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LEONARDO GALLUCIO

TO HIS BENEVOLENT AND SINCERE READERS

[-1-] Verdicelli told you in advance these words, which you should remember with ease, and that are found at the end of his letter, addressed to you, benevolent and sincere Readers, on the occasion of the solemn celebrations of the last Christmas, in the year 1602: “That you should never consider the Submissions made by a certain Artusi as the signet and seal of an invective launched by him against the knight Hercole Bottrigaro, as anything else but plagiarism, if not the mangled plundering of others’ writings, and, as to what is his, you should not deem it but slander, lies, false doctrine and other such things, which are useless, unpleasant and unworthy of being read.” This is what Verdicelli said to you, having in mind the words of this Artusi at the end of his invective, which are these exactly: “I will let the World know who produced those many translations mentioned by others in my own Opinion on the harmonic tetrachords which I will write in defence of Patricio.” And here you have now, benevolent and sincere readers, that this man, a true good-for-nothing, as a man of his word has not failed to want to execute the promise he made to you with all his power, although he did this much before what Verdicelli himself had been drawn to believe. However, how badly he realised his promises will be clearly manifest through the challenge that I am here to make of such sophistry of his, as Verdicelli, who would have aided me more than willingly to sustain the burden of this challenge as if it were his duty, is right now very busy with some other great and important affairs of his. Nevertheless, he does not refrain from saying that what is delayed is not discounted, wanting to infer that, there being the need, he will not abstain from reviewing in more detail these accounts. Therefore, I tell you now, benevolent and sincere readers, that, in a letter addressed to the Friendly Readers contained in the first pages of the second part of the Artusi, or, of the Imperfections of modern music, which was published again by this man with this title and printed by Giacomo Vincenti in Venice, he writes, after several of his usual slanderous assertions and lies: “Moved by the truth, and by the promise which I made to you last year, I set myself to this work to defend Signore Francesco Patricio, who is now dead.” He intends to mount this defence through his Musical In-considerations, which he has published as a measly addition to the second part of the Artusi of the Imperfections of modern music, delaying to the fifteenth and last of his In-considerations to inform the Reader about who made those translations. Now, Readers, please, let me state that I do not want to proceed in this writing of mine, if not by using civil language, since, if I wanted, I could also repay him in the same fashion, by calling him now malignant, slanderous, evil tongue, presumptuous, arrogant, bossy, now silly, ignorant, detractor, falsifier of others’ writings, Sower of darnel, impertinent, malicious and inconsiderate man, babbler, insolent, troublemaker, or I could address him with other titles such as idiot, Cimabue, left-over, a big jacket for fat sparrows, obtuse as a gelding, dazed, drain with no wisdom, weirdo, or even worse ones, according to the need, and his provocations, which he displays very often in this and all the other works scribbled by him, showing himself a great codfish, a giant, a buffalo, an

Elephant, and one such that has no equal. Premised this inviolable protestation of mine, and omitting to refute the lowly proverbs badly interpreted by him, the dreams and the fabrications which he makes up in his dedicatory (or rather derisory, and even better discouraging) statement, in the Letter to the Friendly Readers and in all of those In-considerations, I direct my pen first of all to show you, Benevolent and sincere Readers, what he says in good defence of the linear Demonstations of Aristoxenus' harmonic tetrachords made by Patricio in the seventh Book of the Deca historiale of his Poetics at the entry ' Distinction of the genera' , page 300, as Artusi promises to do in said first Letter to the courteous Readers, where he writes that he wants to take up his defence, and in this other one to the Friendly Readers, where he writes that he has to show only how excusable is what has been written and demonstrated by Patricio. Such excuses are, he says first of all, that "since this was not his (namely, Patricio' s) main aim, he was forced to deal with this discipline and to discuss it briefly and incidentally," adding also that "Patricio had not the precise experience of such discipline as it was required of him. Now, you be the judge [-3-] of whether these first ones are excuses great enough to justify a very erudite contemporary of ours, such as Patricio was, as this man mentions in the first words of said letter of his, and truly it was so. To this excuse, he adds this other one in the second of his In-considerations, page 4. "This might have happened for a mistake of the copyist, or because it is a prerogative of the printers to leave out some word on occasion, and sometimes entire lines." But this man does not remember that Patricio was present when the print was amended, as the Author of the Opinion, namely, knight Bottrigaro refers appropriately in the proem of it having witnessed it himself, as he lived at Ferrara at the time, and for more than ten years he had been conversing daily with Patricio and was a regular visitor to the printer Baldini for his personal needs. This man adduces another excuse in his third In-consideration, which begins thus. "I said in the Letter to the Friendly Readers, that Signor Patricio' s intention was to show in general how the Harmonies of the ancients related to their Poems, according to the information that he could gather from in the Ancient writers, as he said himself in the eighth Book of the Deca historiale at page 303, under the heading ' Distinction of the Genera.' Patricio repeated this in the same book at the Paragraph Poems and Harmonies at page 316, but he did want to deal with Music in a specific way and with the precision embraced by Aristoxenus, Euclid, Gaudentius, Ptolemy, Boethius, the Stapulensis, Glareanus, Zarlino, Salinas and many, many others. For this reason the, he did not bother to investigate if the musical explanations of the harmonic Tetrachords which he had to present were true or not, since this detail was of little or no importance to the overall plan and intention of what he wanted to write in his Poetics. Hence, this consideration is very effective in the eyes of men of judgement, and justifies Patricio." But I do not believe that you, benevolent and sincere Readers, would suffer being counted among those men of judgement, just as knight Bottrigaro would not agree to be, as Artusi became fully aware. For this reason he continues thus. "But since it seems to me that the Author of the Opinion is shaking his head, and stomps his feet unhappy with this reason, and he believes that such a justification is not sufficient to cancel the error which he recounts as so terrifying, [-4-] nevertheless his words will justify him again, and very effectively." So, he adds: "Patricio means to say. "I see and understand very well that nor I, nor any other Theorist (what a reckless judgment, which should be presumed to belong to a man of science as Patricio was) would find and understand those intervals which are necessary in order to build everyone of those species according to the intention of Aristoxenus in the division which I made of the four lines in equal parts. However, I seem to understand

that in such a division those parts have to sound a Semitone." These words - Artusi continues in order to say to be better understood - are to be referred to the sound, and not to the sections of equal length in which the lines are divided, as the Glossarist interprets (here we see him raising a new complaint). But Signor Patricio reasons with regard to the Genera, and his words are taken literally from his Poetics in the aforementioned passage. Their conditions, according to how Euclid and Nichomachus describe them, were that in every Tetrachord where the first line and the fourth sound a consonance (the word Diatessaron is missing) or a fourth, as we call it, it should be divided in 30 equal parts, and, according to the measure of the third parts both of one and of the other, six should be taken up by the distance between the first and the second part, so that they would sound a semitone, and so on." I maintain that these words have been written by Patricio in that very passage, and were also correctly related by knight Bottrigaro Author of the Opinion at page five of it, while building on them the secure foundations of his examination of those linear Demonstrations. However, Artusi, in his commentary, where he strives with all his strength to put forward as well as he can this excuse, beside relating what he wants Patricio to be saying, namely, "Here is how he himself justifies himself and declares", he adds and repeats that Patricio does not want that only the total division of the parts in which the line has been divided should be considered, but also the sound, since he realised very well that he could not achieve the exact result of what he needed by merely relying on the division of the lines in equal parts. For this reason he adds "So that they sounded a Semitone betwixt them (and not between them). This means nothing but that such a shortening must [-5-] be measured against the sound, and not against the total length of the line. And he did not need to look for any other clarification or confirmation around this to achieve the exact and correct result, "because he did not want to deal with Music specifically, but with Poetry. So, it was enough for him to hint at his intention." However, this man does not mention what Patricio mentions a little further on talking about the said 12 equal parts, namely, that they sound a whole tone. You have now heard this excuse of his in its entirety, and you can understand how effective it is. Judge it as it seems right for you to do, since I do not want to reply to this imagined and illogical blathering in any other way, except by relating another event. There was a good fellow citizen of ours, young and rich, who, enjoying high living and beautiful clothes, went to the shop of a sword maker and said to him. "I would like a sword with a golden hilt, some attractive knives and a dagger also made of gold, Mastro." Having been asked by the Mastro with what type of hilt he wanted the sword to be adorned with, adding that, if he did not have in the shop one decorated as he wanted, he could decorate one for him one in the space of a few days, he showed him several swords adorned in different ways, and also other hilts not yet mounted on to the blade of the swords. Our good citizen, not being able to express what he wanted to that Mastro, left his workshop saying that he would be sending a friend of his later on, who would tell him which hilts he preferred. After not many hours the Friend went to se the Mastro, and, wanting to describe that hilt, he said: "I believe, that it should be thus, and thus; or rather, thus, or rather, thus and thus." The shrewd Mastro hearing all this said: "Fine. Although I do not understand you, leave it to me now, and, when you come back, I believe that you will be satisfied immediately." Benevolent, and sincere Readers, since Artusi regretted not to have declared and said anything to the defence of the Demonstrations of Patricio himself after these lame excuses, he decides to add these words: "But since the Author of the Opinion is making a great fuss around the examination of the sections [-6-] of the lines drawn, comparing those sections together and extracting many intervals as he

sees fit, in order to demonstrate that those demonstrations are false, would he be so kind as to tell me who, being moderately knowledgeable in mathematics, does not know that, if two lines of the same length and equal sounds both are divided into 30 equal parts, and if six parts are removed from one of them, the ratio 30. to 24 will result between the longer which measures 30 and the shorter that measure 24 compared together, which is a proportion located in the superparticular genus outside of its radical terms, and will be a sesquiquinta between 5 and 4, which, according to Ptolemy, will give us the shape and model of a major third?" I answer for the Author of the Opinion, who in no way must dignify this man with an answer, that said Author is satisfied that Artusi proved and agreed that this is true, as he himself confirms in the Letter to the Friendly Readers where he says that "Annibale Melonj considered the words of Signor Patricio chewing them over for a few days, and knowing that they did not correspond to the Demonstrations he executed, he decided, and so on." Hence, it follows inescapably that all the other Demonstrations executed by Patricio are similarly of that sort of ilk, and that the Author of the Opinion, namely, knight Bottrigaro was right in stating that Patricio had deceived himself greatly in those. However, you must have noticed those words ' comparing' and ' compared' , and especially ' a sesquiquinta between 5 and 4' which are expressions worthy of a great mathematician, who, convinced not to have said enough, continues: "However, after the partition of the lines he says that they sounded a semitone, and not the interval of a major third, which is not useful in constituting Aristoxenus' intense diatonic colour, and even less the other colours." But this is everything that knight Bottrigaro has shown clearly in that Opinion of his. Nevertheless, Artusi, not content with this, adds as a repetition of his new complaint that "when he subtracts from one of the lines twelve parts in order to establish the Tone, he means that said shortening should be made with regard to the sound, and not to the mere parts of said line, and this [-7-] should be applied to the line, according to Patricio' s intention, with regard to every interval ordered in this way, so that they should sound the sequence of Tone, Tone and semitone, since he knew very well, as I said, that from the equal sections of the lines one could not derive exactly what he was demonstrating according to the intention of Aristoxenus." Now, if all this is untrue, since one cannot, nor should trust this man, since he states almost at the beginning of his following fourth In-consideration: "I was not left to be secretary, nor heir to Aristoxenus' opinion," and "since he does not say this explicitly, I cannot report with reason of this opinion that it is authentic," who induced or moved Patricio, or forced him to produce those Demonstrations, which are not only useless, but redundant? They are useless, since Artusi said that Patricio "does not want that consideration should be given to the mere division of the parts of the line, but to the sound." And how should this consideration be given to the sound? Can sound be demonstrated visually? They are redundant, because Artusi himself has stated equally that Patricio "did not care to ascertain if the musical Demonstrations of the harmonic Tetrachords which he had to do were true, or not, since this did not matter either to the narrative or the intention of what he wanted to write in his Poetics." Add also that this was not well understood by Patricio, since Artusi said also "that Patricio means: I see and know very well that, in my division of the four lines in equal parts, nor I, nor any music theorist can grasp and understand those intervals, which are needed to build each one of those species which are necessary according to the intention of Aristoxenus, having himself said earlier that he did not have of this discipline that precise experience which was needed for it." O what a great praise to give, o what great honour bestowed by a champion, a God-father, a Protector to his charge, his adoptive child, his client. Patricio has written

things that are useless, redundant and which he struggled to understand. Can anybody say anything better of a Writer? Nevertheless Patricio is referred to and considered as a noble contemporary Writer, not only because he is described and qualified as such by Verdicelli towards the end to his Letter addressed to you, Benevolent and sincere Readers, but also because he was regarded equally as such by knight Bottrigaro, [-8-] as one can gather clearly from the words in the Proem of his Opinion, which are these precisely: “Since I know, that Patricio is worth to be kept in high consideration, as he is a tireless scholar and endowed with the most wide and varied doctrine.” These are the insufficient and vain defences that Artusi has put forward, that has boasted to want to enact, and finally he has published in print in order to relieve and protect Patricio against what knight Bottrigaro, Author of that Opinion had written and clearly demonstrated, namely, that Patricio had deceived himself completely in all his linear Demonstrations of Aristoxenus’ tetrachords. As a complete conclusion of this section, it is left for me to add some words, to refute Artusi’ s slanderous fabrications, to counteract his most vile and pungent words, and to protect knight Bottrigari’ s reputation. “He says in the same letter of his to the Friendly Readers that this very book came to the hands of messer Annibale Melonj (and here I leave out an additional and a new reply to the other first slanderous fabrication inserted by him hin his first Letter to the courteous Readers written in Milan on 12 July 1601; although a full answer was given to it by Verdicelli in his Letter addressed to you, Benevolent and Sincere Readers, at the end of the year 1602, I will not fail to add some further details of my own) and that he read it several times with great attention, especially in the section where Signor Patricio deals of the Harmonic Genera. Noticing the detail that Signor Patricio had had derived from Nicomachos and Euclid, Melone spent a few days brooding over Patricio’ s words, and, having realised that they did not match his demonstrations, decided to inform several of his friends whom he knew to be experts in this discipline, in order to know their opinion. Since he had contacted me as well, among others, with the desire to acquire my opinion, I replied that there were many details in this instance which required the application of mature consideration and judgment, since Patricio might have reasons of such force regarding several different issues that, if they did not provide a complete defence of his actions, at least they were sufficient to justify him. [-9-] It was my intention, since I was a few miles away, to discuss the matter with him within a short time and to disclose my opinion freely. However, the Author of the Opinion, who thought censuring a man considered outstanding in our age was an appropriate way to enhance his reputation and acquire praise in the eyes of the world, set himself immediately and boldly to write a book against this very man, forgetting what Cato used to say, “Unless, and so on.” However, Meloni was responsible, although it was the Author of the Opinion who published in print in the year 1593 the book entitled Patricio, or Opinion and True Demonstration of the Harmonic Tetrachords of Aristoxenus.” In the first part of those fabrications, ill-composed by Artusi and ending in. “Although it was the Author of the Opinion,” one has to challenge three points. The first one is that that book, namely, the first and second Part of the Poetics of Patricio, came into the hands of Melone. You must know, Benevolent, and sincere Readers, that Melone never had that book, or rather those books in his hands, before knight Botrigaro presented them to him both bound in one volume. And why would Melone (a man very tight in spending his own money) buy and set himself to read those Books about Poetry? What did he know about Poetry, and Poetics? Conversely, knight Bottrigaro understands of Poetics and writes poetry, so he has, in his ample and well-stocked library, many Authors who not only have translated Aristotle’ s Poetics both into

Latin and Italian, but authors that have written commentaries to Horace Ars poetica, and others who themselves have dealt with Poetics both in prose and inverse gaining great approval. Moreover, he collects all the poems of Greek, Latin and Italian poets, and he was penned himself many Latin and Italian verses, which provide considerable evidence of his great passion for composing verses, hence he was inventor of the good verse of nine syllables, as one can see in the Dialogue by the knight Ciro Spontone entitled Il Bottrigaro, and in a Letter to the Readers by Doctor Melchiore Zoppio printed in the first pages of the Melone, Harmonic Discourse. I state that, although knight Bottrigaro, who had read over and over both those Books as soon as they had been published by Baldini in Ferrara when he lived there, had seen those linear Dimonstrations, nevertheless he had put them aside, for what they were, no more, no less, and they would have remained, and would still remain unchallenged, as far as he was concerned, if then a Doctor and Philosopher from Ferrara (who was a very close friend of his and whom it is not right for me to name now that he is no longer alive, since he refused resolutely for some particular reasons to be named when he was alive) had not asked him to consider them and to unveil his opinion of them to him. These opinions would have remained private, if not for anything else, for the motives and reasons which knight Bottrigaro himself adduces in the proem as a reply to that friend of his. There, he justifies and excuses himself for publishing these Considerations writing first of all thus: “Therefore, as a friend of Truth and corrector of Patricio, to do you a favour, immediately and boldly I set myself to consider that passage, which contains the words that pertain to Music, which are the ones contained in your papers. Having produced a commentary, which is totally free and untied by the shackles of somebody else’ s authority, with that sincere moral integrity and modest freedom of speech which is conceded with good reason to everyone in the Study of every Discipline, and particularly in Mathematics, to which Music responds among the first ones, I will repeat here Patricio’ s words, and I will add to them my own comments.” So, one day knight Bottrigaro sounded out Melone on such matter, among others, to know his opinion in one of their usual homely Conversations, as everybody knows, and even Artusi confesses and affirms, if not anywhere else, at least at the beginning of that Letter of his written in Milan and addressed to the Courteous Readers with these words. “It gives me clear evidence of this the devotion that he reserved not only for Costeo, for the most gentile Baldi, unique philosopher and the mathematician Carolo Caracciolo, but also for the illustrious knight signore Hercole Bottrigaro.” So, Signor Bottrigaro put into Melone’ s hands that book of Patricio’ s Poetics, asking him to read and to give some consideration to those linear Demonstrations as well, and then referred back to him if it seemed to him that they were really coherent and well structured together. Therefore, Melone read and considered Patricio’ s words and demonstrations and replied that they were really coherent with each other. For this reason, [-11-] knight Bottrigaro then asked Melone to pass him the harmonic Tetrachord (an instrument entirely similar to the harmonic Monochord, but that has four brass strings tuned in unison instead of the single brass string of the Monochord, which is more stable and more resounding than a gut string) and he told him they would be verifying in practice how mistaken Melone was. So, he put a bridge or wood stop under the second String placing it in the twelfth degree, or ounce, since the linear length, or surface of that instrument is divided mostly into 60 degrees, ounces or particles instead of 30. Then, each of those 60 particles, ounces or degrees is doubly halved, and also fourfold divided in 240 particles, on one side of that instrument, and equally threefold divided on the other side of that instrument, and thus in 180 particles. The string was subdivided in this way to make it more abundant

and useful in the various harmonic operations which take place particularly in the Musical systems of Ptolemy and Didymus. Knight Bottrigaro said to Melone: “Judge now for yourself, Melone, if this is one of Aristoxenus’ Semitones, as Patricio’ s words promise to you,” and he struck both strings at the same time. When the two strings were struck together, Melone heard Ptolemy’ s Semitone, and realised what the truth was with immediate resentment. Then, after positioning another bridge or wood stop under the second string at a distance of 12 ounces, particles or degrees from the first bridge, knight Bottrigaro struck the second and third string at the same time, and Melone heard that it sounded, as a consequence of being struck in that way, a Diapason in unison instead of one of Aristoxenus’ Tones, which is what Patricio’ s words had predicted. For this reason Melone was even more resentful and was very surprised that Patricio did not want to acquire some practical evidence of these matters before he set himself to write about them so resolutely. He was also astonished when, after trying out in practice all the remaining operations, he found them to be exactly how they have been and are described by Knight Bottrigaro in his Opinion, which is for this reason entitled The Patricio, or, on the harmonic Tetrachords of Aristoxenus. Hence, Melone, having grown very curious to understand from Knight Bottrigaro how He thought that Patricio had deceived himself so greatly, he asked him to share with him his opinion on the basis of their close friendship. His opinion was that Patricio had deceived himself twice in that first Demonstration, and, consequently, in all those others (or, to repeat the words that Knight Bottrigaro said then as he had known Patricio very well, and as one can read in this very respect in the Dialogue entitled [-12-] the Antartusi, Patricio was deceived). The first mistake that Patricio made is that, since he did not distinguish the simple and sole sound of the uncompounded Interval, he came to suppose that the first string (as the second, the third one and any of those) sounded a Diatessaron, and, therefore, he said that it was divided in 30 parts, which measure one as well as the other. Therefore, because of their shortening on the basis of the equal division devised by Aristoxenus, one could hear those Enharmonic Dieses, those many different chromatic and diatonic Semitones, those varied diatonic Syntonic Tones, those chromatic Semiditones and, finally, those Enharmonic ones, which come to be heard as a consequence of the distribution of the Tetrachords described by Aristoxenus. All of this is dealt in copious detail in the same section of the Dialogue Antartusi. The other, and very important, mistake is the assumption that the first string (and consequently the other two, second and third) must sound the consonance of a Diatessaron with the fourth string, because they are all three in unison with each other. This assumption has to be the root cause of all the disorder and mishap, since in the case in which Patricio had not set this as a condition, namely that the fourth should sound a Diatessaron with the first one, but had tuned it in unison with the first one itself, as the other two in the middle are, he would have had an easy method to take Patricio’ s side against who might have attacked him. I will not uncover this method right now, allowing Artusi, with the sharpness of his beautiful mind and penetrating brain worthy to be admired by everyone, the chance to uncover and demonstrate it. However, this is not the explanation that he has provided at the beginning of his sixth In-consideration, since it is worthless, since Knight Bottrigaro added that the most probable reason of Patricio’ s deception was nothing but the word Tetrachord, which, although it means ‘ four different strings’ , nevertheless such variety of strings occurs also within the divisions of a single string, as in the Monochord, where two, three, four, six, ten and other more strings are represented by virtue of the division of that one string in two, three, four, six, ten and other more parts, as it is demonstrated, and well, by Knight Bottrigaro at

