq	5958	6771	303sp	FF-c4	1808		
sq	390	6818	131sp	FF-f3	1808		
sq	6196	[7046]	692sp	FF-c4	1808		
sq	6244	7104	–	FF-c4	1808		
sq	6283	7152	730sp	FF-c4	1808	192	
sq	6298	7171	684sp	FF-c4	1808		
sq	6319	7195	727sp	FF-c4	1808	37	
sq	6445	7315	888tray	FF-c4	1808		
sq	6472	7374	45sp	FF-c4	1808		
g	761	7393	–	FF-c4	1808	57, 76	
g	772	[7553]	181bo	FF-c4	1809		

Appendix 4: A, B, C and D numbers

sq	6921	7902	439sp	FF-c4	1809		
g	809	[7989]	–	FF-c4	1809		"J R B"
sq	6976	8001	–	FF-c4	1809	92	
ug	830	8144	–	FF-c4	1809		
sq	7087	8151	–	FF-f4	1809		
sq	7338	8464	–	FF-c4	1810		
sq	531	8728	98sp	FF-c4	1810		
sq	7621	8822	51sp	FF-c4	1810		
sq	7630	[8866]	683sp	FF-c4	1810	30	
sq	8016	9326	101sp	FF-f4	1810	153	
sq	8087	[9]415	210sp	FF-c4	1811		
sq	8377				1811		"Marshall 167", 40
sq	8464	9941	–	FF-f4	1811		
sq	8465	9942	1042bo	FF-f4	1811		
us	356	10061	1227sp	FF-f4	1811		
sq	8821	10494		FF-f4	1811	104	
sq	8854	10528	1333sp	FF-f4	1812		
sq	8860	10534		FF-c4	1812	15	
us	402	10662	1643sp	CC-e4	1812		
co	408	[10672]	1538in	FF-f4	1812		
sq	9011	10792	837sp	FF-f4	1812		
sq	9096	10895	1625sp	FF-f4	1812		
sq	9149	10963		FF-c4	1812	9, 112	
us	461	11236	1476sp	FF-f4	1812		
g	409	[11376]	1774bo	FF-f4	1812		"Robinson"
sq	9496	11444	2284bo		1813		"Marshall 142"
sq	9551	11504		FF-f4	1813		"D Scott 16", 75
sq	9585	11544	2304bo	FF-c4	1813	103	
sq	9836	11905	2751bo	FF-f4	1814	181	
sq	9856	[11931]	–	FF-f4	1814	115	
g	9868	[11950]	2789bo	FF-c4	1814	196	
sq	483	[11952]	–	FF-f4	1814		"Joseph Hoy – January 1814"
sq	9902	11985	2809bo	FF-c4	1814	26	
g	9905	11988	2827bo	FF-c4	1814	34	
ug	540	1[2]027	2898bo	FF-f4	1814		
sq	521	12168	2770bo	FF-f4	1814		
sq	10142			FF-c4	1814	78	
sq	10208	[12594]	3285bo	FF-f4	1815		
g	10674	13160	4016bo	FF-f4	1815		
sq	638	[13173]	–	FF-f4	1815		"J. Hoy 116, R. Howlow 60"
sq	10828	13418	–	FF-f4	1816	190	
sq	10917	13520	4131bo	FF-c4	1816		
sq	10996	13608	4267bo	FF-c4	1816		
sq	11229	13937	4739bo	FF-c4	1816	181	
sq	11372	14213	4855bo	FF-c4	1817	203	
sq	11738	[14744]	–	FF-c4	1817	205	
sq	12545	[15940]	–	FF-c4	1818		
sq	12638	15972	–	FF-f4	1819	146	
sq	12834	16274			1819	132	
sq	12920				1819	98	
sq	13242	17023		FF-c4	1820	266	
g	13495	17445	10sp	FF-c4	1821	96	
sq	156	17626	–	CC-c4	6/2 1822		"Gray 1, George Montrie"

Appendix 4: A, B, C and D numbers

sq	13647	17713			1822	297
sq	13733	17799	139 or 631	FF-c4	1822	231
sq	13741				1822	284
sq	14063	–	–	FF-c4	1823	229
sq	14356	18754	–	FF-f4	1823	263
sq	14703	19280			1823	"H Scott 124", 53, 83
sq	14772	–	–	FF-c4	1824	88
sq	14999	19762	–	FF-f4	1824	184
sq	15271	20223			1824	194
sq	15790				1825	35
<p>Note: Only instruments for which there is information on C or D numbers have been registered here. Numbers within brackets have been calculated from App. 1.</p> <p>All instruments are Clementi &amp; Co pianos except those in 1796-1800.</p> <p>Sq 248/–/414 is dated on the nameboard. Sq 5685/6448 is dated on the top key.</p>						