page 38. of the Patricio itself through the line which represents the universal Monochord of Aristoxenus, and it is divided with [-13-] the letters of the Alphabet into twelve different Intervals which signify the strings contained between the two main ones A B C B, which sound together the interval of the Diatessaron. Therefore, being possible to understand in the first place that Melone never had in his hands that Book of the first Deca historiale of the Poetics of Patricio before Knight Bottrigaro gave it to him, and that, although Melone happened to acquire that book three or four years after the publication of the Opinion, he obtained it for little money, as it was found among a lot of different books belonging to a citizen deceased in the meantime, (and for this reason this book happened to be found, as it was a few years later, among Melone' s possessions at his death, and consequently it ended up, as all his other books, gratis and free of charge into the hands of this Artusi) it will be possible to consider a fabrication the claim that, having Melone learned (as Artusi relates, and this is the second point that has to be challenged in this first part) "that the words of Signor Patricio, which Melone had been ruminating (like an ox) for a few days within himself, did not correspond to the Demonstrations enacted, he resolved to tell several of his Friends, among whom he notified me as well, being eager to extract my opinion. I replied to him that, et cetera." Although, since Melone (as I have related to you truthfully, at the instigation of Knight Bottrigari and for his own benefit, so that he might become less prone than he was to believe the Writers, albeit of great authority) had worked out in minute detail all those Operations, he had no need whatsoever to call his Friends to assembly to advise him, as he was indeed very well versed in these matters. And what Friends would these be? Those (Artusi says) who enjoyed practising such discipline, and not only those near him and readily available (and who were and are these?), but also those who were a few miles away, as Artusi himself happened to be in that felicitous conjuncture ready to proffer his due obedience in this new Necessity, as he was used to doing. So Melone asked him as well, yearning to extract from him his most wise opinion in a truly difficult case. "Hence, Buono di Antona in his book where he compares a Donkey with a horse," Artusi says this exactly, was obliged to affirm it and confirm it. In fact, [-14-] in the third of his Imperfections, the most erudite Artusi encloses this passage, and says in this respect "that He confirms, and affirms this concept, which he wants anyone, who is averagely expert of mathematics, to master." But then Artusi does not accept that Melone, a man in his day (these are Artusi' s own words at the beginning of the Letter to the Friendly Readers), as he was, not only of decent living, but knowledgeable, expert and judicious in what pertains to Harmony, by putting forward the evidence of a book which never belonged and never will belong to Melone himself – let this Artusi speak, shout, rack his brains as much as he likes -, that Melone could not ascertain the validity of Patricio' s statements without asking his friends, both near and far, who greatly enjoyed practising this discipline, for their opinion, and without begging then for their help. Let the names and surnames of those friends be revealed. Let this letter be produced and deposited in the hands of an openly trustworthy person, so that it may be available to peruse, otherwise no credence will be given to Artusi in this matter as he is a simple and suspect informer. In fact, he knows very well that ' the informer is not trusted, unless there is evidence of what he relates," and that letter is the writing in which one has to make reference to, and without which it is not possible to trust Artusi as the informer, as the Emperor says in the Authentica Consilia Si quis in aliquo Cod. De edendo Consilio: "If somebody in a Document mentions another Document, there will be no tax collection on the basis of the first document, unless the other document, which is mentioned, is

put forward." I will deal with this perhaps much more at length somewhere else with regard to other circumstances, since now I have to carry on with what I was saying. And where is that great trust which Melone put in Knight Bottrigaro (thus Artusi testifies in this letter of his to the Corteous Readers from Milan dated 1601) that he could no nothing without [-15-] his advice? He who lies must have a good memory. Thus, Melone would have appeared to grant little trust to his sense of hearing, as imperfect or defective, and even less to Knight Bottrigaro, as if were an ignorant man. Besides this, if he was unable to verify by himself such a slight matter, how could have Melone produced such a profound exposition of that very famous Problem by Aristotle, which was itself so extolled and celebrated by Artusi, that he himself burst out saying that, not only that exposition had been attributed to Knight Bottrigaro by others, but that Knight Bottrigaro himself had not been ashamed to claim it as his, as one reads towards the end of Artusi' s same Letter to the Friendly Readers. I tell you, Benign and sincere Readers, that this statement by Artusi is not in the least true, and I give you my word in conformity and as corroboration of the word already given to you by Verdicelli in that Letter of his addressed to you at the end of the year 1602 in the name of Knight Bottrigaro, that nobody ever attributed to Knight Bottrigaro that exposition by Melone (if indeed he ever produced it). It is even less true that Knight Bottrigaro attributed it to himself, or that he even had the mere thought of doing so, since he declares that, in the event that it had been attributed to him, this was not done correctly, and he does not accept it in any way. Moreover, even if it were his, as it is not, he does not want it, he does not recognise it as his, but he declines to accept it at all and he refuses it. As to the notification made by Melone to Artusi who was at a few miles removed in order to obtain his opinion with regard to this particular issue, there is no doubt (and this is the third point that needs to be challenged) that it is a complete fabrication of his in order to create himself a ' nos Poma natamus' and include himself in the number of those who enjoy practising this discipline, and thus boast of being considered a great erudite, a great Scientist, convinced, as he is, to be one. Instead, by publishing these books entitled Artusi, he has made and he makes himself known (I am sorry to say) as an ignorant, immodest, indiscreet, and, in short, a malignant, slanderous and contentious man, rather than a man of science and knowledge. However, do let us move on to that section of those ill-written stories which begins with the words "But the Author of the Opinion" and ends at the words "And this Demonstration". [-16-] Equally then, two other points have to be challenged in this section. The first one and most poignant is the following one. "But the Author of the Parere, thinking that this was an appropriate way to acquire credit and glory in front of the World, namely, by grasping the chance to censor a unique contemporary of ours, boldly set himself to write against this particular issue." Artusi betrays himself as a true Donut. Nor this statement should be ascribed to me by you, Benevolent and sincere Readers, as a contradiction of what I have pledged at the beginning of this writing of mine. This man must have not known that the World has benefited for more than thirty years from Knight Bottrigari' s Italian translation of Ptolemy Planisphere, with the addition of so many noble annotations of his and mathematical operations in order to render it more clearly understandable and to reduce the work to its proper and true text. Nor must he have know that in a letter by the printer Benacci to the Readers his numeric operations pertaining to the Almagesto of Ptolemy himself, (whose volumes, which contain more than a thousand pages, serve as a copious commentary are mentioned to that such great and admirable Work about the Revolutions of the celestial Spheres, of its Epilogismic sphere, of the Cosic rules, or algebraic chapters, through which the equations containing in themselves not

only two, but four and five of the first algebraic dignities however their equivalence to each other) are mentioned, and besides his some other mathematical works by him. Similarly, Artusi must knot have known that back in the year 1576 Rossi in Bologna at the request of Senese' s and later of Ziletto, the main printers in Venice, printed the Tiberiade by Bartolo corrected by Knight Bottrigaro from the immense number of errors, which, being found not only in the graphic Demonstrations, but in the spelling of the words themselves and in the quotations of the laws, rendered it so unintelligible and obscure that it was ignored by all the law-makers as it could not be understood. Therefore Knight Bottrigaro, Author of the Opinion had no need of these "way to enhance his reputation and glory in the eyes of the World," nor was it ever his intention to reprehend nor (even if Artusi states it too boldly) to censor Patricio, as you have heard that Knight Bottrigaro claimed in the Proem of the Patricio itself with these words "As a Friend of the Truth, and not as a Corrector of Patricio", and with these others "And, because of this truth, I do not expect that he should be indebted to me (as in the [-17-] above-mentioned words of the Letter by the Printer of his Poetica historiale one reads that he wants to be) if not as far as he will wish to be because of his courtesy and gratitude. And since I desire greatly to be loved by him and by all the artistic and literary men, just as I love and honour them, I will be very obliged to him for this reason". These words can be read at the close and end of that Opinion of his. Melone was indeed very anxious about the publication of the Opinion, - while Knight Bottrigaro was not at all concerned – and, for this reason, he was not only a fervent instigator of the print, but sometimes passionate proof-reader and editor of the first prints of the pages that Benacci was producing every day in Bologna. According to Artusi, this was the reason (second point which has to be accepted with a little challenge) that Melone did this, when said Opinion was published, as I said earlier, in the year 1593 with this complete title Il Patricio, or Opinion and true Demonstration of the Harmonic Tetrachords of Aristoxenus, by the Illustrious Signor Knight Hercole Bottrigaro. The title was not truncated, thus artificially concealing the name and surname of his proper and true Author, as you have heard that Artusi relates in said Letter to the Friendly readers. Towards the end of this letter one can read these words: "Finally, he, namely, the Author of the opinion, deeming it a good thing "to bite the Jay with his own beak", has spoken and written widely against me, who never offended him, nor mentioned him at all on any account, not being ashamed to attribute to himself several things which I have already traced in various ancient and modern writers, and which I have published in the book entitled On the Imperfections of modern Music, which was printed in Venice in the year 1600. From all of this, one can gather and consider without the shade of doubt how this man is naturally prone to anxiety. However, since ' from a bad egg a bad crow is born' you will find out from these Considerations of mine how adept the Author of the Opinion is to this kind of Discourses, Opinions and Demonstrations. Read and take good note, while I put some order in this matter, and so on." Therefore, You, Benevolent and sincere Readers, read and take good note of all those words, while nevertheless I will apply the appropriate remedy, life saving antidote, the Theriac, the Mithridate, the White Earth of Melos, the sealed Red, or the Armenian bulb to the venom, the poison, the rabies that is contained in them, [-18-] hence the reputation of the Author of the Opinion will be restored; a reputation that Artusi tried to besmirch in such a biting way, not ashamed to attribute to the Author of the Opinion himself the sin, which he has committed without a hint of blushing. First of all, I say, what do you think of that noble Proverb, which he has highlighted in margin and noted in the index of the book, so that it may not fail to be noted and perceived, namely, "to bite the Jay with his own beak?" How

negligent of the Author of the great Collection of Greek and Latin proverbs edited by Manutius not to have mention it. What an oversight of Polidoro Virgiliano' s to omit it from his collection, and of Giuseppe Albertazzo to exclude it from his Epitome Adagiorum. What accuracy did Pietro Godofredo and Carlo Bovilio show, by not including it in their books in their books of proverbs popular in France, and Don Ignido Lapaz among the Spaniards? No such diligence can be found in Pescetti, who collected very few years ago so many and many hundreds of Italian proverbs, and forgot this one, which is so mysterious and noble. I do not mention Cornazano, because he mentioned in particular and explained but a few. You judge whether it should be shunned. Artusi repeats it at the very end of his In-considerations at page 53, saying Dar "to bite the mosquito with his won beak." Both the mosquito and the jay are irrational animals, according to the experts, and consequently Artusi is a beast, like each of those, and, being a good sophist, he does not deny it. After having attracted the attention of his Friendly (though I am not sure if benevolent) Readers with this proverb, Artusi, who is not less of a good orator, than a show-off, continues: "He has spoken, namely the Author of the opinion, and written a lot against me." I state to you that the Author of the Opinion has never said nor written anything against Artusi before he published his first Artusi, those Imperfections of his, those first slanderous accusations contained in those vain chit-chats, since the Author of the Opinion never had anything to do with Artusi himself, nor did he read a single word of his pamphlet on the Art of Counterpoint, as they would be of no benefit to him, since he had already read and studied Zarlino' s Institutioni Harmoniche, whence Artusi has copied his Art of Counterpoint. Nor did he know him as an acquaintance, as it is widely discussed in the dialogue Antartusi written [-19-] after the publication of said Artusi, which was printed by Vincenti in Venice the day 20 November 1600. The scope of the Antartusi was twofold; on one hand, to defend the Dialogue by Knight Bottrigaro entitled Il Desiderio from the slanderous attacks mounted against it by Artusi; the other one was the revelation and the denunciation of the theft enacted by Artusi to the detriment of said Knight Bottrigaro of the most part of the final section of the first Dialogue his Harmonic Trimerone and of little less than the entire second Dialogue. Therefore, Artusi has concocted a plan to alter the true events surrounding this theft so that he could shift the blame of this crime, which he has committed fraudulently, on to Knight Bottrigari in this way. Therefore he adds: "Not being ashamed (namely the Author of the Opinion) to attribute to himself several matters which I have already traced in various ancient and modern writers, and which I have published in the book entitled On the Imperfections of modern Music printed in Venice in the year 1600," namely, the Artusi which was published, as I mentioned above, on 20th of November. Although this detail appears to be of no consequence, it is nevertheless, as you will be able to know, of the greatest importance, and therefore it was omitted maliciously by Artusi. However, he has caught himself inadvertently in his own trap, he has quartered himself with the knife of his own words, since Knight Bottrigaro is not ashamed, since he has nothing to be ashamed of, to state, as he states categorically, that what good there is in the second chit-chat of the Imperfections of Artusi himself, printed in Venice on the 20th of November 1600 from page 49 to 69, which pertains to the Tones, Modes or Tropes, both ancient and modern has been lifted in its entirely by Artusi, who should be ashamed of such a thing, although he is not. All this is contained in a long letter written to him by Knight Bottrigaro to inspire some remorse in him, where he tries to convince him in a friendly way and exhorts him to return duly to him what he stole from him. The copy of this letter, with that of twelve witness statements is recorded at the end of the dialogue Antartusi, which

Artusi himself says (in the dedicatory Letter of the second Part of his Imperfections addressed to that most Illustrious Patron of his) that it has been given that title as a homage to him, but, to the contrary, it has been named in that way to accuse him, and burden him as much as possible, according to his great [-20-] merits. Nor do I want to avoid mentioning this, since the following words written by Artusi in said dedicatory letter give me the chance to do so now, although other chances will come about to do so in this matter, since Artusi, having been alerted expressively about those declarations of trust by the first man in the World, who was a friend both of his and of Knight Bottrigaro, and a double informer, wrote: "I hope to obtain from you a large statement certified by the authority and trust not of some Pedant, since "blacksmiths deal with their own work," but authenticated by learned people belonging to this profession, although these Signori Legati say that "a declaration of trust is not a proof."" And then at the end of the seventh Inconsideration: "What will he (namely, the Author of the Opinion) be able to say in his own defence to cover himself? He will be able to say (here you have, Benevolent and sincere Readers, the confirmation uttered by his own mouth) that I plagiarised certain writings by him, which he had entrusted into the hands of a friend of his, in these Considerations of mine, and this might be true." And when he adds: "When even of such things", I will reply that in this case the absolute conclusion that he mentions at page 25 will be true, when he says: "And it is a most solid conclusion that who relates a fact is not believed unless there is complete clarity around what he refers. Who wants to be believed as someone who relates the truth will have to provide manifest clarity of what he relates, and, since this case will cause some difficulty, he will be able to put forward some statement of trust underwritten by some friend of his, if given permission, and in this way provide manifest clarity of what he has related. However such procedures provide evidence of falsehood, rather than of truth." Thus Artusi bites and accuses, in that first tirade of empty words, unjustly those gentlemen of pedantry, who have underwritten those declarations stating what they deemed to be true, and, in the second one, he wounds them all en masse without discriminating as to their character, their conditions, their friendship, their sex or their status, and, not only shutting the visor, but closing both eyes, and like a good Syrian Archer he targets his Friends as well as his benefactors with the indiscriminate accusation of being easily persuaded to do what their friends want them to do. And what is the worse of it? It is that they would be doing this where fraud is involved. Therefore, in order for you to know, Benevolent and sincere Readers, if these are people liable to be tainted by that infamous vice, I want (against what I had decided to do [-21-] at the beginning of this writing, namely to avoid naming anyone who had testified with their written declarations of trust of what it seemed to them to be the manifest truth) to name individually each one of them together with details of the day, the month, the year and the place which relate to their declarations. Firstly, Signor Gianvincentio Pinelo in a chapter of a letter of his from Padua dated 13 November 1600 and addressed to Knight Bottrigaro, written seven days before the date of Artusi' s dedicatory letter and the publication of his Imperfections. Secondly, Signor Serafino Bertoliere, pupil, permanent dining partner, joint tenant, and partly heir to Melone' s estate, with a declaration dated 20 December 1600. Signor Don Giannantonio Pietramelara, Knight of the reformed order of Saint Mauritio e Lazaro, the last day of December and of the year 1600. Messere Simone Parlasca, the main bookseller in Bologna, on the second day of the month of January of the year 1601. Signor Fulvio Codibò on 9th of January 1601. Madama Lucia, already Wife and usufructuary heir of Melone' s estate on the 13th of the same month and year. Messer Lorenzo Righetto, very dear pupil, and

almost as a Theophrastus to Melone. Knight Signor Ciro Spontone, general Secretary of the most illustrious Government of Bologna on the 27th day of the same month and year. Signor Doctor Roberto Titio on the 26th of April of the same year 1601. Signor Codibò, for a second time, on the 6th of June of the same year. Signor Doctor Girolamo Bisaccione on the 9th of the same month and year in Ferrara, and finally, on the 15th of July of the same year 1601, Signor Doctor Ascanio Perseo, mentioned by Artusi himself at the beginning of the fifteenth and last of his In-considerations at page 49 with these mellifluous words. "The most kind Signor Persio, professor of Greek Literature, and Reader at the studio in Bologna." Signor Roberto Titio and Signor Girolamo Bisaccione themselves are of the same rank and belong to the same studio, the latter being public and primary Reader of Humanities in the morning, and the former in the evening. Then Artusi adds: "From all of this one can gather and consider without the shade of a doubt how this man is naturally prone to anxiety." I reply to these words that they are most fitting and appropriate to describe Artusi, as they are unsuited and inappropriate to Knight Bottrigaro, and that the Greek Proverb, not very much used by the Romans, and not understood by the Italians [kakou [-22-] korakos kakon oon], ' Mali Corvj malum' ovum or ' out of (and not from) a bad crow a bad egg,' is most convenient and most appropriate to Artusi. He quotes it himself adding these words connected to it: "From these Considerations of mine you will discover how the Author of the Opinion is adept to such discourses, opinions and Demonstrations." Thus, I myself, Benevolent and sincere readers, hope that this is exactly what it is going to happen. Therefore, read carefully and make mental notes, as Artusi commands you to do, and I prey you to do very consistently. However, before we move forward on this particular aspect, it seems a good thing to me, and it really is, that I should show you how this Artusi [Fifth in marg.] discussed the proposition that he undertakes to defend boldly in his fifth In-consideration, namely, that the Octave is not in unison. He accuses the Author of the Opinion of saying in his discourse (note this, and do not laugh) at page 11 and 12 that "The Octave is called Diapason unisona" and that he calls it thus more thana once. It is absolutely true that Knight Bottrigaro calls the Diapason ' unisona' three times (which really amounts to once more than twice) at page 11 and 12 of that Opinion of his, just as I have called it, if you observed carefully. However, he has never said that the Octave is called ' Diapason unisona.' His words are these, precisely, starting with page 11. "The interval of a simple whole tone will not be heard sounded among them, but a Diapason unisona, or, as we call it, an Octave." Then, at page 12. "Hence we would be fooled and we would here a Diapason unisona instead of a whole Tone." And towards the end of said page 12. "To be brief, I will tell you only that a Diapason unisona would be heard under the double proportion." However, Artusi, wishing that the Author of the Parere had caught a large fly, or, namely, got it wrong, (he uses these same expression at the end of this In-consideration at page 15, then 43 and 52) although you will see, Benevolent and sincere Readers, that it was he who caught one, as he usually does, quotes Boethius, chapter ten of the fifth book of his Music, twice, and the second time he adds: "So that one can see, according to Ptolemy' s opinion related by Boethius, that the Diapason belongs to the ' aequisonae' rather than ' unisonae' intervals." Let us see now if this is Ptolemy' s opinion, or if it is a different one. First of all, Ptolemy at chapter 7 of the first book of his Harmonics (let us entrust ourselves to the Latin translation by Gogavino, as it is the one familiar to him, although he has the possibility, if he wants and pleases, to refer to the copy and exemplar of Ptolemy, which is a very famous manuscript. However, it is in Greek, so Artusi cannot read it or understand it) which says this: "The Diapason and the

Bisdiapason are manifestly different from the other Consonances, as they are called by singing experts, because one could call them univocae appropriately." However, for greater clarity, he had said previously: "When we made the division into three Genera of different tone and into the distinct sounds, the first one to come, on the basis of its value, is the genus of the univocae; the second one is the one of the consonances, and the third one is of the ones that are suited to singing." Then he adds. "We define as univocae those that, when they are struck, are perceived by the ear as a single sound, such as the Diapason, and its compounded intervals; we define as consonae those that are closest to the uniuocae, such as the Diapente and the Diatessaron, and those that are formed by a mixture of these and of the univocae. We call suitable to singing, the ones that are closest to the consonae, such as the Tone and all the others of that type. Therefore, the univocae are also composed of consonae, and the consonae of the ones suitable to singing." And a little further he says: "The Diapason is the most simple and most beautiful of the uniocae." Some way further on, he continues: "The first of the consonae to come after the univocae are these that divide the Diapason in two parts, like the Diapente and the Diatessaron." And a little nearer the end of said chapter, he says: "Among the numbers, the multiple and those measured by it are univoci. The first two of the superparticulares and those that are composed by them and by the univoci are called consoni, while adept to singing are those which are superparticular under the sesquitertia. Therefore, the ratio of the consoni and of the univocae is said to be particular to each." Add that at the beginning of chapter 12 of the first book itself he says: "As the first univocum, which is one, is composed by the first two consonances, and it refers to nothing else but to the Diapason. Besides this he says at chapter 15. of the same first book: "In fact from the Diapason univoca, and from the ratio of 2: 1", and not only at chapter 7, which is really chapter 8 of the third book: "the first of the uniuoci produce two double segments, it seems the Diapason, three times." And at chapter 12, or rather 13. "For the reason that they create the opposite system according to the first Horns of the Moon and to the highest Tetrachord from the Diameter, and the Diapason unison." And some way further: "In fact this system is opposed according to the first crescent Moon and the Tetrachord of the Middle notes from the diameter [-24-] and the Diapason unisona. But at chapter 14, which must be marked 15 of the same third book, he say: "As in Music, these first two consonances together create the Diapason unisonum, thus here said intervals composed by the two mentioned fractions, namely the sesquialtera and the sesquitertia release the proportion of the dupla to the Diapason unison. Now, if I can count well, these are ten places where Ptolemy clearly calls the Diapason univoca and unisona; and not only the Diapason, but also the Bisdiapason, as at the very end of chapter 5 of the first book where he says. "The Bisdiaposon will be univoca because of the quadruple ratio," and in the mentioned chapter 9 of the third book: "The Quadruple Diapason of the univocum twice." What dream is that this of Artusi, because of which he wants that Boethius quoting Ptolemy relates that the Diapason belongs to the aequisonae and not to the unisonae? That distinction was made by Boethius himself at chapter 10 of his fifth book, and not by Ptolemy, who said: "We define them univocae, like the Diapason, those that derive their origin from there", having also said earlier "The Diapason and the Bisdiapason differ clearly from the other consonances, such as those differ from the ones adept to singing, therefore one would call them univocae with reason." However, even if we suppose it to be true, that Boethius quoting Ptolemy said that the Diapason were equisona instead of unisona, does Artusi not realise now hat Boethius relates something which is not true? Does he not realise that this action of his is tantamount

to a manifest smear on Boethius, and it would give others the chance to having him regarded as an untrustworthy Author, while he professes instead to want to defend him from those, who say imprudently (this is what he says) that he is not to be believed? His defence consists in the great power of a very artificial syllogism which, diluted in a Baroco format according to the doctrine of Triperuno, has no end or bottom. It is this one. “One of the two: if he has related the truth, should we not believe him? If he has not related the truth about what others have said, then what he has written is of his own invention. Hence, should we not believe him?” This writing cannot be solved, because it is not tangled up. However, do let us return to our Diapason unisona, which this Artusi, clutching at straws, would not agree that it enjoys this title of unisona. For this reason, given to it another title [-25-] commonly agreed among the theorists, namely that of consonance, I subscribe myself to that one and also with plane and most ample mandate ‘ in forma and secundum formularium, et cetera’ in the name of Knight Bottrigaro. And, said that he knows that Stapulensis does the same, and Glareanus and Marsilio Ficino have said the same several times about the Timaeus, he adds and recites those precise words about Plato’ s Republic. However, I do not want to go and check if they are true or not, because I would not like that it should happen what happens almost always in the case of the quotations that this man provides to those who look for them in those books where they come from, namely, that they are either not there, or, if they are there, they are not the same as he quotes them, but they are altered. “The consonance of an octave is so gracefully constructed that what are in fact two sounds sparkle as one”. And commenting these words he says that the words ‘ apparet una’ do not imply that it is unisona, almost as if he says that the verb ‘ apparet’ means ‘ it appears’ . Oh what a good little Grammarian. ‘ Apparet’ is what the Romans described as ‘ it shines’ , ‘ it shows itself in the light or to somebody’ s sight’ , and it has the meaning of clarity, of truth, not of doubt and uncertainty. Hence, my lexicon by Calepino quotes this verse from the first book of Vergil’ s Georgica: “Nisus shines high in the limpid air.” And I remember to have read in the fifth book of Cicero’ s letters to Atticus “Appius’ wounds are for everyone to see, and they cannot be hidden.” However, in order that this Artusi may not quibble and say that the meaning of the word is that one in the writings of theorists and musicians, for this reason I state that I remember that, among many other places, in the first book of Gogavino’ s translation of Aristoxenus’ Harmonics, one reads, at page 16. “It is clear however, that the smallest of the consonant intervals is determined by the nature itself of the song”, and, at page 18, “Now, as it is clear from there, and it results.” And in the second book, page 23. “This is the most absurd opinion of all and the most opposed to this results which appear clear, and it is like those oracles which say everything without reason or demonstration, and do not even enumerate correctly what is clear.” And in the same second book at page 31. “In fact, it is clear that in all the dense Tetrachords there is the sound of a dense interval, albeit of differing size. Of a chromatic Diesis if it is clear that it is the chromatic genus.” And equally in the translation of Ptolemy in the first chapter of the first book at page 52. “And it is all the more evident to the senses as the division is made into smaller parts.” And in the second chapter of the same first book at page 53: “They related ratios (which often did not corresponded in number to those which were clear to those who made a practical experience of them) to the variety of sounds.” And then: “Consequently they almost abused [-26-] of reason both against the trust in him, and in all that was that was evident.” Therefore, Ficino said well when he demonstrated the unison quality of the Diapason: “What is a double sound is clearly perceived as one.” This happens not only (as Artusi continues) to children and to those who do not

understand such matters, but to those who know that what is high is part of what is low. To this I add that not only what is low is high compared with what is lower, but that what is high is low if compared with a sound higher than itself. For instance, G sol re ut is high if compared to [Gamma]ut, but is low compared to gsolreut. And among this vane words about the fact the Diapason is consonant, after some more bragging, he says that Ptolemy, talking about the Diapason, at chapter 5 of the first book confers two singular attributes on it, namely: “Among the consonances the Diapason is the most beautiful,” while he says in the same place about its ratio. “Among the ratios, the dupla is the most attractive.” And so, it did not take long, Benevolent and sincere Readers, for me to be able to justify my having said that it almost always happens that who looks for these quotations put forward by Artusi in the original books either cannot find them there, or, if he finds them, they are so different in their form from those that he quoted, having been lengthened or shortened, such as in the case of these. In fact, these are Ptolemy’ s words translated into Latin by Gogavino, to which I add only a few others that come before to facilitate their understanding. “Hence, they accommodate the superparticular and multiple ratios to the consonants and they attribute the diapason to the dupla ratio, the Diapente to the Sesquialtera and the Diatessaron to the Sesquitertia. Nor do they do this without reason, since (‘ Cum’ is omitted here by Artusi) the Diapason is (and this ‘ sit’ is transformed by Artusi into ‘ est’) the most beautiful, just as (this ‘ ut’ is thrown out as well by Artusi in his deception) the dupla (and here Artusi interjects ‘ est’) is the most attractive among the ratios. So it appears clearly that, according to Artusi, of the two individual attributes of the Diapason, the only one that he is left with is the individual word ‘ most beautiful’ , confirmed to it in the seventh chapter of the same book with the addition of the word ‘ most simple’ , since the other adjective ‘ most attractive’ related to the dupla ratio, as Ptolemy proceeded thus by comparison and according to convenience. But let us put an end at last to these empty words, since, if I wanted to reply to the sole reply that Artusi gives concerning his previous answers with [-27-] what he says after, I would not be putting down the pen so promptly, but I have to address with it, being almost fatigued, the sixth of this In-considerations to discover in truth “how Knight Bottrigaro Author of the Opinion is (as you have heard being stated by Artusi, but against his intention) adept to such Discourses, Opinions and Demonstrations.” [sixth in marg.] So, Artusi says at the beginning of his Sixth In-consideration that “after hading declared the in the previous In-considerations the intention and the words of Signore Patricio, which are said in his defence, now we can see

how and in which manner he disposes himself with his crossbow (Galileo’ s words at page 65 of his Discourse) to constitute his intense Diatonic colour of Aristoxenus, aiming to hit the target.” And he continues, after a number of rules, which I omit now, but I will refer to them for sure at the appropriate place and time, after I have go back to re-examine some which I have already dealt with instead of them: “However, since he hits the target in this division which he makes according to Aristoxenus’ thinking and he produces a real and sincere demonstration, firstly, I will recite his own words, and then we will consider them and we will judge together if what he wants us to

[Bottrigari, Aletelogia, 31; text: praecedens idest nello Acuto, Deinceps, Mezano, Sequens, graue, Enharmoniun. Chromaticum. Diatonum. Molle, Sesquialterum, Tonicum, Incitatum, 48, 6, 44, 8, 42, 9, 36, 12, 30, 18, 24]

And at chapter14 of the second book, wanting to constitute the Tables of the sixty divisions of the harmonic Tetrachords invented by Archita, by Aristoxenus, by Eratosthenes, by Didymus and by him himself, he says. “The first Canon contains the Enharmonic Genera. In the first table according to Archytas with Sesquiquartae ratios, [-32-] et cetera. The second Canon contains.” And in that Translation by Gogavino all the rest is missing. However Knight Bottrigaro has mended that lacuna in his Italian translation, which, in Latin translation, is this one. “The Second of the Canons contains the Chromatic Genera. In its first Table, it is shown according to Archyta’ s ratios, et cetera. The third Canon contains the Diatonic Genera, and, in its first Table, it is shown according to Archytas with the ratios sesquioctava, sesquiseptima and sesquivigesimaseptima. In the second though, et cetera.” And here Ptolemy immediately begins his description of them in tabular form, entitling the first Table in this way: “Ratios of the Enharmonic according to the opinion of five music theorists, namely, Archytas, Aristoxenus, Eratosthenes and Didymus, and mine. Thus, the second one is entitled “The ratios of the Chromatic systems according to the opinion of five music theorists, the Chromatic of Archytas, the Chromatic of Aristoxenus, et cetera.” The third, then, is headed: “The ratios of the Diatonic systems according to five music theorists, the Diatonic of Archytas, the soft Diatonic of Aristoxenus, et cetera.” And at the end of the fifteenth Chapter of the same second book he says: “There follows the small Canon containing the varieties of all the sounds, Enharmonic, soft Chromatic, intense Chromatic, soft Diatonic, Toniaeus, intense, equal, and Diatonieus.” Similarly, one reads at chapter 5 according to Gogavino’ s translation, which is really in the sixth of the third book: “Compare in the most appropriate way both tripartite Genera with the three Genera of Music equivocally called, namely the Enharmonic, the Chromatic and the Diatonic, which differ themselves sweetly among each other because of their magnitude which is now more intense and now more restricted.” He says again at chapter 10, or rather 11 of the third book at page 146: “In fact, this variety consists of three species, the Enharmonic, the Chromatic and the Diatonic one, separated by the quantity of the ratios adopted in the Tetrachords, just as that one has three species of recessus measured according to the smallest, the medium and the largest, and by the quantity of their trajectories.” Boethius himself also gives a Description of those Species and Divisions of Aristoxenus’ Tetrachords with the same order, saying at chapter 15 of the fifth book of his Music this, in the first place: “The varieties of the Genera mixed together become six according to this order: one of the Enharmonic and three of the Chromatic, namely, soft Chromatic, Hemiolic Chromatic and Toniaeus Chromatic. Therefore, the two that remain are those of the Diatonic, namely soft and intense. This is the Division of all of these according to Aristoxenus.” Then, a few lines further on, he adds. “Therefore, the Enharmonic according to Aristoxenus is divided in the numbers [-33-] 6 and 48,” which are numbers corresponding to the ones in Ptolemy’ s Table, “between the low string and the one next to it, et cetera”, describing the Intervals one by one. After this Description, he continues. “The soft Chromatic Genus creates this division 8, 8 and 44, et cetera. Equally, the Diatessaron of the Hemiolic Chromatic is divided thus 9, 9, 42, 29, et cetera. Similarly, the distribution of the Toniaeus Chromatic according to Aristoxenus is this one, namely, 12, 12, 36, et cetera. The Division of the Diatonic itself is twofold. The division of the soft Diatonic is this one 12, 18, 30, et cetera. Similarly, the distribution of the intense Diatonic is this one, so that it has a Semitone and two full Tones, namely 12, 24, 24, et cetera.” Now, although it is possible to read at page 26 of his Opinion Knight Bottrigaro’ s

Italian translation of the order in which these Species and Divisions of Aristoxenus are described by Euclid in his Harmonic Isagoge, nevertheless, I will not abstain from repeating it here according to the Latin translation of Pena, so that Artusi may compare them, since he is not likely to possess Valla' s translation and he does not understand a word of the Greek text. So, Euclid' s words are these: "Therefore the Enharmonic Colour is sung through the span, or the Interals of thre, three and twenty-four ounces. The Chromatic Colour is sung through intervals of 4 ½, 4 ½, and 21. The Colour of the Toniaeus Chromatic is sung through six, six, eighteen; equally, the Colour of the soft Diatonic through 6, 9, and 15. Finally, the Colour of the Syntonic Diatonic, or intense through three intervals, of which the first one will be of six ounces, the second of twelve, the third one again of twelve." I add here myself that Euclid, several lines before, and almost adjoining these other ones omitted by the Author of the Opinion, as redundant for his Operations, describes the same six Species and Divisions of the Tetrachords, which he calls Colours, with the same order, saying: "The Colours that can be explained and known are six: one of the Enharmonic Genus, Three of the Chromatic Genus, and two of the Diatonic. The Colour of the Enharmonic uses the same division as the Genus itself. It is sung, et cetera. Of the Colours which belong to the Chromatic division, one is called soft Chromatic, another one Hemiolic Chromatec and another Toniaeus Chromatic. And the soft Chromatic is sung, et cetera. The Hemiolic Chromatic, instead, is sung with a Diesis, et cetera. The Toniaeus Chromatic uses the same Colour as the Chromatic Genus itself. In fact, it is sung through the Semitone, et cetera. Finally, of the ones of the Colours of the Diatonic division, [-34-] one is called soft Diatonic and the other Syntonic Diatonic, namely, intense. The soft Diatonic Colour is sung by Semitone, et cetera. The Diatonic Syntonic Colour, or intense has the same division as the Diatonic Genus itself. In fact, it is sung by Semitone and tone." Since Ptolemy, Boethius and Euclid described the six species or Divisions of Aristoxenus harmonic Tetrachords in this sequence, and Aristoxenus himself did it as well, the Author of the Opinion has not committed any mistake in describing them in this way. But what am I saying? Even if Ptolemy and Boethius, in reporting Aristoxenus' doctrine, and Aristoxenus himself had executed this Description with a different order, and even a better one, Knight Bottrigaro Author of the Opinion would have not have had, reasonably, to stick to their word, but he would have had to follow, as he has followed judiciously, the order with which Euclid described those Species or Colours in his brief musical Institution, since Patricio, in producing his Demonstrations, followed as a guide the words, which he relates in Italian, having taken them from Euclid himself. Hence, the Author of the Opinion relates those words precisely a little earlier at page 37 and says: "Since Patricio has relied on his words, namely Euclid's, we will repeat them here bit by bit, dividing them into seven parts to provide a greater understanding of the Exemplary Operations which we are preparing to undertake." Now, laugh! Laugh, now, Benevolent and sincere Readers, and laugh with every right at who invited you to read and said that you will laugh later, namely, when you would have read, as you have done now. And, if having read this, it moves you to a certain disdain towards him, instead of causing you to laugh, let that little charming story that he tells too defiantly (as he is used to) at the end of said second half of his Imperfections (to the honour and in praise not only of the Author of the Opinion, and of one of the best and most famous Composers of our times, but of an entire People, of the entire and most noble Nature of Italy) move you not to laughter, but to the greatest contempt of him Now, having freed myself from these words, it is now the place and the time to go back to the other words which I said that I wanted to leave aside in that sixth In-

consideration, and the challenge for me will be to show that, since Artusi is not even capable to explain his own ideas, he is even less capable to understand, and, even more so, to explain those of others, which do not need any declaration of his, such as are these by the Author of the Opinion. [-35-] Now, the words which I left out, which are at page 15 of the sixth In-consideration, are these: “But, since Signor Patricio demonstrates this (namely, the already mentioned Syntonic Diatonic Colour of Aristoxenus) through four lines, each of which he divides into thirty particles in order to extract those Intervals which seem to be to be apt to constitute such Colour, according to the words of Nichomacus and Euclid, the Author of the Opinion himself, adapting some Inventions of Patricio, lays out four lines all of equal length, but he divides each of them into four parts, and each of these parts, one as well as the other, into thirty particles all of equal length, which added together reach the total of 120 particles. This is the same as if he had established a single line conflating the four lines, or strings drawn and ordered by Patricio. Since the three parts of one together with the entire string, which amounts to four parts, sound the consonance of a Diatessaron, he takes six particles from the difference or excess, which is longer than the other one divided into thirty particles, in order to obtain a Semitone, and takes twelve particles to obtain a Tone, so that he interposes two other strings (which constitute this Colour necessarily) between these two which define the Diatessaron. The Genus, in fact, is nothing but a certain and specific Division or modulation which is created through the number of four strings. But, as in this division, which he has created, et cetera.” There is no doubt, Benevolent and sincere Readers, that, if Patricio, when he laid out his four Strings to demonstrate the six different species of the Aristoxenus’ Divisions, had established them and divided them in the good and careful way followed by Knight Bottrigaro, he would have not committed such a mistake, in all truth, which he has committed, and the exact Analysis made of it by the Author of the Opinion, where at first he shows with great clarity and modesty that Patricio was really wrong, and where he added later his most correct Demonstration of those Divisions of the six species of Harmony according to Aristoxenus and the description, which we have seen, that Euclid provides, first with a single line, or String, and then with four all of common and equal length with the first one, and all in unison together, would have been useless, if not redundant. Nor would Artusi have wasted [-36-] his time writing his In-considerations, through which he deluded himself to be able to defend Patricio and, by mounting a patrol, to be able to offend Knight Bottrigaro Author of the Opinion. Nor would I be wasting now my own time, since my writing this discourse would be none other than, as they say, ‘Actum agere’, namely the act of repeating an act without any gain. I want this to be said with regard to Artusi’ s words, but, since Signor Patricio wants to write a commentary also on the other following ones (which are: “The Author of the Opinion, adopting some invention of Patricio, he himself establishes four Strings all of equal length.”) in order to cloud what the Author of the Opinion has explained with great ease and clarity, I will reply to these by saying that the Author of the Opinion has no need of Patricio’ s knowledge pertaining to the four main branches of Mathematics, although one can see a book ‘del Quanto’ printed in the year 1585 (well after the death of its true Author) under Patricio’ s name and with a dedicatory letter also by him. This book, which was still largely manuscript, was read by its rightful Author (who shared a house with Patricio) more than two years earlier to Knight Bottrigaro who lived in that City at the time. Nor has the Author of the Opinion borrowed from Patricio the use of the four lines or Strings of similar size, as if they were invented by him, but he has adopted them according to what Ptolemy teaches first at chapter 8 and 11 of the first book, and

then at chapter 1 and 2 of the third book of his Harmonics. Artusi then continues: “It is as if he had created and established a single line or String out of the four invented and ordered by Patricio.” But this is a dream, one of Artusi’ s usual vane fabrications, which I am not going to leave unchallenged in any way. Patricio says: “In every Tetrachord, where the first String and the fourth sounded the consonance of a Diatessaron (or, a fourth, as we call it), both one and the other should be divided into thirty parts equal in measure, of which thirty parts six are allotted to the space of the distance between the first and the second, so that a Semitone is sounded between them. Between the second and the third String there has to be double the space of the distance, compared to the first one, namely twelve of the said parts, which should sound a full Tone, and the length of the fourth String must be the same, up to the end, as it is shown in the following illustration, where they are all divided into thirty parts.”
[Bottrigari, Aletelogia, 37; text: A, B, C, D, Acuta. Graue. suona Diatessaron]