Appendix 5:  
Analysis of C Numbers

Type	A	B	C factual	C theor.	Diff.	Year
	[1128]	[270]		[1]		1798
sq	1155	322	48	[52]	4	1799
sq	1162	341	71	[28]	43	1799
sq	1355	748	287	[478]	#191	1799
sq	1608	1137	740	[867]	#127	1800
	[1728]	[1270]		[1]		1800
sq	1848	1484	–			1801
sq	2177	[2063]	799	[793]	6	1801
sq	2183	[2071]	–			1801
	[2350]	[2270]		[1]		1802
sq	2461	[2443]	310	[173]	137	1802
sq	2480	2539	200	[269]	#69	1802
sq	2636	2546	475	[276]	199	1802
sq5	6	3086	905	[816]	89	1803
sq	3057	[3170]	202	[900]	#698	1803
sq	3127	3238	819	[968]	#149	1803
	[3138]	[3270]		[1]		1803
sq	3312	3468	35	[198]	#163	1803
sq	3359	3524	114	[254]	#140	1803
sq	3710	3963	712	[693]	19	1804
sq	3721	3974	692	[704]	12	1804
	[3957]	[4270]		[1]		1804
sq	3999	4318	750	[48]	#298	1804
sq	4137	4495	183	[225]	#42	1805
sq	4254	[4645]	317	[375]	#58	1805
sq	4293	4676	404	[406]	#2	1805
sq	4503	4953	802	[683]	119	1805
sq	4550	5015	80	[745]	335	1805
sq	4619	[5101]	169	[831]	338	1805
	4755	[5270]				1806
sq	5028	[5621]	–			1806
sq	5191	5827	675	[557]	118	1806
g	633	[5897]	255	[627]	#372	1806
sq	5337	6018	810	[748]	62	1807
sq	5472	6197	325	[927]	#602	1807
sq	5492	6232	6	[962]	44	1807
		[6270]		[1]		1807
sq	5609	[6295]	23	[25]	#2	1807
sq	5659	[6437]	165	[167]	#2	1807
sq	5685	6448 ?		[178]		18/7 1807
sq	5858	6649	140	[379]	#239	1808
sq	5958	6771	303	[501]	#198	1808
sq5	390	6818	131	[548]	#417	1808
sq	6196	[7046]	692	[776]	#84	1808
sq	6244	7104	–			1808
sq	6283	7152	730	[882]	#152	1808
sq	6298	7171	684	[901]	#217	1808
sq	6319	7195	727	[925]	#198	1808
		[7270]		[1]		1808
sq	6445	7315	888	[45]	157	1808
sq	6472	7374	45	[104]	59	1808
g	772	[7553]	181	[283]	102	1809
sq	6921	7902	439	[632]	#193	1809
g	809	[7989]	–			1809

Appendix 5:  
Analysis of C Numbers

sq	6976	8001	–			1809
ug	830	8144	–			1809
sq	7087	8151	–			1810
		[8270]		[1]		1810
sq	7338	8464	45	[194]	#149	1810
sq5	531	8728	98	[458]	#360	1810
sq	7621	8822	51	[552]	#501	1810
sq	7630	[8866]	683	[596]	87	1810
		[9270]		[1]		1810
sq	8016	9326	101	[56]	45	1810
sq	8087	[9]415	210	[145]	65	1811
sq	8464	9941	–	[451]		1811
sq	8465	9942	1042	[672]	370	1811
su	356	10061	1227	[791]	436	1812
sq	8854	10528	1333	[1258]	75	1812
su	402	10662	1643	[1392]	251	1812
co	408	[10672]	1538	[1402]	136	1812
sq	9011	10792	837	[1522]	#685	1812
sq	9096	10895	1625	[1595]	30	1812
su	461	[11385]	1476	[1966]	#639	1812
g	409	[11335]	1774	[2065]	#291	1812
sq	9496	11444	2284	[2174]	110	1812
sq	9585	11544	2304	[2274]	30	1813
sq	9836	11905	2751	[2635]	116	1814
sq	9856	[11931]	–			1814
sq	9868	[11950]	2789	[2680]	109	1814
sq	9902	11985	2809	[2715]	94	1814
sq	9905	11988	2827	[2718]	109	1814
g	540	1[2]027	2898	[2757]	141	1814
ug	521	12168	2770	[2898]	#128	1814
sq	10208	[12594]	3285	[3324]	#39	1815
sq	10674	13160	4016	[3890]	126	1815
g	638	[13173]	–			1815
sq	10828	13418	–			1816
sq	10917	13520	4131	[4250]	119	1816
sq	10996	13608	4267	[4338]	71	1816
sq	11229	13937	4739	[4667]	#72	1816
sq	11372	14213	4855	[4993]	#88	1817
sq	11738	[14744]	–			1817
sq	12545	[15940]	–			1818
sq	12638	15972	–			1819

Note: Theoretical numbers (both B and C) are within brackets.  
Theoretical C numbers are numbers within a regular flow of production.  
The Diff. Column gives the difference between the factual and theoretical C numbers.  
A positive value in the Diff. column indicates a short time of production.  
A negative value in Diff. indicates a delay in production.  
Calculations are explained in the section C Numbers (p. 15).