And he adds, in order to illustrate it: “From the A to the B there is a Semitone, and 6 of the 30 parts. From B to C there is a Tone, and 12 of the 30 parts. From this one to the string D there is another Tone, or the other 12 parts, which are left over from the above-mentioned 30. This is the Division of the first and simple Diatonic Genus.” Now, given these words of Patricio, to which his graphic Demonstration corresponds perfectly, as the Author of the Opinion confirms at page 8 by saying: “Patricio’ s added Demonstration in the form of Example corresponds very well and accurately to all his words, in such a way that he appears to have demonstrated the Division of the Tetrachord according to Aristoxenus in a perfect way,” I cannot imagine how it would have been possible to form a single String or line (to use the same words that Artusi uses) from the four created and ordered by Patricio at any time, and obtain a compatible result to the Aristoxenus’ intention, speaking not only for myself, but also, positively and truthfully, for any good music theorist, and professor of mathematics and geometry. However, I am absolutely sure that this was never the in the intention or in the imagination of the Author of Opinion, which was called Il Patricio. In order to execute such a worthless Operation it will be necessary for Artusi, as its true Author, to engage and show off his great brain, and for him to resort to Apollo, since he maintains that the Muses are on the side of the Author of the Opinion. “I tried (as, it seems, Artusi words sound) to connect the second String divided into six particles at point B with the entire first String at point A in order, then to add the third one to the second one cut into 12 more than B itself, corresponding to 18 parts, at point C, and, similarly, to unite the fourth (sounding in unison with each of them the consonance of a Diatessaron) to the three in unison disposed one on top of the other. Thus, I reduced all of these lines or Strings to the length of one, and I added to that one, which became A B because of the transfer to the above-mentioned instrument of four Strings called Tetrachord, [-38-] the String C D which sounds the consonance of a Diatessaron with each of those three Strings in unison mentioned by Patricio and united together (as Artusi wants them to be understood). Then I disposed, underneath said String A B, which is the lowest, three bridges or wood stops, E, F, G, at the distance of 30 particles one from the other, out of the 120 into which it has to be equally divided, and the third one of them, namely, G, is in common with the other string sounding a higher sound, C D. Thus, divided all said String A B in four equal parts, or Intervals, of which the first three A E, E F, F G represented the three Strings in unison, and the smaller one, G D, of the other String C D, marked by the common bridge G, which, instead of the fourth Interval G B of the String A B, sounded, equally, the Diatessaron

with each interval of the same String A B, I discovered that, once the first two Bridges E and F were taken away, and A G, the larger portion of the same String A B (which represented Patricio' s three Strings A, B, C, tuned to a unison, according to Artusi' s fantasy) and the smaller part of the second String C D, which represents Patricio' s fourth String D, were hit together, they sounded a Quadrupla towards the lower register, or a Fifteenth lower than each of the said three equal parts A E, E F, F G of said String A B. I found also that the same Interval was produced, once I had taken away the third bridge G, and I had hit the entire free String A B, compared to any Interval or part of the said four parts A E, E F, F G, A B, of the same String A B. I found that the Calculation or the Operation of the Proportions also corresponded very well. In fact, the proportion 12/3 is derived from the tripla of those first three Strings in unison, namely 3/1 and from the Sesquitertia, namely, 4/3 added together, and this proportion, reduced to its minimal terms is 4/1, namely the Quadrupla. I also found, after this demonstration, that the percussion of the entire String A D of 120 parts with its part B D of 84 parts produced as its first intermediate sound an Interval of supertripartientesettima proportion, namely from 10 to 7, which is wider than a Diatessaron and smaller than a Diapente, rather than a Semitone of those described by Aristoxenus, which should be sesquidiciannovesimo (may Artusi accept what I say with good grace) which is the minor Semitone of the Sesquinono Tone divided arithmetically. I also found that, if the entire String A D, of 120 parts, is hit together with its other part C D, of 42 parts, they sound [-39-] together as the second intermediate sound an Interval in proportion Dupla superseipartientesette, namely from 20 to 7, which is wider than a Dupla Sesquiterza, namely, than a Diapasondiatessaron, or Eleventh, and smaller than a Tripla, namely, than a Diapason Diapente, or a Twelfth. Thus, between this second and that other first Interval and the intermediate sound of 84 parts there is a Dupla which sounds with a Diapason in unison, instead of a superbipartiente diciassettesimo Tone of those described by Aristoxenus, as Patricio has put in this place as well. This, therefore, is the order, or disorder of that Tetrachord of Artusi, namely 120, 84, 42, 30. Now, Benevolent and sincere Readers, you can judge if so many greatly preposterous and exorbitant consequences would flow from this consequent joining together of the Strings of Patricio according their order as imagined by the Artusi, a collector of ears [spigolativo/speculative], rather than a Speculative thinker, and not by the Author of the Opinion, as they would derive in the 24 possible combinations of those four lines A, B, C, D of Patricio. However, since many times in the Books of his Imperfections and In-considerations, this Artusi castigates others about whom he wants to talk about, for what errors they have committed in speech or in action, I want to report a very grave mistake of his, among the others almost impossible to count in those Books of his, since it is almost the consequence of those words of his quoted above. In order to show more clearly that this is really a great mistake, it is necessary that I quote the words that precede the above-quoted words, which follow them. "And since the three parts of one (Artusi does not say of what they are parts) with the whole of the String, which is made up of four parts, sound the consonance of a Diatessaron, in order to constitute this Diatonic Colour from the difference, or remainder, of which one exceeds the other divided in 30, he takes now six particles to form a Semitone, and now 12 to form a Tone, so that he puts two other strings between these two by which the Diatessaron is contained, which contribute to the creation of this Colour without a doubt. (Here comes the enormous mistake) Since the Genus is nothing else but a certain particular Division, or Modulation, which is realised through four Strings." [-40-] Which of the preceding words underpins such a Definition of Genus?

Who are those who require and want it? Moreover, why it should be altered in this way? Euclid, at the beginning of his harmonic Isagoge, says, among other relevant things, that “Genus is a certain division of four sounds.” There, Artusi, who plays at being the expert [intendarco], does not know what a definition is. Quintilian, teaches it with these few words: “Definition is an appropriate, clear and succinct explanation in words of a proposed object.” Artusi, out of the goodness of his heart and redundantly, adds to Euclids definition, firstly ‘and specific’, then ‘or Modulation’, ‘which is realised’ instead of ‘the’, and in this way he corrupts the pure and simple brevity of the Definition of the Genus created by Euclid. Now, going back Artusi’ s words, where at first he says that, after reciting the words of the Author of the Opinion, he wants to consider them and to see if what the same Author of the Opinion wants to make us believe is true, or false, after reciting with scarce accuracy the words of the Author of the Opinion himself pertaining to the graphic representation of the four lines of equal length of said Demonstration of the Diatonic Syntonic Tetrachord of Aristoxenus, and the Demonstration drawn by Artusi himself, he delays to the following In-consideratione his verdict, which he adds, as to how true, or false was this Demonstration. In the meantime he says that he is describing the Syntonic and intense tetrachord, as it is explained by the Author, but he does not say which Author, while he means the Diatonic of the Aristoxenus. And this is the Description which he produces, but this is never the one given by the Author of Il Patricio in his Opinion.

[Bottrigari, Aletelogia, 40; text:Tetracordo sintono Aristossenico manco Diatonico. 60. 102. 114. 120. A. B. C. D. 12. 12. 6. superbipartiente 15. 17. 12/120 6/12]

Then Artusi adds, as if he became aware of it, not wanting to be accused of being little concerned about his Reader, that “this Tetrachord is the same as the one of Eratosthenes, and can be compared with the one by Ptolemy, namely, with the Diatonic Diatoniaeus, but only if the Table described by him at chapter 14 of his second book has to be [-41-] without correction, and, as far as the Proportions of the Intervals therein contained, it is described thus to us by the Author of the Opinion.” Let us consider this Tetrachord of Artusi, firstly, to ascertain whether this notice of his regarding the conformity, or rather identity of the Diatonic intense Tetrachord of Aristoxenus with the one by Eratosthenes. The one of Arisoxenus is this one: 120, 114, 112, 90, while the one by Eratosthenes is 256, 243,216, 192, and it is the same as the one that Zarlino calls very ancient in the first chapter of the fourth book of his Supplementi Musicali, being embraced by all Musicians, and that, being formed by the proportion supertredicipartienteducentoquarantatrecima, called Limma, and by two sesquiottaui, is called most ancient also by Galileo at page 107 of his Dialogue of the ancient and modern Music. Galileo says that Nature itself created it, that it was followed by Pythagoras, Plato, Eratosthenes, and Ptolemy, and that later it was embraced by Guido of Arezzo, Franchino, Glareanus, Fabro and others. He then says that it compares to Ptolemy’ s Diatoniaeus which is in the ninth Column of the Table of the Diatonic colours which he describes at Chapter 14 of the second book of his Harmonics. “If indeed – this great music theorist, Artusi, says – that has to be left without correction.” That it is described as such, as far as the proportions of the Intervals therein contained, by the Author of the Opinion, it is as true, as it is the same as Eratosthenes’, since Eratosthenes’ Tetrachord and Ptolemy’ s Diatoniaeus one are really one and the same, and as such it is described by Ptolemy in the fourth Column of that same third Table in the above-mentioned Chapter 14 of the second book of the

Harmonics. In Gogavino' s Translation of the fourth Column the penultimate number is wrong, since it should be 113, 54 instead of 113, 41, just as the penultimate number of the ninth Column in the third Table of Ptolemy' s Diatoniaeus, which should read 113, 54 instead of 113, 51. It can be found corrected in this way in the Italian Translation of Knight Bottrigaro. Does it seem to you, Benevolent and sincere Readers, that this can be noted as a true identity and that it should be noted, marked on the margin and included in the Index? This man Artusi the continues saying: "I want to know from him (namely from the Author of the Opinion), if, since Aristoxenus nowhere in his harmonic Fragments (as I read so-far) has discussed even for a minimal sign (Artusi' s own peculiar expression) the numbers, nor the proportions nor he has allotted [-42-] to any interval any specific quantity, I want to know, I say, if the consonance of a Diatessaron has to be established in the Sesquiterza proportion, and if this is in accordance with Aristoxenus' opinion, in order to transfer it to the Monochord to investigate the quantity and quality of Tones and Semitones, as this Author has done." But since it is in no way convenient that the Author of the Opinion should answer to him, as he does not ask with a desire to learn, but only to provoke contention and start an argument, in order that he may have the means to satisfy his desire, if he wants, I say, as someone who knows almost everything for the Author of the Opinion to reply to him, since I have read over and over the Dialogue Antartusi, I will say to him that, albeit Aristoxenus did not demonstrate the variety of the Colours or harmonic Species with numbers and proportions, as all the other music theorists both before, and after him have done, it is not true that he has not used definite numbers for those divisions, since he divided the Tone into 12 equal parts and he created the Semitone of 6, the Enharmonic Diesis of 3, that of the soft Chromatic, or delicate of 4, and the sesquialter of 4 ½. Therefore, he has established (as I have said and repeated so-far many and many times; these are Euclid' s words translated by Pena, quoted from the middle: "So that the entire Interval of the Diatessaron is of 30 ounces) the Diatessaron of 30 ounces, since it is composed of two and a half Tones, the Diapente of 42, since he said that it exceeds the Diatessaron by a Tone, as it contains in itself three and a half Tones and the diapason is composed of six Tones, and thus of 72 ounces or particles. Firstly then, it is not true, for these reasons, that Aristoxenus did not assign to a given interval a specific quantity, which can be realised in practice by transferring it on to the Monochord according to the judgement or will of the sense of hearing, as Aristoxenus himself orders towards the end of the second book of his Harmonic Elements, where he teaches the way to judge if it is true or not that it is assumed with reason that the Diatessaron is composed of two Tones and a half. He says, in the Latin translation: "After preparing these in this way, do let us test against our senses the extremes of the Sounds defining the intervals," or, as the Author of the Opinion did, with greater accuracy of that Diatessaron through his formal sesquiterza proportion, to provide a demonstration, rather than "to take the chance to explore the quality and quantity of the Tones and of the Semitones," as Artusi says. Artusi later adds that Boethius says – no details of the passage are given – that, according to Aristoxenus, the differences between sounds are investigated according to their quality, rather than quantity. However, I say that, in that place, Boethius' words are different from these that Artusi relates, and that, moreover, at Chapter 12 of the [-43-] fifth book of his Music he says these precise words: "We must explain Aristoxenus' opinion on theis matter briefly. In fact, since he disposed that Intervals should not be dealt with by the intellect, but by the judgment of the ears, for this reason he does not mark the sounds themselves with numbers, so that he might collect their ratios, but he refers to the difference that

in the middle between them, and he does not investigate the notes in themselves, but in what they differ from each other." Then, not very far from the beginning of the fifteenth Chapter of the same second book there are these other words: "And because Aristoxenus does not compare the sounds themselves between themselves, but he measures the difference between them, and, according to him, the Tone is composed of 12 units, the fourth part of it will be et cetera." From Boethius' first words it appears clearly that, since Aristoxenus attributed the entire judgement on Music to the Sense of Hearing, for this reason he does not mark those voices with numbers in order to extract their ratios, but he takes the difference in the middle of them to set the investigation not in the notes themselves, but in the difference between them. And in the second passage, as if to repeat and confirm the first one, he says that Aristoxenus does not compare the Notes together, but measures the difference, and the space, or Interval between the notes. Hence, logically, Artusi should calm down. As he then adds: "In truth, If Aristoxenus established and understood the Division, et cetera," I will delay responding to this question until he makes himself better and more clearly understood, but I want to try, if I can, to solve the doubt that he seems to have when he says that he does not find it believable that Aristoxenus establishes the Diatessaron in the sesquiterza proportion, since what makes him doubt this is the fact that Knight Botrigaro, Author of the Opinion, has established it within said sesquiterza proportion between the numbers of 120 and 90, whose difference is 30, which is the an Interval considered and measured by Aristoxenus as the divisor of said Diatessaron. Therefore, I say that Zarlino, describing this Diatonic Syntonic Tetrachord in the first Chapter of the fourth book of his Supplementi Musicali at page 113, not only founds the Diatessaron in said sesquiterza proportion under these numbers 10 and 15 which multiplied by 6 give 120 and 90, and, further on, he builds the Diatessaron of the soft Diatonic on these numbers 40 and 30, which multiplied by 3 produce 120 and 90, and at page 119 in the second chapter of the same book the one of the soft, or delicate Chromatic, and after that of the Toniaeus and of the Hemiolic [-44-] in those numbers 120 and 90, and equally in the third Chapter of the same book at page 128 the one of the Enharmonic, and that seven years before Zarlino himself Galileo, at page 107 and 109 of the Dialogue of the ancient and modern music, did the same for one and the other Diatonic, at page 109 for all three the Chromatic, and at page 110 for the Enharmonic, but Ptolemy himself in the Column of the first Table of the Enharmonics, where he describes the one of Aristoxenus, puts the Diatessaron under those numbers 120 and 90 for the low Tetrachord, and under the numbers 80 and 60 for the high one adopting the Tone of the Division. He does the same in the second, third and fourth Table where the Diatonic ones are contained for both the high and low Tetrachords. The Author of the Opinion has not made a mistake at all, unlike Artusi concludes to be convinced, towards the end of his sixth In-consideration, with these very words of his: "Therefore, I believe that the Author of the Opinion has made a big mistake in building the Diatessaron on the sesquiterza proportion between the two extreme Notes of the Tetrachord established by him, to divide the differences that are found between those Sounds into Tones and Semitones in the way that he did." In case the Author of the Opinion had committed a mistake, I would like to believe, or rather, I am absolutely sure that he would not have minded being wrong, having had such a famous escort and guide, as Ptolemy is, and such erudite fellows, namely, Galileo and Zarlino, who are called 'a noble Triumvirate' for this reason in the Dialogue Antartusi, where all these Tetrachords of Aristoxenus are discussed amply and perhaps exhaustively, as a consequence of another opportunity provided by Artusi. In fact, if he had waited, not with that patient attitude which appears to be part

of his indignant and spiteful demeanour, but with the sort of patience that he should bear with pleasure, until he examined and read the good Books accurately, and not haphazardly as he is used to doing, he would not have written these In-considerations of his and also those Imperfections which he has published in print in such a rush that the ink was barely dry, in order to be better known as somebody impatient, ignorant and malevolent. However, let us move on to the other negative Consequences which follow from this, "as he will show" (this is what he says at the end of this sixth In-consideration of his), namely, in his following [-45-] [seventh in marg.] In-consideration, that begins with this attractive and graceful Introduction, which I would not recite in order to protect his reputation, if I could avoid it. He says: "When I turn to consider the words and the Demonstrations of the Author of the Opinion, which I have recited in the previous Consideration, the lies and the mistakes are so many, that I almost do not know from which, among them, I should begin, since it is true that when he thinks and is convinced to be demonstrating the Tetrachord of Aristoxenus, he explains, as a secondary matter, a Colour totally deformed compared to what Aristoxenus says, and closer to the one of Didymus or Ptolemy, than to the one by Aristoxenus. I say similar, in respect of the fact that the Tones are both unequal, and the Semitone is not half a Tone, as Aristoxenus wants. However, I will provide a demonstration." Slowly now, I say, since these meaningless words have to be challenged in some way. Benevolent and sincere Readers, when somebody lacks good basic foundations, he wanders around like a headless fly. He wanders, and does not know what he is doing. Artusi, as someone who lacks any good foundation, twists and turns, and, since he stares with rolling and baleful eyes, everything appears contorted to his eyes. Therefore, he projects all his faults onto others. Who is more confused and disorderly in his Writings than he is? Who writes more lies than he does? He states: "In the words and in the Demonstrations of the Author of the Opinion there are so many lies and mistakes, that he almost does not know from which, among them, he should begin." And when he believes to be discovering all these lies in the detail and one by one, and all of these mistakes, and to denounce the ones and the others really as what they are, he adds "that he will uncover in practice (as it is true) that when the Author of the Opinion thinks and is convinced to be demonstrating the Tetrachord of Aristoxenus, he explains, as a secondary matter – an expression which he has taken badly from what one can read in the Patricio, Opinion at page 23 – a Colour totally deformed compared to what Aristoxenus says, and it is rather closer to the one of Didymus or Ptolemy, than to the one by Aristoxenus." He says: "Similar, in this respect, that the two Tones are both unequal, [-46-] and the Semitone is not half of the Tone." This is almost as if one said that, because one has Ears, Eyes, Nose and Mouth as part of his face, he resembles a Pig, or a Gelding. Regarding such different sizes of the Tones and the fact that the Semitone is less than half a Tone, one might also say that this Colour is also similar to the one of Archytas, and to the soft and delicate of Ptolemy, hence, consequently, each of these looks like the other in turn. And what about the statement that this is the reason why the Author of the Opinion did not, as he did, produce the true Demonstration of the Diatonic Syntonic Tetrachord of Aristoxenus? This is how Ptolemy explained it, and with the same numbers 120, 114, 102, 90 at Chapter 14, third Table, third Column in the second book of his Harmonics, which I quoted above, as well as Galileo did at page 107, third Column of his Dialogue, at the place mentioned above, and Zarlino at Chapter one, third Species, of the fourth Book of his Supplementi, but, as I said above, in the radical numbers of the proportions contained within them, namely, 20, 19, 17, 15, which, multiplied by 6, as I also said above, produce 120, 114, 102, 90,

and marking alongside them their proportions in written-out words, thus: Sesquidecimanona, superbipartieentediciasette, superbipartientequindici. Therefore, this is the deformity, these are they lies and the secondary matter that Knight Bottrigaro Author of Il Patricio, Opinion can produce, expose and represent. Let us move on now to see what Artusi says. “Hence, I will provide a demonstration.” In order to do so he puts together six Propositions, which, as a man of great doctrine and knowledge, he notates in margin as “Conclusions to be proven,” not knowing that a Conclusion are something to be disputed, and a Proposition is something to be proven. The first one of those is this one: “That the Semitone proposed to us as Aristoxenus’ intention does not amount to half a Tone, and, consequently, it cannot be what he is convinced to be demonstrating according to the intention of Aristoxenus.” Here we have to change this entire Proposition by making the first part, which he negatively affirms, a negative, and by making the second part, which he negates affirmatively, a positive one, thus saying that the Semitone proposed by the Author of Il Patricio, Opinion (there is a man who proceeds really according to reason) is exactly half of the Tone, according to the intention of Aristoxenus, and that, [-47-] consequently it can be, as it is, the one that the Author of the Opinion himself has demonstrated according to Aristoxenus’ intention. So, since Artusi then adds: “It will not be very laborious to demonstrate that the Semitone described by the Author of the Opinion does not amount to half of a Tone, or, more correctly, to half of any of the Tones which are proposed to us as conforming to Aristoxenus’ intention, since the proportion of one is larger than the one of the other, as every intelligent person can understand very well by himself.” Similarly, I add that I will demonstrate with the minimum effort that the Semitone described by the Author of the Opinion is exactly half of each of the Tones proposed according to Aristoxenus’ doctrine, as those who understand the words and the doctrine itself of Aristoxenus have been able, are able and will be able to know very well. Aristoxenus establishes his Semitone not only in the intense and in the soft Diatonic, but also one in the Toniaeus Chromatic. Both Semitones are of a permanent and identical quantity, namely, of 12 equal parts, in which he has divided earlier the space assigned to the Tone. It clear to see now that that, in the Demonstration provided by the Author of the Opinion, by Zarlino, Galileo and Ptolemy in the places quoted above, the Semitone itself is built in that way, since between the Hypate, given as 120, as Aristoxenus says just less two thirds of the way into the second book of his Harmonics, where he provides the divisions of all his Tetrachrods, and the Parhypate, given as 114, there is the difference of six of those parts, which in the number of 12, being equal between each other, subdivide the space of one Tone, not only between the Parhypate itself, 114 parts, and the following Licanos, 102 parts, but also the distance of a Tone between said Licanos, 102 parts, and the Mese, 90 parts, which is also of 12 equal parts, and so on across all the Diatessaron established between the Hypate and the Mese, divided into 30 equal parts in the intense Diatonic. The same also is clear in the numbers of the Demonstration of the soft Diatonic 120 and 114, where the difference is a space of six parts, which are also found between 120 and 114, and between 114 and 108, namely in one and the other Semitone of the Toniaeus Chromatic of Aristoxenus. Hence it is true, and not a lie, that the Semitone of the Author [-48-] of the Opinion, demonstrated according to this method of Aristoxenus, is exactly one half of the Tone established by Aristoxenus himself, as Ptolemy, Galileo and Zarlino maintain that it is the sound and also the true meaning of the words of Aristoxenus. Let Artusi say something different and reach a different conclusion, according to his right mind, and will, as he does with these words: “Therefore, what the Author of the Opinion has demonstrated as true

according to the doctrine of Aristoxenus, is false," and to confirm such statement of his he adds as a good Mate-madman: "This is what it was my duty and intention to demonstrate." He has done this by doubling the ration of said Semitone sesquidicianovesimo, by subtracting their doubling, namely the supertrentanouepartientequattrocentesima, firstly from the proportion 19/17 of the Tone closest to that Semitone, and thus concluding that it is inferior to that Tone by the proportion 6859/6000. He then adds: "And since the Author of the Opinion might say (I promise you that he would never say it) that it was one half of the other Tone, which is of proportion superbipartiente quindicesima, I state, that this also cannot be true (he argues in this way, but in a lame and crippled fashion) since this Tone is not smaller than that one, but larger, as the denominator of its proportion is larger. And if it is larger than the two Semitones added together, as we have demonstrated, it will be contained even more by a larger quantity. I mean to say that it will be of a larger proportion, and it will not be possible for it to be true that this Semitone is half of the superbipartiente15 Tone." In this lame and crippled way reasoning, he puts that beautiful reason why he would like to prove what I am not sure if it is the major or minor proposition or the conclusion of that one, but, I will say, he wants to show that the superbipartiente15 Tone is smaller than the other one, the superbipartiente17. He says: "Because it is expressed by a larger denominator." So, has this argument come out of the jar of majolica of an apothecary in order to evacuate so many lingering faeces? If this doctrine of Artusi's is true, the Tone expressed by the proportion 19/17 is larger than the Tone expressed by the proportion 17/15 because its denominator 17 is larger than the denominator of the other Tone. However, it is all the other way round, since, subtracting one of the Tones from the other, the one expressed by the proportion 17/15 remains larger that the other one expressed by the proportion 19/17 by an Interval expressed by the proportion 289/285, as some way further on Artusi concludes.[-49-] Now you see, Benevolent and sincere Readers, if a man of such doctrine and literary culture can express a sound judgment and pass a sentence on the Author of the Opinion, as he does, adding to this that he has said. "Everything proceeds from the scant knowledge and limited reading of music literature of this modern Aristoxenus of ours." These words are so very ill-fitting to the Author of the Opinion, as they are very well suited to their Author, who is so unstable and incoherent that he recycles and adopts numbers and proportions that he has already refused and dismissed as way to demonstrate purely that this sesquidiciannovesimo semitone is smaller than the half of a Tone. "But that the two Tones (and this is his second proposition) are unequal one from the other, and for this reason they cannot be those of which Aristoxenus talks, but others different from his own". The first part of this proposition, which Artusi maintains as true, has been demonstrated as false negatively because of the Tone set between 114 and 102 and the other one between 102 and 90, and because one and the other, being both composed of 12 parts which are equal, are also rightly equal. For this reason, it is true that they were established by Aristoxenus as really equal, which is the second part of the proposition denied by Artusi, and thus by me demonstrated affirmatively. The third proposition states that "The Ditone is similarly contained by the proportion assigned to it or by the section of the lines drawn cannot be, under any circumstances, the one that Aristoxenus draws for us, since this is larger than that one, which had already been established by the followers of Pythagoras. Hence, if the one established by the followers of Pythagoras of two sesquiottavi Tones is dissonant, it is a necessary consequence that this is very dissonant, and the Tones, according to which it is ordered, would be too wide and, therefore, too remote from Aristoxenus' intention." That unholy beast which carried

Calandrino must not have jumped around nor skipped for sure as bizarrely, while being swallowed by the ground around the square, as Artusi jumps around and clutches at straws in this proposition. One answers to the first part of it, which is negatively affirmed, that the Ditone, which one can say is assigned by the Author of the Opinion because it is composed of two Tones already proven to be according to the intention of Arisexenus, is, in any way, the Ditone established by [-50-] Aristoxenus in his Enharmonic, as it is clear in its Demonstration, since it is contained by the numbers 114 and 90, which interval is 24, and the proportion is from 19 to 15, as Ptolemy certifies at Chapter 14 of the second book of his Harmonics which were translated buy Gogavino in this way: “In the third table, according to Eratosthenes is contained by the proportions 15 and 19,” and sesquitrigesimaottava, and sesquitrigesimanona for the Harmonic Tetrachord, which is the same as the one of Aristoxenus above describe and put in a Table. The second part of this proposition stated by him affirmatively, which has nothing to do with the first one, and says that the proportion from 19 to 15 of this Ditone of Aristoxenus is greater than the proportion of the Pythagorean Ditone, which is from 81 to 64, is accorded to him, and also, one does not deny its consequence, not because, if the Pythagorean Ditone is dissonant, it is a necessary consequence that this one of Aristoxenus should be most dissonant, as he says, but because Aristoxenus himself, talking not only in general around the middle part of the first Book, and again around the middle of the second says, with the same words of Gogavino’ s Latin translation: “We modulate also many Intervals which are smaller than the Diatessaron, but they are all Dissonant.” However, more specifically towards the end of the same second book of his Harmonics, where he teaches to take the dissonant Intervals by means of the consonants, he says that it is dissonant, quoting it as an example. Here are the words in the Latin translation by Gogavino. “Let it be established to take for the given Sound at the lower term a dissonance, for instance a Ditone, or any other one of those which can be established via a consonance.” However, I cannot discern what this matters in this and what difference it makes. I deny that “ the Tones according to which it is ordered (namely, the Ditone mentioned above) would be too wide and, therefore, too remote from Aristoxenus’ intention.” In fact, those tones can be divided in equal Semitones, as it is clear that Aristoxenus has done in this Toniaeus Chromatic, saying, in the passage quoted several times of the second book of his Harmonics: “Then there is the division of the Chromatic, where the dense is composed of (and not ‘is’, as one reads in that translation by Gogavino) two Semitones, while the remainder consists of three Semitones.” And since their equal division amounts to a total of 24 parts, it allows for 6 parts each, and for this reason they conform [-51-] to the intention of Aristoxenus in every respect. This relates to the third and final part of this third proposition. The fourth proposition is that “the Semiditone, or the minor Third, is smaller that the sesquiquinta proportion, and, for this reason, it turns out to be very languid and unsuited to its purpose.” All this is conceded to him and we say that to talk about it is outside our remit. The fifth Proposition is that “this Tetracord, or Colour, which is ordered in this way cannot be distributed according to Aristoxenus’ intention, nor did anybody ever understand this to be the case, since the parts that compose it, or the parts into which it is divided, clash with Aristoxenus’ words.” If Artusi had consulted Ptolemy, Galileo, and Zarlino, as it has been shown that the Author of he opinion did, he would have been able to learn from them, as the Author of the Opinion has done in the places quoted above, that this Tetrachord or Colour, ordered in this fashion, is possible and it is distributed in every way according to Aristoxenus’ intention. In fact, the parts of which it is composed, or (as Artusi says

with great precaution to avoid being taken literally) in which it is divided, do not clash with his words nor do they contradict them. The sixth and final Proposition is that "the Author of the Opinion asks for help from Signor Patricio in order to cover up his deception." I will delay my answer to this accusation until later, after I have concocted or collected together like ears some beautiful details which complete this seventh In-consideration, the first of which, at page 22, is that "since the Ditone of the Author of the Opinion exceeds the one of the Pythagoreans by the proportion sesqui1215, which is much smaller of the of a fourth of the Comma sesquiottantesimo, therefore it is useless and very dissonant." The question of whether said Ditone is dissonant or very dissonant has been already considered, since Aristoxenus himself in the places quoted above concedes it. However, I do not know how it would be possible not to deny that it is useless, hence it is denied, and it is denied with so much force because it is not true that such uselessness has not been proven or demonstrated in any way by him (as he states to have promised). Another Proposition follows this first one, which is almost the same as the fourth one, of which I have already said, in conformity with his words, that it is [-52-] pointless to talk about. However, since he adds that "the Semiditone contained by the proportion superrtripartiente 17 is smaller than the Sesquiquinta, which, according to the Author of the Opinion, is the form of the minor third, which is consonant, and therefore it is a very dissonant Interval." I do not want to omit to say that Artusi, in a lying dream of his, relates that the Author of the Opinion ("when he reprehends Patricio," whom he has never reprehended, and declares not to want to do - in the Proem of that Opinion of his, albeit Patricio himself, or the Printer of his Poetics for him, shows himself agreeable to being corrected, if the correction were true - as a critic of Patricio, but as a lover of truth and as a favour to a friend) said that the Sesquiquinta is the form of the Division of the Diatonic Tetrachord made by Didymus, and of Ptolemy' s intense. However, since in the whole of the Opinion it never occurred to him that that Interval is, not (as Artusi says) very dissonant, but dissonant, it is conceded to him, as the Dissonance of the Ditone has been conceded to him, since it is also one of those many intervals which are smaller than the Diatessaron, as Aristoxenus says. Therefore, this man Artusi does not argue the case as well as he adds that it is argued, when he says that "all the Tetrachord shown in this way to you as a invention, but one that follows the intention of Aristoxenus is not true, nor does it approach the true one, but a third kind of thing done at his expense. Moreover, I say (Artusi still continues) that these two Intervals added together, namely one, and the other Third, cannot produce for us the Fifth of sesquialtera proportion, as the Author of the Opinion presumes, when he wants to take the sesquiottavo Tone from the difference of the two greater Consonances." Besides this, I say that I do not know what it matters, if indeed it is true, that these two Intervals, namely the one and the other Third, added together could not produce the Fifth of sesquialtera proportion. Nevertheless, this should not appear to Artusi to be a miracle or a peculiar thing, since he should know well, according to the great show he puts up of being a scholar and a learned man, that not even those of Archytas or Didymus joined together produce the Pentachord of Sesquialtera proportion, and even less those of Ptolemy, except in his intense Diatonic, but not even in all of the places of that one, as, for instance, between the Licanos Hypaton and [-53-] the Mese, or, as we call them, Dsolre and alamire. Here said Pentechord is of supertredicipartienteventisettecima proportion or from 40 to 27, so that it is smaller that the Diapente of Eratosthenes or Ptolemy by one of our modern Commas sesquiottantecimo, and also smaller by the same amount than "of the other Ptolemaic intense Fifths of sesquipla proportion, as the Author of the Opinion

expects us to believe, when he wants to subtract the sesquiottavo tone from the difference of the two major Consonances." Artusi says this without quoting a precise place; whether he refers unwittingly to a passage in the Opinion itself, as I believe that he does not, it does not matter. However, these words are skewered with such order and in such a good way, that one who does not know what they would want to infer, would never be able to understand them. Artusi, not content with blaming the Author of the opinion with lies that he would have and faults that he would have commited, he accuses him of having made mistakes and told lies, adding: "This is further proof of the error in which he incurred in the Description of these intervals and of this Tetrachord. The Demonstration will be at your disposal to provide clarity."

[Bottrigari, Aletelogia, 53; text:20, 17. Semiditono, 19, 15. Ditono 380, 255, 26, 17, Diuisore]

He continues: "From the Sum of these two Intervals there derives an Interval of super9partiente17 proportion, which is outside our remit, namely, from them does not derive the sesquialtera proportion which lays between the terms 3 and 2 and was thus expressed by all the Ancient and Modern theorists. Nor do this Ditone and Semiditone come together as parts to constitute the Diapente, albeit they should do. Hence, one can understand that this Demonstration is false, and this will appear more evident, as we carry on to examine these Intervals." The scant knowledge and the greatly slanderous character of this Artusi will be manifest the more one will read and examine his In-considerations in detail. Where does this Artusi find, I will say firstly, that the Products (and not the sums, as he says) of 20 and 19, namely 380, and of 17 and 15, namely 255 can be equally divided or split by 15, so that 15 is contained 26 times in 380, exactly as 17 is contained in 255? 380 divided by 15 is 25 and 1/3 and not 26. For this reason that interval composed in this way (if one could) would be of superventicinquepartientecinquantunecima proportion, [-54-] namely, from 76 to 51, which is what one finds dividing both Products, 380 and 255, by 5, their maximum common divisor, instead of 26 and 17, and in superventipartientediciassette proportion, as this new Archimedes demonstrates and writes. Therefore, said Pentechord of Aristoxenus has to be represented by a proportion which is smaller than the Hemiolic or Sesquialtera form of the Diapente by a supercentocinquantaduecima, namerly from 153 to 152. Since this difference between them can be said to be just about half of our modern sesquiottantecimo Comma, it would be much smaller of the above-mentioned difference of Ptolemy' s Fifth expressed by the proportion from 40 to 27, which is the one of our full modern Commas, and therefore much smaller of this one of Aristoxenus. But, I ask myself orderly after this, where does this Artusi find that that Ditone of his marked by him with the Proportion super4partiente15, namely from19 to15, and that Semiditone of his equally marked by him with the proportion superpartiente17 can be added or joined one to the other to create the Diapente, as they were parts of it, as he says that they should do? Taken in this Tetrachord of Aristoxenus 20, 19, 17, 15 the Semiditone from 20 to 17, as he wants to add to it the Ditone from 19 to 15, and taken said Ditone from 20 to 17, so that from their sum, in this or in that way, one may form and compose the Diapente, I do not mean the sesquialtera, but any other one it might be, are his eyes so completely shut, or is he so obfuscated by sleepiness that he cannot see, or discern that, between the terms 20 and 15 of these Semiditone and Ditone of his, there cannot be contained the sesquialtera proportion, but that it is sufficient that there is the Sesquiterza containing that Tetrachord? Does he not know that the Diapente is composed only in one of these

two ways, namely, of a Ditone and a Semiditone, such as ut, mi, sol and fa, re, fa, or, conversely, by a Semiditone and Ditone, such as re fa la and mi sol mi, one united to the other and never intertwined, as these one of his are thus:

[Bottrigari, Aletelogia, 54; text: ut, mj, sol, fa, re, la, sol 20. 17. 19. 15.]

But what now? After having spoken as in a dream, I believe him to be not fully awake when he adds: “When Aristoxenus wants to define the Tone he says [[-53-] recte [-55]-] that the Tone is the distance between the first two Consonances. The first two Consonances are the Diapente and the Diatessaron, hence the distance will be the Tone. However, their difference is the sesquiottava proportion, since one is in the sesquiterza proportion and the other in the sesquialtera. Hence the sesquiottavo tone is the one discussed by Aristoxenus.” Paolo Veneto, il Massa, il Mirandola (I do not mean each one individually, but all of them together with that Pietro Hispano of his (I wanted to say ‘insane’) did not know in creating long syllogisms what this expert of logic knows in building special Arguments, which are double, intricate, and with subsequent parts of the concluding Consequences, even outside the Premises. In order to create these Syllogisms or sophisms of his he quotes Aristoxenus, saying that, when he defines the Tone, he says that “the Tone is that distance which is found between the first two Consonances.” However, that quote is defective, according to his usual Artusi habit, since it lacks the most important part, which is “as to size.” Aristoxenus words, past two thirds of the first book of his Harmonics, in the Latin translation of Gavino at page 16 are these: “The Tone is the distance between the first Consonances, as to size.” Therefore, that Consideration of sesquiterze, sesquialtere and sesquiottave turns out to be useless, and that conclusion of the sesquiottavo Tone turns out to be false, as it is not the one of Aristoxenus’. It is equally untrue that the Demonstration made by the Author of the Opinion is false in any respect, “since he proposes to us (this is what this Usarti says) two sorts of Tones, one larger than the other, and both different from the sesquiottavo,” which I will discuss soon. “Apart from this (he continues) when the Author of the Opinion wants to establish this Colour in the four Strings, the larger one is made up of four parts and sounds the lowest sound, while the smallest, which is of three parts sounds the high sound of the Diatessaron (I concede this). Therefore, he constitutes (he continues) the Diatessaron in the sesquiterza proportion (this is also allowed). If we want to add (he carries on still) one of the Tones described by him to achieve the sesquialtera (oh, this is not allowed) which expresses the Diapente, it will be false without a doubt, but completely false.” To the contrary, I say, it will be [-56-] [[[-54- ante corr.]]] not only true, but very true. In fact, if one adds one of the Tones described by the Author of the Opinion to the Diatessaron, it will be added to achieve not a sesquialtera Diapente, but a Diapente, a Pentachord, or a Fifth of that shape and proportion as it will be, as one can clearly see happen in the Chromatic of Didymus, which is used to thicken Ptolemy’ s Diatonic intense, to which, one can give the sharpened F fa ut, #, or, as we say, elevated. Albeit this Pentechord, or Diapente it is not of sesquialtera but of supresettepartientediciottecima proportion for these reasons, and it is smaller than the Sesquialtera by a very large semitone between from 27 to 25, it does not stop being a Diapente, Pentechord and compounded or unconpounded Fifth, as it might be. In the same way, if one wants the Fifth of Cfaut with a diesis # going upwards, the only possible note is alamire. Conversely, it is of a larger proportion than the sesquialtera by a major sesquiquindicesimo Semitone, and therefore it is an Interval of diatonic minor intense Sixth according to Ptolemy, expressed by the proportion

supertripartientecinque, or from 8 to 5. Then he continues: “Also, the passage from the Fourth to the Fifth can only be made via a Tone, but if one is added, it does not reach it, while if the other is added, it exceeds it, as do the Ditone and the Semiditone, which, added together, exceed the Sesquialtera. However, consider from these evident facts how the Author has made a mistake.

[Bottrigari, Aletelogia 56; text: 4, 3, 19, 17, 76, 51, 15, 68, 45]

assigned to us by the Author together with the Diatessaron, and from the addition of the other to the Diatessaron the super25partiente51 is formed in their radical terms.” Consider now, Benevolent and sincere Readers, who has committed a mistake in these obvious matters, since Artusi does not say of which Author he is talking, namely, the Author of the Opinion, or the Author of the In-considerations. Artusi says: “The passage from the Fourth to the Fifth can only be made via a Tone (this is conceded, but only in the Diatonic), but if one is added, he continues, it does not reach it, while if the other is added, it exceeds it.” With what he has said above, perhaps he wants to infer that one Tone is the superbipartiente17, which added to the Sesquiterza produces a proportion which is smaller than the Sesquialtera, and that the other one, namely the superbipartiente15 added with the Sesquiterza [[-55-], recte [-57-]] produces a proportion which is bigger than the Sesquialtera, as it appears from said Demonstration. But who has taught this Artusi to operate in this way? He might answer, that Ptolemy was who did it, but only, though, if he misunderstood him, since Ptolemy established this first Tetrachord of Aristoxenus between the two terms 120 and 90 forming the sesquiterza proportion, and between those he put, as the two middle terms, 114 and 102, namely, 114 as the half of a Tone at the distance of 6 particles from 120, and 102 as the extremity of the two tones, each of them at the same distance, one towards the low register, from that 114, and the other one towards the high register, from 90 in order to complete the System of eight notes, as he had done in all the others. Starting from the Tone of the Separation, which he presumed to be sesquiottavo, he the put 90 next to 80, and he added to that the high Tetrachord, which he created from the same proportions of the first low one, ending it on 60, which, being in dupla proportion with 120, is at the interval of a Diapason, in sesquialtera proportion with 90, at the interval of a Diapente, and in sesquiterza proportion with 80, at the interval of a Diatessaron. Of the two intermediate numbers, the lowest one he put as 16, building thus the proportion sesquidiciannovesima for the Semitone, and the other higher he put as 6, for the two proportions 19 to 17 of one Tone, and 17 to 15 of the other, so that among all of them there is always the Diapente with a sesquialtera proportion, but never the Diatessaron of sesquiterza proportion, except in the two main ones between 120 and 90, and between 80 and 60. Therefore, wanting to proceed to complete the entire Diapason, following Ptolemy, for the conjoined Hyperboleon Tetrachord formed with the same proportions 20, 19, 17, 15 one will put 57 after 60 for the sesiqui19ecimo Semitone, and then 51. For the conjoined Hyperboleon Tetrachord formed with the same proportions 20, 19, 17, 15, one will put 57 after 60 for the sesqui49ecimo Semitone, and then 51 for the Tone superbipartientediciassettecimo; then 45 for the other superbipartientequindecesimo Tone. Finally, we will add 40 to complete the Diapason, and also as another Tone of the Division in sesquiottava proportion. Thus, Artusi, still all sleepy, has proceeded, putting in his Demonstration 4 and 3 at first for the two remaining numbers 76 and 57, namely, 4 for 76, and 3 for 57, which express the sesquiterza Diatessaron between 76 and 57, adding to that one 51 as the superbipartiente17 Tone. Hence, between those

terms 76 and 51 one finds the proportion from 76 to 51 representing a Diapente, which is the same as [-58-] the sum, which he has already presented, of the superbipartiente15, Ditone, and of superbipartiente17, Semiditone, put one above the other in succession, such as the ut, mi, sol of c, e, g. Then, putting those 4 and 3 for the two numbers 68 and 51, namely 4 for 68, and 3 for 51, he forms the sesquitertia Diatessaron between 68 and 51. Then, he adds to them 45 to create the other superbipartiente15 Tone, so that the proportion from 68 to 45 is found between those terms, as Artusi himself has demonstrated for the other Diapente which is composed thus in sequence of a Diatessaron and a Tone, such as re, sol, la of d, g, a. As to the reason why are in a greater proportion than the Sesquialtera, Artusi can learn it from Ptolemy himself, and if he is provides him with a reason that he likes, let him use his great authority, and let him play on him the trick which his puny knowledge deserves. However, I will say also that Artusi says, persevering in his sleepy attitude, that the Diapente itself exceeds the Sesquialtera, as does the Ditone and the Semidione, which themself exceed the Diapente, forgetting to have said a little earlier that they do not reach its size, which is true. It would have been possible to proceed with the similar system of eight notes by adding another lower Tetrachord created from the same proportions, namely, 120, 136, 152, 160, which is at the interval of an octave with the other one measuring 60, 68, 76, 80, to the Tetrachord 90, 102, 114, 120 itself. One could have said then that the numbers 4 and 3, had been assigned by Artusi to the Diatessaron 152 and 114, and the numbers 19 and 17, assigned to the Tone 114 and 102, or that those numbers 4 and 3 represented the Diatessaron 152 and 114, and the 19 and 17 represented the Tone 114 and 102, or even that the numbers 4 and 3 took the place of the Diatessaron 136 and 102, and 17 and 15 the place of the Tone 102 and 90. In this System of eight notes which is composed in this way from two conjoined Tetrachords with the same proportions and completed with the sesquiottavo Tone, each one of the five Diatessaron is rightly sesquiterza, except the last one between 114 and 80, or between 57 and 40, which is rather larger. However, none of the four Diapente is sesquialtera, except the last one between 120 and 80, or between 60 and 40. Therefore, since the Demonstration produced by the Author of the Opinion is true, and not false, the objections and exceptions taken by the Author of the In-considerations against him are False, rather than true. Therefore, the Author of the Opinion did not commit grave mistakes in matters which are clear and evident, and not subject to individual opinion, as this Artusi maintains, while, I reply, [-59-] Artusi, the Author of the In-considerations has gone badly wrong in matters which are evident, clear and open for everyone to see. Nevertheless, Artusi continues by saying: “The error itself derives from the different size of the Tones which derive from the shortening of the particles which cannot provide the exact quantity of what is sought in any way. For this reason, if the highest string of the Diatesseron, divided in particles according to the way that the Author of the Opinion has taught us, is shortened by twelve particles, in order that it would sound a Diapente with the lowest one, which is of 120 particles, we will have a proportion super7partient13, which is a larger Interval than the Sesquialtera.” This unequal proportion of the two Tones, which Artusi calls difference, displeases him to such an extent that he also replies that the error derives from it. And who doubts that from the same causes derive the same effects? However, if these two Tones of unequal proportion described by the Author of the Opinion displease him so thoroughly, how much more will displease him the three of unequal proportion placed by Ptolemy in the very same Description of this System of Aristoxenus with eight notes? Besides, he puts in that one the Tone of the Division in this way 114, 102, 90, 80. Nor does he worry that the proportion between

and 114 and 80, Interval of the Tetrachord, is larger than the Sesquiterza. Artusi adds: “And this is caused by the shortening of the particles, which cannot provide the exact quantity of what is sought in any way (assured talk, resembling the one of a philosopher). However, one can see (he adds, adding the evidence) if the highest string of the Diatessaron (I could, if I wanted, be pedantic, and ask him which one this was, which he calls the highest of the Diatessaron, but wanting to understand him always step by step – therefore, this string is the one marked 90) will be shortened by twelve particles (so that it is left measuring 78 particles) in order that it may sound a Diapente with the lowest one, which is of 120 particles, we will have a proportion super7partient13, which is a larger Interval than the Sesquialtera.” Executed this shortening, one would really hear the Diapente, or Pentechord, the Interval of a Fifth in proportion supersettepartiente13, namely from 20 to 13, and not another one instead of it. But what sort of comparison is this between a Diapente, which is [-60-] an Interval, with a proportion? It is one of his usual actions, him being a Melon-head, of which I am informed and that I want to refer. If this Interval of a Diapente were then of larger proportion than the Sesquialtera, as it really it would be, Artusi says, and has been confirmed, I do not know, as I have said already another time, what Artusi wants this to matter. After Artusi has done this practical shortening of the String, he wants also to do the one concerning the lengthening of the String. Hence, he continues with these words: “Equally, if the quantity of 12 particles is (namely will be, or would be) added to the low String, which one finds that he divided in 120 particles to achieve a Tone beyond the Diaessaron, one will not have that Interval, in order to find the Diapente, but one which will be smaller than this, and contained by the super7partient15 proportion.” He tells the truth, since, if one lengthens that String measuring 120 particles by 12 of the same size as the others, it will reach the length of 132, which, compared to the string measuring 90 particles, will form the proportion from 22 to 15, which is shorter than the Sesquialtera by a Sesquiquarantaquattrecimo, namely from 45 to 44. However, it will not be the case that said Interval is not a Pentechord or Diapente, although it is a full sesquialtera. Equally, I am not aware that one can conclude, as he says that one can, that “the Demonstration made according to the doctrine of Aristoxenus is not this one, nor it approaches it even,” nor consider “how the Author of the Parere misses his Target, so that when he thinks to be demonstrating something, he demonstrates something else, which is compatible with the intention of Aristoxenus as fire is with ice.” What a beautiful comparison and much more beautiful Metaphor. Does this Usarti not remember that in his fourth In-consideration he has said that he has not been left as Secretary, and even less, Heir of Aristoxenus' Opinion? How come then that he himself wants to judge, or even consider if the Author of the Opinion shoots so far from the Target and demonstrates one thing instead of another one, which does not comply with Aristoxenus' intention? This Artusi then continues: “Having he realised however, (namely, the Author of the Opinion) that this Tetrachord and those others which he had demonstrated were not those which he had set himself to demonstrate (using the Venetian turn of phrase which Zarlino used habitually) according to the Aristoxenus' intention [-61-] by reducing the particles in the lines he drew, I say, having realised the infinite draw-backs which derive from it, that he tried very hard to remedy that disorder, and finally, not knowing which way to turn, he resorted to Signor Patricio's Poetics.” Notice, I beg you, Benevolent and sincere Readers, what sort of powerful inductions are these. This Artusi maintains, in several places, that the Author of the Opinion, having realised that his Demonstrations of the Tetrachords did not agree with Aristoxenus' intention, and that the draw-backs deriving from them were infinite, he

turned to Patricio's Poetics in order to remedy them. Who has told him this? Who has confirmed this to him? What a dream, what a folly! Is this not one of his usual fabrications, perhaps? If it were true that the Author of the Opinion had realised the falsehood of these Demonstrations of his, and that he noticed so many draw-backs flowing from them, why should he resort to someone else to remedy them? He had the remedy in his hand and the solution in his hands. The act of tearing to pieces those pages would have remedied their falsehood. The act of burning those written leaves would have remedied all those draw-backs. Who required that the Author of the Opinion sent those papers to his Friend? Who compelled him? Who forced him to agree that his Opinion should be published in print? The Demonstrations of Aristoxenus' Tetrachords produced by the Author of the Opinion are all sound, all true, and from them does not derive and does not flow any Draw-back. Their Author, who is also the Author of the Opinion, confirms them all as sound and true, being completely stunned at Artusi's enormous cheek. However, let us presume for a minute that said Demonstrations were false, and therefore create those infinite Draw-backs, that their Author had realised this and, having a profound desire to remedy their falsehood and their ineptitude, he resorted to Patricio himself whom he so greatly offended, being deprived of any other refuge, let us see what remedy he obtained from the Poetics of Patricio himself, "there in the seventh book, where (oh good!) he provides the Demonstration of the Colours (he says) so that they sounded a Semitone, a Tone and a Tone." Oh this is indeed a great remedy, a great succour, a [-62-] great help, similar indeed to the one which our good Citizen taught the Pope to defeat the Turks in their entirety. I know that in this way falsehood would be reduced to truth and what is inconvenient to something convenient. He continues: "It is true, however, that he was ashamed to use and adopt the same words that Patricio used, but his words have the same meaning." It is an important matter this one, which he mentions, namely that he wants, every for words he writes, that the Author of the Opinion should be ashamed; on the contrary, he has nothing to be ashamed of, while he, who should be ashamed of his every word, which is nothing if not hostile or slanderous, has nothing to be ashamed of at all. He says, that Patricio's words "have the same meaning," and that they are these: "To sum up, that accidental shortening of theirs has to be in relation to the difference of the Sound, rather than in relation to the total original length and quantity of the proposed String." Then, does it seem to you, Benevolent and sincere Readers, that the words of the Author of the Opinion agree in their meaning with those of Patricio? Nobody who is a sound man, except Artusi, would utter this nonsense, these lies. But the core of the question will not lay here, as He says with one of his charming expressions quoting the Author of the Opinion in his twelfth In-consideration at page 42, where he adds: "Since, according to this man or this beautiful spirit we can demonstrate whichever Tetrachord we like, regardless of whether it has long or short Intervals, as this does not matter very much to him, as, in any way, all the dreams thought up by whichever intellect will be accommodated by adding this shortening enacted with regard to the sound." So, one can learn ever more clearly how this Spirit of contradiction (an epithet which is most apt to him, although he attributes it unjustly to the Author of the Opinion in the second In-consideration at page 4 and to the Obtuse Academic in the imperfections at page 13) takes pleasure in giving to words of the passages that he quotes meanings and sentiments totally alien to the intention of the Writers, and in particular to those of the Author of the Opinion, who, in this place quoted by this man, never intended or thought that his clearly written words would be interpreted by this man and explained in such a way, which is so contrary to their clear sense, which derives from the many

words which precede them in the [-63-] Parere itself. This can be gathered for the most part from the expression 'such addition' and from those that precede the word 'shortening'. These words are written at the end as a statement of what has been demonstrated in practice in the Opinion itself by his author, and for this reason they can be read at the and of it at page 46. I recite them here, as they are there, and they are these: “It remains for me to inform you, as a final conclusion of this Reasoning of mine that, since it has been said more than once that a String has to be shorter than the other one, as, for instance, the String A O is shorter than the String A B, or the String A P than the A O, and since it has also been said earlier and stated among the universal notices, that all the Strings have to be of an identical length and of the same sound, that this must not be taken as a contradiction or as a verbal entanglement, but that it is meant by this that their being in unison with each other and the equal length of the Strings themselves must be really such, and they are all marked in their extremes A B for this reason. Also, it must be borne in mind that the shortening that hast to be done, has to be done by means of a wood block or a bridge, as it has been advised, and taught both by Euclid and by Ptolemy.” As a summarised declaration of all those words, the Author of the Opinion himself adds: “To sum up, that accidental shortening of them has to be in relation to the difference of the Sound, rather than in relation to the total original length and quantity of the proposed String.” Also, as I noted above, Artusi relates these words in their entirety, but with his usual scarce fidelity, as I have noted above already at page 17 of his In-considerations, together with these other ones, which follow them and explain them more clearly. “Because each one of these and of all the other varieties of sound, whether the ear distinguishes them and hears them or not, can be achieved (as we have seen)by using a single String, and instrument, which is called Monochord for this reason.” To explain these words further I add, according to the intention of the Author of the Opinion himself, that the Difference of the Sound has to be understood, both here and there in that Opinion, as the actual difference of the Intervals particularly and effectively described and pertaining to the different species of the Distributions of the Aristoxenus' Tetrachords, and not as a difference imagined in abstract. Thus, it is absolutely true that this is that true Demonstration, and I would add as well, as he adds, “That Annotation produced on Euclid’s words, [-64-] which is so unique, but, as he says, not invented, nor demonstrated by anyone else by him.” Since these words can be read at page 36 of the Patricio itself: “Since he (namely, Patricio) deemed not inappropriate nor annoying to compose such a long digression to demonstrate something perhaps which had not been demonstrated by anybody else in a published work up to this day, as far as I know, except in my Italian Translation of Euclid's brief musical Institution itself and of his harmonic Elements, to explain that passage of the Aristoxenus' Distributions in the way and in the form which I myself have decided to add herewith,” I imagine that he would have wanted to understand with his usual frame of mind, and comment with his usual or tongue these mentioned words. For this reason he adds: “He tells the truth, since there has not been up to now a man, no matter how excellent and erudite he is, or has been, who had the courage to prove and present to the world such a chimera, knowing that this is like writing on water, counting grains or sand, and, in short, an utter waste of time.” What can I say, Benevolent and sincere Readers? He cannot grasp this with his hands, or by using a set of steps. Ptolemy, Galileo and Zarlino, erudite and excellent men who knew that this was not a waste of time, like writing on water, and even less counting grains of sand, have had the courage to pursue this Demonstration and offer the World not a chimera of the type favoured by Artusi, but a true and certain Description of these Tetrachords of

Aristoxenus, as it has been said now to the point of exhaustion, providing it with a list of the relevant passages in their books. Knight Bottrigaro, Author of the Opinion (as he is considered by everyone, except this Artusi) achieved what Patricio tried to do later on courageously and to a great degree of perfection. Artusi does not believe it, nor does he want to understand it in any way. Therefore he adds: “But let this new Aristoxenus tell me, if I am asked if the Demonstration made by him with the ratios is true or not, according to the intention of Aristoxenus, how will I be able to affirm affirmatively that it is true, if the proportions that express the Intervals are one greater than the other, and they cannot be equal between each other, and therefore they cannot be divided according to the doctrine of Aristoxenus?” I am completely certain that [-65-] Artusi is not going to obtain an answer in any way from this new Aristoxenus, as he thinks, since it is not appropriate for him to answer and because he is engaged in other matters. However, I will reply to him by asking him first if, since he is not the Secretary, nor heir to this Opinion by Aristoxenus, as he has confessed openly that he is not in his fourth In-consideration, why is it that he speaks in Aristoxenus' name. Perhaps via Ampullonian [Apollonina/ampulla/wine flask] inspiration, or through the revelations of a jug of wine. If this is the case, will he tell me clearly, how he thinks that this music of Aristoxenus has to be realised, either in actual practice, or by means of abstract speculation. Let us settle this game between us, and then we will talk again. I say this, because sometimes he wants that this Music should be understood from a speculative point of view, and sometimes from a practical one. Now he censures the use of the numeral proportions in this music and disowns them as not known by Aristoxenus or as banished by him. Now, he embraces and strokes them and wants to destroy, disband and wreck what somebody else has done. Finally, not as a Friend and Defender of this Music of Aristoxenus, but as an enemy and destroyer of it, he wants from it what is not the case, or has not been found to be the case by so many Mathematicians, namely, that Intervals of the same magnitude on a same line should be expressed by similar proportions. And even if this impossibility were rendered possible, I would hold it dear, if this Artusi then showed me where it is possible to read in Aristoxenus' Harmonics that he wants that the Tones and all the other Intervals of his have to be equal but in a different sense than with regard to the equal distance or space from one to the other on the String. In other words, that the shortening of the String containing the tone are always of the same magnitude and quantity between them, and the Dieses equally between them, and, consequently, the Fourths and Fifths as well within a full Octave, or Diapason, and then, consequently, in conformity with the most great priority that the dupla proportion holds, which his the expression of the Diapason (as we have seen that Artusi points out quite imperfectly that Ptolemy says). Hence Knight Bottrigaro has selected a new number (I do not know if it will be necessary for him to obtain the rightful permission from this Artusi to use it even in his written words [-66-] and to publish it; however, he has talked about it extensively in the Antartusi, a Dialogue whose existence is known to Artusi, but which has not been seen so-far by him, as i believe, which by itself individually is sufficient and apt to this effect. I write this number here, since not only it has been widely mentioned, as I said, but it has been described punctually together with all that depends on it, is connected to it and pertains to it in the Dialogue Antartusi itself. For this reason I do want to keep the promise made to him to answer his question, so that he may satisfy with this answer who asked him (as I do not believe) this question. Therefore, I say to him that, if he wants to affirm affirmatively that that Demonstration produced using the Proportions is true, he will be certainly able to do it, albeit one of the Proportions of those Intervals is greater than the other,

and they cannot be reduced to an equal ratio. For all of these reasons, this will not mean that those Intervals are not always divided according to the intention of Aristoxenus, since nowhere in his books one reads that he held in any consideration the equality between those Proportions, but only considered the equal quantitative size of the 12 particles of the Tone and of the 6 identical which make up the Semitone. And since he continues by saying: “If I wanted to state that that Demonstration of the lines or Strings made in equal parts is true,” I say that he will be able to do it also with complete certainty, nor will he have to fear that this is in any way false, as he says to have already said quoting the opinion of the Stapulensis and Zarlino (“these are Demonstrations which cannot be proved wrong,” as he says), since the Stapulensis never considered in his Music any of Aristoxenus' Intervals, but, as a follower of Pythagoras, he talked of the division of the Tone made by Aristoxenus in the seventh of his second book. Zarlino, as a close friend of his, will not oppose him in any way, on the contrary, he will favour and help him enormously describing that Tetrachord not only with figures and numerical characters, as in the first chapter of the fourth book of his Supplementi, but with written out words, adding to each Interval Sesquidecimanona, superbipartientediciasettecima, et supebipartientequindicesima, just as this Artusi should remember to have done when he demonstrated this very Tetrachord in this sixth [-67-] In-consideration. He will be able to rely also on Ptolemy's Authority, who, describing, at Chapter 14 of the second book of the Harmonics, which has come down to us incomplete, the Enharmonic Tetrachord of Aristoxenus himself with the quantitative distances of 3, 3 and 14 equal particles, and, putting after that Heratosthenes' one, which is really the same as that of Aristoxenus, as consider it Galilei and Zarlino in passages of their works mentioned above, since it is expressed with the same numbers in the following universal Table, he says, in the words of Gogavino's translation quoted above. “In the third one (namely, table) according to Eratosthenes in the proportion 15 to 19 and sesquitrigesimaoctava and sesquitrigesimanona.” Hence, one can see clearly that Aristoxenus' Ditone is expressed by the proportion superquadripartièntequindicesima, as one sees that this Diatonic intense of his is also. Besides, I give him my word that I will have to demonstrate to him what is Zarlino's intention and the conclusion that he gives on this Music of Aristoxenus. “But, who goes there? What addition is this? Moreover, his words convince him, when he says (and what ever does he say?) that such shortening has to be considered in relation to the sound, rather than to the total length of the line or String.” Oh, oh, he must not have any doubts about these, since one has already shown what their clear meaning and their purpose is. But let us not reply to them in a defective manner. Between the words 'in comparison' and 'to the sound' the words 'the diversity of' are missing. Between 'total' and 'length' the word 'first' is missing. Between the words 'length' and 'of the line' the words 'and quantity' are missing, and finally before the word 'string' the word 'proposed' is missing. Let see Artusi overcome himself in this, such great defect and perverted habit of his, remembering that the punishment against liars is not to be believed when they tell the truth. Let him change his habit, and only then conclude, as he does: “Therefore, the Demonstration executed through the parts and proportions of the line is not false, but true.” Thus, there will be no need for him, as he adds, to resort to the defence on the basis and through the advice of Patricio, which basis and advice has already been shown to be something empty, a dream, the spinning of someone's head, a feeling of dazed confusion, as he says a little further with the rest of his empty words. I will leave unmentioned most of them, as they are just empty and impertinent words, since another majority of them has been found and discovered to be infected with too bold

and slanderous malice. [-68-] [uiij. in marg.] However, let us move on finally to his eigthh In-consideration, where he starts saying the following untruths: “Having come to know the falsehood of the Demonstration of the intense diatonic Colour demonstrated by this modern Aristoxenus.” To the contrary, the falsehood of the silly statements of contradictions and of the biting untruths of this Usarti have to be known., and if they have been known so-far in their entirety, from now on he will act in such a way that they will be known. However, since I would have too much to do, if I were to pick up on each one of his impertinent lies one by one, which are also poorly regarded by the Author of the Opinion, or new Aristoxenus (a title of which Knight Bottrigari is proud), having left those on one side, I will only deal with his Contradictions, and I will strive to free myself from them as succinctly as I can to avoid causing both you, Benevolent and sincere Readers, and also myself, too much boredom and nuisance. Artusi produced a Description of the soft Diatonic Tetrachord of Aristoxenus almost completely derived from the Demonstration of it made by the Author of the Opinion. It is this one, and it provided with notes in the margin.

[Bottrigari, Aletelogia, 68; text A. B. C. D. 30. 35. 38. 40. Tuono, et Diesis Enarmonico. Semituono. 15. 9. 6. Tetracordo molle Diatonico descritto con le proportionj.]

He continues: “We will see in the present Consideration how the Demonstration of this Colour in all of those three ways which the previously explained intense Diatonic has wanted to make us aware, since its being false has already been manifestly known by considering the Intervals which compose this Diatessaron in the length of the String divided into equal parts.” The meaning of this closing sentence is so densely wrapped up and intricate, that I am not sure whether I ought to subscribe to it or negate it, as I am not sure that, if I negate it, I negate what is true, or, if I subscribe to it, that I subscribe to what is false. However, I will say that, since the Demonstration of the intense Diatonic Tetrachord given earlier has been quoted as true, thus this Demonstration of the soft Diatonic Tetrachord will be considered to be not untrue. Now, let us come to the evidence, about which he continues: “As to the proportions, He says (namely, the Author of the Opinion) [-69-] that the second Interval amounts to an Enharmonic Diesis, and a Semitone of sesquidicianovesima proportion.” The Author of the Opinion, Il Patricio also says this at page 44 of it, but in his graphic lateral Demonstration of that Tetrachord he says this: “The third (namely, the second intermediate changeable line A E, which is of 105 equal particles) being shorter than the line A M (which is the second String) by nine particles which are contained between M and N. Therefore, it is higher than that one itself by the total of a Semitone united to a Enharmonic Diesis, which is an uncompounded Interval, which is thus expressed by the proportion supertripartiente35ma, namely from 38 to 35.” The clarity of these words cannot be clouded by Artusi's tangled and intricate empty words. The Author of the opinion never mixes the names of the Intervals with their proportions in a confused fashion. He says, instead, that that second Interval amounts to the Sum of a Tone and an Enharmonic Diesis, and not to the sum of an Enharmonic Diesis and of a Semitone expressed by the proportion from 20 to 19. For this reason, when Artusi continues thus: “We will see that such Intervals addeded together do not produce the Interval supertripartiente35,” he speaks improperly and outside of the boundaries proposed by the Author of the Opinion. “But since (Artusi adds) the Enharmonic Dieses are one larger than the other, as the Author has proved them to be, and not knowing which one has to be the one that gives us the exact result of what he informs us, when it is added to the Semitone (oh, what negligence!), it will be

necessary to make two separate calculations, in order to see if this can be ascertained as true." Artusi would have not needed to execute these two nor any of his other operations, had he known what I am about to say. The size of the Semitone is always of 6 particles, according to Aristoxenus, while, equally, the one of the Enharmonic Diesis, is always of 3 particles. Therefore, the 3 particles of the Semitone added together with the 3 of the Enharmonic Diesis amount to a total of 9 particles, which is the size of that second Interval, which is also the difference between the second String 114 and the third 105. For this reason, their proportion is supertripartiente35, as the Author of the Opinion said wisely, rather than carelessly, as this Usarti says, when, executed his two operations in the most careless way, without halving the second and reducing it to 390-261, but leaving it in the larger numbers 780-722 of the other first one, he continues with these words: "That Semitone, which one founds accompanied by the minor Diesis, gives us an interval contained, in its radical terms, [-70-] by the proportion super59partiente800, as one can see, 800 741 (what shabbiness!). Therefore, this premise is false, and very false is the Demonstration executed;" but, on the contrary, the one made by him is false, instead of the one by the Author of the Opinion, as he would like it to be. When I say 'by him', I mean by Artusi, who provides two other Operations of his own, in order to have himself regarded as accurate and diligent in his calculations. In the first one, he has forgotten to divide the numbers of one and of the other multiplication by the common divisor 5, to reduce them to 126-117, and he has not bothered to divide the other two of the second one by three, reducing them to 221-190, but he has left both in their larger numbers 680-585 and 663-570. It is true that, when he states which the proportion of this second Operation is, he says that he gives us the interval contained by the super21partiente190 proportion. He should have said super31partiente190, but I am sure that he will want me to blame this on the Printer he has protested already, so to speak, at page 12 of his Imperfections. Let this allow him this, let us accept his excuse, but let us not accept and allow him to say that the Demonstration made by the Author of the Opinion is false, that he was wrong to say that that second Interval amounts to a Semitone and an Enharmonic Diesis, and that it is expressed by the proportion supertripartiente35, which Zarlino himself quotes in the Demonstration of this soft Diatonic Tetrachord at the fourth Exposition in the first Chapter of the fourth book of his Supplementi at page 113, which Artusi copied as far as the numbers are concerned, which are 40, 38, 35, 30. Moreover, if he was wrong to say that that second Interval amounts to the quantity of a Semitone and an Enharmonic Diesis, how much worse should be considered by him the fact that the Author of the Opinion said that the following third Interval amounts to a Tone and an Enharmonic Diesis added together, so that its size is of fifteen particles, a fact which he mentions hardly at all? However, let us check whether this is said so wrongly said. Ptolemy, at the end of Chapter 12 of the first book of his Harmonics, where he describes the Colours, he says of this soft Diatonic one, in the words of the Latin translation. "In the other Genera then, which are not intense, the following (namely, the low one) keeps the interval of a Semitone, in the same way; the one after that, or middle one, in the soft Diatonic keeps the interval of half and a quarter of a tone, and the first one, [-71-] (namely, the high one) keeps the interval of one and a quarter Tone." Boethius, in the fifteenth chapter of the fifth book of his Music says also himself: "The division of the soft Diatonic is this one 12, 18, 30, namely, that the Semitone is twelve, the Semitone is eighteen, and the fourth part of the Tone is thirty, but, what is left over, and so on." Galileo, in the Demonstration of this very soft Diatonic Tetrachord, at page 108 of his Dialogue, says that second Interval amounts to the quantity of three Enharmonic

Dieses, while the interval of the third one amounts to five of the same Dieses. Euclid, in more than one place of his harmonic Introduction, where he describes the Colours or Divisions of the Genera says, in the Latin translation. “The soft Diatonic colour is sung by semitone, through a simple Interval of three Dieses and through another simple Interval of five Diesis.” Of these words, the repeated two 'simple Interval' confirm also very well to what the Author of the Opinion refers with the words 'uncompounded Interval', which is something that those words by Artusi, which contradict each other, do not do, and thus arrive to the conclusion that what is false, is true, and what is true is false. However, if Artusi, when he quotes other people's words, does not quote them in the exact way as they have been written by their very Authors, why should we be surprised that he does not quote his own words in the form that he had them put into print? At the beginning of his following ninth In-consideration, [Ninth in marg.] where he wants to show with what innocence, modesty, gratitude and respect He proceeds, he says: “When, in the Book that I have already written and had printed, whose title is l'Artusi, or, two Discourses on the Imperfections of modern Music, where, et cetera.” So you can understand, Benevolent and Sincere Readers, that this feature of quoting himself presumptuously has to be excused almost as a natural fault, or a habit of many years, and, especially, with regard that dividing in two of his surname (which he has learned from the most knowledgeable and erudite Enrico Puteano) into two words Arte and Usu, which he included in those Latin verses dedicated to Cardinal Arigone which are in praise of that book, and can be found within its first pages. As to the other ones traits of his character, he continues: “I said what I thought about some Passages used by Certain modern Composers quoted (here comes innocence) without naming any of them, (Here [-72-] is Modesty) as I did not deem it polite behaviour to offend those who do not offend, nor create the circumstances so that someone might be offended (here is respect). I said everything as a means to speculate on what is true, and so that the Authors of such blunders, realising their mistake, may acquiesce in my correction, if indeed they were capable to understand reasons of this kind.” But what would he reply to who asked him how this does pertains to him and what authority he as to act as a public Censor? As to not naming anyone, even if he does not name them by their name or surname (albeit he also names some of them) he points at them with those Titles of their Compositions and with such nicknames, that anyone who knows them, realises that he wants to refer to them, and he wants to be understood as doing this. As to the fact that it seems to him impolite to offend those who do not provoke offence and do not create the circumstance so that someone might be offended by naming them, I say and state that not only this is an impolite act, but that it is also barbaric to offend those who are innocent without naming them. Moreover, I state that he is fully aware that he causes offence by saying these things, while he should know for sure that one must not deliberately offend someone else in whichever way. As to the rest of this Ninth Inconsideration, I leave it to the Ottuso accademico, as I have to, as the person to whom everything pertains, and as someone who is very learned and powerful, so that he may oppose and restrain the infinite and immeasurable audacity and arrogance of this man with his prudence and worth, a man who is so presumptuous in himself that this feeling emboldens him to be able to make others subject to his rules, while he thinks he should be free to do what he believes to be right and what he likes. I do not say this as if in a dream, but on the authority of his declaration according to these words of his that can be read at page 12 of the second half of his Imperfections. I recite them now here for you: “In my Canzonette for 4 voices, some printing errors have occurred, and others I have made of my own mind.”

Then, ten or fifteen words further on he says: “Those who are judicious in this discipline will take note of my argument and will be able to discern from what I have said on this matter what has occurred as a printing mistake, and what I have written according to my taste. This is what the situation is and this is what happens.” Then, this Artusi recites the words of the Author of the Opinion found at page 43 at the beginning of his tenth In-consideration, [Tenth in marg.] after a small Proem. However, it has not be possible that they be preserved without the usual trace of alteration [-73-] in the style of Artusi, since in the middle of these three words, ‘between the said’, there appears as an addition the article ‘the’; then, ‘And, thus it contains’ is instead of ‘thus containing’; between the words ‘fourth’ and ‘highest’ the word ‘and’ is missing, and, similarly between the words ‘to be’ and ‘still’ the words ‘the same’ are missing; finally, one has to read ‘of his Harmonics’ instead of ‘of the Harmonics’. One could pass as a printing mistake that word ‘Tomaeus’ instead of ‘Toniaeus’ which is near the words ‘Chromatic Colour’, but the fact that it is written repeatedly in this way two lines below, in the fourth line below under the following linear Demonstration, and also in the margin, ad even in the Index at the word ‘Genus’, indicates that it has to be taken as a mistake due to Ignorance, since the right word is ‘Toniaeus’ rather than ‘Tomiaeus’. However, having completed this linear Demonstration of this Toniaeus Tetrachord of Aristoxenus in imitation of the one by the Author of the Opinion at page 43, he adds: “So many are the impertinent inaccuracies which flow from the Demonstration of this Colour made in such a way, that I remain as if besides myself.” To the contrary, I say with certainty and maintain that the supposed “impertinent inaccuracies which flow from” that Demonstration (to which there is no substance) derive from his own mental imperfection. Therefore, he continues: “As the Author says in his first mistake, this colour is called Tomaeus, because it contains a Tone composed of two Semitones within itself.” In order to begin to demonstrate this first error of his according to his Brain, he adds: “If this Colour proceeds across his notes by Semitone, Semitone, Semiditone and Trihemitone, as he says.” Where does one find this Tone composed of two Semitones? I answer that it is found between B 120, beginning of the first and lowest semitone, which we describe as Hypate meson, and D 108, which is the end of the second and higher tone which we describe as Licanos Meson, which is, as one notices, the description given by Ptolemy in the fourth Column of the Table of the Chromatic sounds in the second book of his Harmonics, or, the one given by Zarlino in said second Chapter of the fourth book of his Supplimenti where he demonstrates the fourth Species Hypatehypaton and Licanoshypaton. For this reason, the Author of the Opinion has committed no mistake when he said that this Chromatic Colour is called Toniaeus, because it contains a Tone composed of two Semitones within itself. So much so, that Euclid in his harmonic Introduction when he describes this Chromatic Toniaeus Tetrachord says, in the Latin words of Penna’s translation. “In fact, the Chromatic Toniaeus is called thus [-74-] from the Tone which is in it through its make-up.” However, this Artusi, not content with this, continues: “When one says that something composite, it means that there are two or three things put in such a way together, that from two or more separate elements, as they were, a single entity is achieved, rather than, when a single entity is divided into two, the original entity should be called composite. In this Colour, the Tone is composed by two Semitones, so it should have been said that it is divided into two Semitones, rather than composed of them. So he should have said ‘divided’ rather than ‘composite’, and in this case he would have spoken appropriately.” Had the Author of the Opinion said this, he would have spoken very wrongly, if not for other reason, because Artusi, Author of the

Imperfections and In-considerations says this. However, the Author of the Opinion says what is right, when he speaks as he does, if no other reason, because Euclid has said so, not only in the above mentioned place, but somewhat earlier, when he deals with he Tone. These are his words Pena's Latin translation. "Similarly, the Tone, in the Chromatic, at least is composite, while in the Diatonic is simple." Moreover, is he not able to remember that he said four or five lines above that "this Colour proceeds across his notes by Semitone, Semitone and Semiditone"? Does he not remember that he also added that when something is said to be composite, it means that there are two or three things put in such a way together, so that from two or more separate elements, a single entity is achieved?" The two Semitones are the two separate elements which united compose the single unit which is the Tone. How can two Semitones be created from a Tone in this Colour, if one does not find a Simple Tone naturally, if not in the Tone of the Division, or by accidental leap, as it has been said, between the Hypate and the Licaons, between the Mese and the Tritediezeugmenon, or, as we say, between [sqb] mj, et Cfaut, # elevated, and between Elamj, et Ffaut # with a Diesis, between alamire and [sqb] mi. So, since (as Euclid says in his Isagoge) "the Chromatic Toniaeus uses the same Colour as the Chromatic itself, it is sung as Semitone, Semitone and Trihemitone," where has this speculative Mole seen himself, who relates things (and these that follow here are the words of Artusi himself) "as the opposite of what they are for his own good," that any Writer who describes this Toniaeus Tetrachord says that the Tone has to be divided into two Semitones? Galileo does not say it. [-75-] Zarlino does not say it, and it is even less credible that Ptolemy might have said it in that Chapter 14 of the second book of his Harmonics which has come down to us in fragments. I am also certain that none of those other ancient Musicians said it, just as I am certain that not even Boethius said it, since he says at chapter 15 of the fifth book of his Music: "Similarly, the division of the Chromatic Toniaeus according to Aristoxenum is 12 12 36, and it is clear that he locates individual Semitones within two Intervals, and what is left over he puts in the last one." He adds: "See, if it is possible to understand things in their proper way. He continues, and says (namely the Author of the Opinion) that the last Interval of this Colour was called Trihemituono by the Ancients, and it is called Semiditone by modern theorists. "These two have nothing to do with each other: in fact, the modern one is consonant, while the Ancient one is dissonant; the modern is contained within one proportion, the Trihemitone by another different one." Benign and sincere Readers, it is a very sweet pleasure to see that, when somebody is convinced to be talking about somebody else's faults, one discovers and clearly shows his own deficiencies. In fact, this is what the Author of the Opinion has said instead, not what Artusi relates according to his usual habit: "After this, this Species has the other uncompounded interval, which is of 18 particles, or ounces, and thus it contains a Tone and a half, which was called by the Ancients Trihemitone, and by Modern theorists Semiditone." This will uncover Artusi's great ignorance, since he says that this has nothing to do with that one, namely, (I will say this first, as what he says is not clear) the Trihemitone of the Ancients with the Trihemitone of the Modern theorists. The reason of this are two: one of them is that the Modern one is consonant and the Ancient one is dissonant. E what does this matter? The Author of the Opinion says that that Interval was called Trihemitone by the Ancients because it contained, uncompounded, a Tone and a half, and by Modern theorists is called a Semiditone. He does not say that that is either ancient, or modern, or consonant, or dissonant. Moreover, simply because something changes name, it does not stop remaining the same. What new effect or difficulty does naming that Interval of a Tone and a half

Trihemitone or Semiditone create? Zarlino, despite being such a great friend of this Artusi, nevertheless (since he is a greater friend of the truth that of Artusi's) utters a sentence that goes quite against him [-76-] in the third Definition of the fourth Ragionamento of his harmonic Demonstrations, where he says that “in this genus one can move from the first String to the third one by leap, because one moves by the interval of a Semiditone or Trihemitone.” And in the fourth Definition of the same Ragionamento he says “and by a Semiditone or Trihemitone,” while earlier in the twelfth Definition of the second Ragionamento he had said, referring to the Semiditone. “This Interval has been named in different ways, since some have called it Sesquitone, almost wanting to call it a Tone and a half and others have called it Trihemitone, or Trisemitone, considering the fact that it is used in the Chromatic genus, when it is taken without middle string. However, let us not stop any further to consider its names. We will call it Semiditone, and it is the smallest Consonance that can be found.” He has said “let us not stop any further to consider its names,” because he knew very well that topic and dispute about the names is regarded as a complete waste of time by those who are knowledgeable. Therefore, he said resolutely: “We will call it Semiditone.” Therefore, this Interval is named Sesquitone, Trihemitone, or Trisemitone and Semiditone, and also minor Third and perfect and imperfect. To greater evidence, as he believes, of this opinion, he continues some way further: “Modern theorists do not consider the Semiditone as an Element of any Genus, so that it would have to be considered as an uncompounded Interval, and the Trihemitone in the way that the Ancients did, so that the Tone and the Semitone considered in this way are called Trihemitone. This is what Boethius says in the twenty-third Chapter of the first book of his Music, but they consider it as an Interval which is full of Tones and Semitones, so that there is no comparison between one and the other, and the name of one does not work for the other one and it is not even the same, otherwise it would follow that the Semitone and the Tone, which are called Trihemitone individually, as Boethius said, would be the same as the Semiditone, which cannot be and it is impossible.” As to the fact that Modern theorists do not consider the Semiditone as the Element of any Genus, nor as a compounded Interval, as the Ancients considered it (hence, according to Boethius, the Tone and the Semitone called Trihemitone are considered in this way) but that they are consider it as an Interval formed by a Tone an Semitone, I will say firstly that the Semiditone, according to the conclusion drawn by Artusi [-77-] comes to be called Trihemitone, which is against what He would like to state. Furthermore I will say that, if the Semiditone is considered by Modern theorists to be composed by Tone and Semitone in this way, it follows that it is considered by them as belonging to one of the Genera. If it is considered as belonging to one of the Genera, which goes against what Artusi himself said, it is considered as belonging to the Diatonic Genus, as Boethius says at Chapter 23 itself of the first book quoted by Artusi. Boethius words are these: “However, a Semitone and a Tone in the Diatonic Genus can also be called Trihemitone, but this is not uncompounded, as it is accomplished by two Intervals.” Moreover, when Artusi says that Modern theorists do not consider the Semitone as belonging to any Genus, he is profoundly mistaken, since they see it as belonging to the Chromatic Genus and as a simple Interval which is typical of that Genus. Boethius himself, at chapter 23, some way before the words quoted above, states it by saying: “However, in the Chromatic, the division consists of Semitone, Semitone and uncompounded Trihemitone, therefore, we call this uncompounded Trihemitone, since it is contained within a single Interval.” Zarlino has already confirmed this to us where he says that it is employed in the Chromatic Genus when it is taken without any

middle String. Thus, therefore there is a comparison, or rather a convergence between one and the other, and the name of one is used for the other, and it is the same thing. Therefore, it follows that, as Boethius says, a Tone and a Semitone are the same thing as a Semiditone, as it can be, and it is possible, but it never follows that each of them individually is called Trihemitone, as Artusi let slip from his pen (oh what negligence!). Now, since I have already said: “What does it matter if the modern Trihemitone (as this man Artusi says) is consonant, and the ancient is dissonant,” as if this is appropriate remark, despite being said with a certain disdain. I say nevertheless, to create a clearer understanding of this, that, if the Trihemitone or modern chromatic Semiditone (if it is defined in this terms, it has to be understood as such) is, as it really is, consonant, what does it matter to us if the ancient Trihemitone, or ancient Semiditone believed to be Chromatic by Timotheus, is dissonant, as it really is? Nevertheless, the modern Semiditone is also ancient because it is the same as the one of Didymus. Hence, the ancient and modern Trihemitone are also consonant. What is the consequence of this for us? It means [-78-] that the Chromatic Trihemitone of Aristoxenus, being the same as the same chromatic ancient Trihemitone of Didymus is also consonant, and, since the chromatic Trihemitone of Didymus is the Trihemitone or chromatic consonant Semiditone used by Modern theorists, hence the chromatic Trihemitone, both ancient and modern, hast to be consonant, and there is not a simple relationship of comparison or convergence between them, but one of absolute identity. Now, that the chromatic Trihemitone Toniaeus of Aristoxenus is the same as the one of Didymus used by Modern theorists, can be clearly seen from their proportions, since the proportion of Aristoxenus, just as the one of Sesquiquarta of Didymus is contained by the same numbers 108 and 109 of their Tetrachords. Thus, it is clear, consequently, that the chromatic Trihemitone of Didymus of modern theorists is expressed by a proportion which is not at all different from the one that contains the ancient chromatic Trihemitone Toniaeus of Aristoxenus. The modern Trihemitone and the ancient one of Didymus and Aristoxenus are consonant, rather than dissonant, and it is contained by the same proportion, rather than by a different one. This is that clear Demonstration and discovery that I have already said that the Author of the In-considerations would achieve in his very ignorant magniloquence and loquacity. Thus, he continues: “This Author says all this to prove that he is an accurate writer.” Then, without interposing any other words he says: “He cites the fact that Ptolemy in the fourteenth Chapter of the second book, in the Table of the Chromatic Colours, where he describes this Tetrachord according to Aristoxenus, says that it is the same as that of Eratosthenes. I add here that, according to these Tables, this is the Chromatic Tetrachord according to Didymus, and that perhaps it is from this one that Ptolemy derived his Diatonic, since this one, described with such proportions, is nothing but Ptolemy's Diatonic thickened with a Chromatic String. Indeed, this modern Aristoxenus should have taken this into account, since he boasts to be writing with the greatest diligence and attention to detail about what this great man wrote.” I do not say to you that this Artusi finds his own fault in somebody else. He says, that the Author of the Opinion boasts to be a fastidious and accurate writer because he has said, quite aptly, that this Division of the Chromatic Toniaeus Tetrachord of Aristoxenus is the same as that of Eratosthenes, as it is described by Ptolemy in his Tables of the chromatic proportions. [-79-] He adds then, very negligently: “I add here that, according to these Tables, this is the Chromatic Tetrachord according to Didymus,” and, since he founds this added Comment of his on the Ptolemy's Tables, do let us focus on it a little. In the fourth, fifth and sixth Column of the Table of the

proportions of the Chromatic Tetrachords, one finds written these numbers with these written additions according to Gogavino. This is the table:

[Bottrigari, Aletelogia, 79; text:Aristoxenj Toniaeum Chromaticum, Eratosthenis, Didymi, 90. 70. 30. 114. 120., quarta, quinta, sesta]

The numbers written in the fourth Column under the Heading of the Chromatic Toniaeus of Aristoxenus and in the low Tetrachord are 120, 114, 108, 90, which are the same, in fact, as those written in the fifth Column under the Heading of the Chromatic of Eratosthenes. However, those written in the sixth Column under the Heading of the Chromatic of Didymus are not all the same, since between the first one, 120, and the third one, 108, there is the second one, 114.30, namely 114 particles and 30, first sexagenes of a particle, which is half a particle, and thus 114 ½ according to Ptolemy's writing conventions in his Tables. This number, therefore, differs by virtue of this half a particle from the other second numbers which are 114, so, as a consequence the Tetrachord of Didymus is different from the Chromatic Tetrachord of Aristoxenus and from the chromatic of Eratosthenes. And for this reason as well, consequently, this Artusi is a negligent and impertinent Writer. He is even more negligent since he has not been able to recognise that second number 114.30 is one of those almost innumerable errors contained in Gogavino's translation itself, which are particularly frequent in all those Tables of the Proportions and combinations of the harmonic Genera. Besides, that this Author of the In-considerations should not be presumed to be a great Mathematician, a great Collector of ears [spigolativo/speculativo] of a Music theorist, and perceptive man, but someone lulled to sleep by the sound of the Biabue or of the Cimbalo of the long-eared Midas, I will say (so that he may learn, Benign and sincere Readers) that that number 114.30 has to be corrected to 120, 112 ½, 108, 90, which reduced to whole numbers gives 240, 225, 216, 180, so that the proportions between its [-80-] three Intervals are the sesquiquindicesima for the low one, the sesquiuentiquattrecima for the middle one and the sesquiquinta for the high one. One can know clearly that the second term itself is really wrong, and the correction provided is the right one, not only from the numbers of the second high Tetrachord 80, 75, 72, 60 above the Tone of Division 90, 80 of the sixth Column by extracting their proportions, and then correcting the low Tetrachord according to them, as can be done also by proceeding through the sesquiatera Diapente and saying, if 2 were 25, what would be 3, hence, once multiplied together 75 and 3, their product is 225, which divided by 2 leaves 112 ½, which is what we were looking for; but also from what Ptolemy himself says at Chapter 13 of that second book, which, according to Gogavino's translation, is this: “In fact, in the Tetrachords he put the sounds which hold the first place in the sesquiquarta proportion to those which are third in both Genera; those in the second place, however, in the Chromatic he put them in the sesquiquinta proportion and in the Diatonic in the Sesquioctaua, so that the different quantities in sequence in both Genera compose the sesquidecimamquinta proportion, while the middle ones in the Chromatic the sesquiuigesimamquarta and in the Diatonic the Sesquinona proportion, which goes against the experience offered by the ear.” Therefore, Ptolemy says that in the Chromatic Toniaeus of Didymus the first low interval is of sesquiquindicesima proportion, the second, middle one of sesquiuentiquattrecima proportion and the third, high one of sesquiquinta proportion. With such proportions and with such order is composed the Chromatic Tetrachord, which is used in a thickened and participate form in harpsichords, spinets, organs and other such instruments; as such it is used in

our playing and singing, and it is known and considered by the good Musicians of our time, and also, consequently, by this Artusi, who adds, after one of his subtle spigolatione: “The Author of the opinion proposes three semitones to us, which he establishes as one greater than the other one, a concept which was never expressed by Aristoxenus, Euclid, Aristides, Censorinus, Martianus Capella or by any other writer who was a follower of Aristoxenus.” Had this Artusi read, or, once having read them, had he able to understand the Books of Aristoxenus and Euclid (as to those by Martianus, Censorinus and, particularly, Aristides Quintilianus, of which, as of many other Authors that he mentions, I would swear that Artusi has never seen the paste of the paper from which their pages were made, I do not believe that they contain a word regarding this detail) he would have learned, as Galileo, Zarlino and the Author of the Opinion together with Ptolemy have learned, that the Semitones of Aristoxenus are not only three, but six, although none of those three invented by Artusi's profound collection of ears [spigolatione/speculatione] is numbered among them, and, if he had a good memory, since he says to be surprised that the Author of the Opinion did not remember what it did not happen to him, he would have invented one more. But, of the three, that, he says, to which will amount (according to his good mind) the Semitones described by this Modern Aristoxenus, one will be (and he never knew this) the one of proportion Sesquidiciasettesima 18, 17

Sesquidiciottesima 19, 18

Sesquidiciannouesima 20, 19

And if, in his speculations, just as he has invented the that Semitone Sesquidiciasettesimo of his by subtracting the Tone 17/15 superbipartientequindicesimo, which he calls major, from the Semiditone 18/15, namely sesquiquinto, with that most subtle speculation, he had the brain to remember of the Tone 19/17 which he calls minor, by subtracting it from the Semiditone 18/15, or 6/5, he would have found another one also by his cutting speculation, expressed by the proportion supersettepartioentenonantacinquesima, namely from102 to 95. Hence, the ones invented by him with accurate and vane subtlety would have been two, just as two are the Chromatic Semitones of the Toniaus of Aristoxenus which I have already named as six. Of the other four of which, these are the proportions 30 to 90 and 29 to 28, for the soft chromatic ones, and from 80 to 77 and from 77 to 74 for the hemiolic Chromatic ones. I can just imagine Artusi shaking is head like a paralytic, puffing and panting, rolling his eyes like a man possessed, and I seem to be able to hear the noise which he makes stomping his feet when he hears this great novelty of so many of Aristoxenus' Semitones, since he believes that even the three described by him to be too many, counting among them also the one found by his ear-collecting mind. But if it is so, let him stop and let him calm down, considering that this happens because of the differentiating quantities of the different Divisions of the Tetrachords made by Aristoxenus in the Chromatic Genus. Thus, he will know that, since the quantitative difference of the Semitones is equal in each of the three Divisions, those Semitones do not turn out [-82-] to be, in truth, if not three; since just three and respectively equal between each other are those differential quantities, namely, of 4 and 4 equal particles in the soft Chromatic, of 4 ½ and 4 ½ in the hemiolic, and of 6 and 6 in the Toniaeus, as in one and the other of the Diatonic. But if he does not recognise this argument, as he is very stubborn in his belief, and he is not left satisfied in his mind, let him be satisfied with the Example or copying our belief. Let him

examine with his lame set square, that, as a good Custodian of it he must not have lost otherwise among the Distributions and Divisions of Ptolemy's Chromatic Tetrachords, and once he has found, as he will find for sure, that six different Semitones have been established by Ptolemy himself, four of which are in his two Chromatic Species, namely, two in the soft Chromatic, one of sesquiventisettecima proportion and the other of sesquiquattordicesima, the other two in the intense Chromatic, one sesquiventecimo and the other sesquiundicesimo, and two others in two of his Diatonic species, namely, one in the soft Diatonic itself contained by the Sesquiventecima proportion and the other in the intense Diatonic within the sesquiquincidecima proportion, let him put a stop to his anger, let him stop to be shocked, and if possible, let him stop to be so trusting in himself that he considers everyone else who is very knowledgeable. He continues: “However, since I said that this is Ptolemy's Tetrachord, it seems a good idea for me to show it herewith, so that it might be known openly that what I said is true.”

[Bottrigari, Aletelogia, 82; text: Diatonico di Tolomeo, Tuono diuiso in due semituonj. Cromatico di Aristosseno, di Didimo, et di Eratostene 15. 18 19 20]

This is what Artusi has said about this Ptolemaic Tetrachord before adding his novelty of the three Semitones of Aristoxenus. Hence I said, “after one of his subtle collections of ears.” Hence, I moved on to show the antiquity of those, to avoid repeating what he had said and what I will say of that Tetrachord subtly collected as an ear [spigolato/speculated] by him. He says then in that passage: “He assigns to us (namely, the Author of the Opinion) a Semitone expressed by the proportion sesquidiciannovesima between 20 and 19, and another by the proportion sesquidiciottesima between 19 and 18. What else are these two Semitones, but the Sesquinono Tone divided into two unequal [-82-] semitones?” It is so, and He, as a diligent Theorist, should have added to the words “divided into two unequal Semitones” the word “arithmetically,” since the two Semitones sesquiquindicesimo and the other, sesquiventiquattrecimo, in which said sesquinono Tone was divided by Didymus (as it has been said) in his Chromatic, are also unequal, but they are not divided arithmetically, and these other two unequal Semitones, one sesquiquatordicesimo and the other sesquiventisettecimo, divided by Ptolemy in his soft Chromatic, and perhaps also in others. He then continues and says that “the Semitone called Semiditone is contained within the sesquiquinta proportion from 18 to 15.” What else is this, however, if not a sesquiottavo joined with a sesquiquindecimo? This is what the Author of the Opinion says, and this is as it is. How did Ptolemy devise his Syntonic Diatonic, if not with this sort of Intervals? Will he say, perhaps, that this is not so (He would state this definitely, as firmly as I state it now)? And what is the difference between them, if not that, while the same Intervals stay in their place, he divides that Tone which is situated in the high part of the Tetrachord of Ptolemy into two Semitones, instead of dividing those which lay in the low part of it? ” This difference seems immaterial to this diligent Collector of ears, but it is so great that Ptolemy's Syntonic Diatonic Tetrachord is completely different from this ear-collected by the ear-collector Usarti. It is possible that he has rolled his eyes so much, not to speak of his brain, that he does not see and recognise whether this Tetrachord devised in this way by him (I will repeat again) is completely the opposite to Ptolemy's? What is in the low register in this one, it is in the high part of that one. In Ptolemy's Tetrachord the sesquiquindicesimo is in the low part, in this one it is in the high one. In Ptolemy's the sesquinono Tone is in the high part, while in this

one it is in the low part. The Trihemitone, or Sesquiquinto Semiditone is in the low part of Ptolomy's Tetrachord, while it is in the high part of this one. In Ptolemy's Tetrachord the sesquiquarto Ditone is towards the high part, and in this one it is in the low part. Now, look at it in the face (as Artusi says imitating Galileo) and realise for yourself that what he has said about this is not true.

[Bottrigari, Aletelogia, 83; text: 20. 10/9. 18. 9/8 16. 15.Diatonico dello Artusi Spigolatiuo 48. 16/15 45. 9/8 40. 10.9 36. incitato di Tolomeo]

However, to reach the end of his fourteenth In-consideration, he says this in the first place: “It is very true that since he realised that he had not hit the target with these new Inventions of his consisting in applying proportions to the Intervals, an Operation most remote from Aristoxeus' intention and of his followers, and in dividing the length of the String in equal parts, for this reason he has turned to the operation consisting in shortening on the basis of sound.” The application of proportions to Interval is something which is not new to anybody except to this Artusi, who is a novice really in every matter. We have already shown that this is not something new, and we have produced, as specific evidence, the passages of Ptolemy, Galileo and Zarlino, where this occurs. Then, as to whether dividing the length of the String in equal parts is very remote from the intention of Aristoxenus, one should not believe this Artusi anyway, since amongst other things which take away his credibility, this is the main one, namely that at the beginning (as it has been said at other times) of his In-considerations at page 8, towards the end, he has declared not to have been left as secretary, and even less as heir of Aristoxenus' opinion, apart from the fact that this has been attempted by Patricio, whom he elected to defend, according to the intention and opinion of Aristoxenus. Therefore, it has not occurred to the Author of the opinion to realise that he did not hit the Target, and for this reason to have to resort to the shortening made with regards to the sound it not to the method, which has not been understood to be the straight and clear and true sound and meaning of the words of that Author. Since Artusi adds as a conclusion: “and had he provided the Demonstration of this shortening without the help of the Mesolabium or of the thirteenth proposition of the sixth book of Euclid, the Demonstration might have been true, perhaps,” I say that to enact this actual shortening of the string in order to obtain the required sounds it was not necessary to resort to the Operation of the Mesolabio or to the help of any of the propositions of Euclid's Geometric Elements. On the contrary, that geometric linear Demonstration which was necessary in order to expose entirely the arithmetic numeral description produced by that great Triumvirate, namely Ptolemy, Galileo and Zarlino has been realised by the Author of the opinion, and it happened to be, and it is, absolutely true. Hence, it does not happen anymore anyway that he should tire his beautiful mind to find out what is true by means of this Operation, nor that Artusi, who says that one should wait and see and hope for the best, and there should be any new Inventions, which are things that cannot be expected of him at any time, instead of those that one can expect of him, such as new [-85-] slander, new malice, new heinous gossip, and new Operations, fruit of his evil mind and deep ignorance. Benign and sincere Readers, here is for you the evidence contained in this eleventh In-consideration of his, at the beginning of which, past a short Epilogue which I leave aside, he continues with these words: “Now we will see how this new Aristoxenus intended the chromatic Hemiolic Colour. Euclid's words which he commented, and some annotations never before written, and illustrated by him. “The Colour of the Chromatic Hemiolic, or sesquialter is divided into Intervals

of four and a half ounces, four and a half ounces, and twenty-one ounces," and when he comes to the Demonstration of this, he describes a Diesis of four ounces, and the other one of five ounces, or particles of the drawn line. He says, however, that their proportions are the following. The first one is expressed by the superpartioente70essima proportion (He means superpartiente77essima, namely from 80 to 77, and it is of 115 and ½ particles, according to his drawings. The second diesis is contained by the proportion supertripartiente74, namely from77 to 74, and by an uncompounded interval which contains a tone with two other Chromatic hemiolic Dieses, and it is lower than the stable and most acute Fourth by the measure of 90 equal particles. Hence, the supersettepartiente30 proportion is contained between them, which is from 37 to 30." I do not know how to position this pen in my hand to begin to unveil how great is the ignorant malice of this Slanderer, Father of these real In-considerations. Nevertheless, I will say that it is indeed very cheeky of him to say that the Author of the Opinion put a Diesis of four ounces and another one of five in the Demonstration itself of the Chromatic Tetrachord, since each of those Diesis have to be of 4 ½ ounces each, just as the words of Euclid translated into Italian by him recite. So, where is this Diesis of four ounces, or particles? Where is the other one of five? He himself says that that the first one is contained by the superpartientesettantasettecima, courteously owning up, quite unlike his usual demeanour, to the omission of the number seven occurred in the printing process. This omission is clearly apparent through the two following numbers of that proportion, from 80 to 77, even though Artusi had wanted to be malicious in this, and even more clearly from the number 120 of the first lowest stable String and from the number 115 ½ of the second mobile. One can see clearly that between these numbers 120 and 115 ½ [-86-] there is the space of 4 ½ ounces or particles, and not of only four, as he says inconsiderately of this first Diesis, and much more so of the second, where he says that it is of five ounces, and it is expressed by the proportion supertripartiente74, namely, from 77 to 74, not realising that in this way he allows that the number of the third mobile String is, as it is truly, 111, both in the literal Description and in the linear Demonstration. Therefore, one sees clearly that the quantitative Interval of 4 ½ ounces, instead of five, as this Father of the In-considerations and if the Imperfections states, is contained between that 115 ½ of the second String and the mentioned 111 of the third one. He does not know also that the difference between 120 and 115 ½ is 4 ½ and between 115 ½ and 111 is 4 ½, both for one and for the other Chromatic Diesis of Aristoxenus. Therefore, the remaining high Interval which contains within itself a Tone and two other Chromatic Hemiolic Dieses and is interposed uncompoundedly between what he calls the third mobile String 111 and the stable Fourth, is indeed the supersettepartientetrentecima, namely from 37 to 30. Moreover, do You really want to know with clarity, Benevolent and sincere Readers, of which quality and how great is the malice and perversion of this Author of the In-considerations? Know it from this, that, in the Slanderous Censure of the above mentioned Demonstrations of Aristoxenus' harmonic Diatonic Tetrachords, in the above mentioned and preceding tenth, and in the following thirteenth and fourteenth In-considerations, he has copied, albeit in altered form, not only Euclid's words translated by the Author of the Opinion, but those of the Author himself explaining the linear Demonstration produced by him of the proposed Tetrachord, and now in this eleventh and onwards he does not even copy one Euclid's words in the translation. He does this so that the Slander may not be evident, but I present them to you, and they are these, at page 42 and 43 of the Opinion itself: "This Colour is called Chromatic hemiolic Species, sesquialtera or sesqupla from that other Diesis by which

it is composed, because, since each of them is of four and a half particles, it turns out to be in the sesquialtera proportion compared to the Enharmonic Diesis, which is of just three particles, and for this reason it contains that one time and a half. Therefore, this turns out to be the particular Design of his Tetrachord, which corresponds to the measurements of the length of the line, or String of the Monochord placed above. Between the extreme Strings of that Tetrachord, [-87-] A B, divided into120 particles of very low sound and the A C, divided into 90 of the same particles of very high sound, the two mutable Strings A H (the second one as to the number of particles and higher than the first one A B by a chromatic hemiolic Diesis under the supertripartientesettantasettecima, – this is the printing mistake which this Father of the In-considerations has conceded to accept as such, by act of unusual courtesy –) namely, from 80 to 77, and A I (the third one higher by 111 particles than the second String AH itself because of another similar Diesis contained within the proportion supertripartientesettantaquattrecima, or from 77 to 74, but lower than the fourth and highest stable A C of 90 equal particles by an uncompounded Interval which contains a Tone rather than two other chromatic hemiolic Diesis, so that the supersettepartientetrecima proportion is contained between them, namely, from 37 to 30. To conclude, (Artusi then continues) this modern Aristoxenus wants that this Tetrachord of Aristoxenus should be divided into two Diesis and a Tone with another two Diesis. However, if the words of Euclid that he quotes in his Italian translation, “Three Diesis will go to fill up the Tone,” are true, as the Euclid's words and those of Aristoxenus himself maintain when he divides the Tone into three and four equal parts, (nevertheless the Diatessaron, or the Tetrachord described to us in this way is made principally of two Diesis, one and the other of which are contained by the above mentioned proportions, and by one Tone and two other Diesis, which all together arrive to the number of four Diesis; but, four Diesis fill a Tone and a third of a Tone, hence this diatessaron would contain only two tones and a Diesis, which is the third part of the Tone) therefore, it will not be true that the Diatessaron ordered by the old Aristoxenus is of two and a half Tones, but it was filled by the modern Aristoxenus with two Tones and a third of a Tone.” This is an error. The conclusion which this Author of the In-considerations and Imperfections, modern Aristarchus reaches is absolutely true, namely, that the modern Aristoxenus wants that this Chromatic hemiolic Tetrachord of Aristoxenus should be divided into two Diesis and a Tone with the addition of two other Diesis, always chromatic and hemiolic. Euclid's words, translated into Italian and quoted by the Author of Il Patricio, Opinion, are also true, but it is not true, although Euclid and Aristoxenus themselves divided the Tone into three, four, [-88-] and even eight equal parts, that three Diesis go to make up a Tone in the Division of this Hemiolic Tetrachord. In fact, since each of those Dieses amounts to 4 ½ ounces or particles, three Dieses amount to 13 ½ ounces, and therefore they exceed a tone by 1 ½ particles, or half of an Enharmonic Diesis. Hence, four Dieses occupy not only a Tone and a third of it, as this Artusi syllogises, but a Tone and a half. For this reason this Diatessaron turns out to be filled not just by two Tones and a Diesis, but by two Tones and half a Tone. Therefore, it will be really true that the Diatessaron ordered by the old Aristoxenus is composed of two Tones and a half, as the modern Aristoxenus has filled it, instead of two Tones and the third part of a Tone, as this modern Aristarchus chatters inconveniently. He says that the ancient Aristoxenus, not any of his followers, whom he does not name, never said such absurdities. If Artusi names an absurdity (or if he calls it an omelette, as i believe) to call the remaining 21 particles “a Tone together with two other Chromatic Hemiolic Dieses” when the Author of the Opinion, modern Aristoxenus, wanted to understand

them as Intervallic quantities, how did he dare quote Euclid's words in this particular matter, when he describes the Division of this Tetrachord, which are, in Pena's Latin translation: “The chromatic hemiolic proceeds through Diesis and Diesis, of which each is a sesquialtera of the Enharmonic Diesis individually, and through a simple Interval amounting to seven Diesis, of which each is the fourth part of a Tone?” Or, how did he dare quote Ptolemy's passage at chapter 12 of the first book where he describes this very Aristoxenic Tetrachord with these words in Gogava's translation: “Moreover, he makes one and the other Intervals of the Chromatic Hemiolic Porrò Sesquialtera Chromatis thickened of a quarted and of an eighth of a tone (and not of a sound, as one reads in that very wrong Translation by Gogava). He makes the remainder of one a tone and a half and a quarter, so that each of those two is 9, and this one 42.” Therefore, the numeral Description made by Euclid according to the sound of his words in the passage quoted by Patricio in his Poetics and by the Author of the opinion is this one: 4 ½ 4 ½ (since the 4 ½ is sesquialter of 3 which is the Enharmonic Diesis) 3 3 3 3 3 3 3, which are seven Diesis, each of whom is a fourth of 12, which is the size of a Tone. Their sum is 21. [-89-] Ptolemy's demonstration, according to the meaning of his words turns out to be this one:

[Bottrigari, Aletelogia, 89; text: 6. quarta parte del Tuono 3. 9. 24. 12. Semituono 6. 42.]

which has also been described by Franchino at Chapter 16 of the second book de Harmonia Musicorum Instrumentorum. Therefore, what the Author of the Opinion and modern Aristoxenus has said so-far is not inappropriate or absurd, just as it is not absurd to say (this is what our modern Aristarco, Author of the In-considerations and Imperfections) that one Diesis which is contained within supertripartiente77 proportion and the other one within the supertripartiente74, since these proportions are not equal, albeit their differences are; and, since he establishes the Tetrachord on the above mentioned proportions, here is its orderly demonstration.

[Bottrigari, Aletelogia, 89; text: A. 80 B. 77 C. 74. Diesis D. 60. Tuono, e due]

This Demonstration, although it is composed of the same proportions, it is not the same as the one by the Author of the Opinion, since it is really this one 120, 125 ½, 111, 90, as it is described by Ptolemy in the third column of the Table of the Chromatic Tetrachords in the incomplete chapter of the second book with the numbers of the sessagene, namely 120, 115.30, 111, 90. Zarlino himself describes it in the second Chapter of his book of the musical Supplementi, although the number 115 is corrupted, as the ½ is missing; also, in the proportion between 11 and 115 itself where he reads supertripartiente115, he should read supetripartiente74, and in the following proportion between 115 and 120, where he reads sesquiventesimaterza, he should read supertripartiente77. Thus, it was almost transferred mistakenly by the overconfident Zarlino from page 109 of Galilei’s Dialogue at the fifth Chromatic Tetrachord, since all the same errors are found in that one. In both of them the difference between 111. et 115. is marked 4, and the difference between 115 and 120 is marked 5. These are printing mistakes clearly highlighted by the two other differences 9 and 9 according to Ptolemy. Those two Diesis of different size are a fault or an error blamed on Author of the Opinion, new Aristoxenus by the modern Aristarchus, Author of the In-considerations and of the Imperfections, who, with his arch=musical licence and his specific authority has marked alongside the numbers [-

90-] of this Demonstration made with the letters A B C D, not considering that between Are and [sqb] mi there is never any Diesis, as he has marked with the aid of the letters, but, instead, between [sqb] mi and Cfaut, or between Elami and Ffaut, as Galileo has marked with good reason in this Tetrachord and in all the others preceding and following this one, and Zarlino, who always writes Hypatehypaton, Parhypatehypaton, licanos hypaton, Hypatemeson. Artusi then says: “He says (namely the Author of the Opinion) that there are a Tone and two Dieses between 74 and 60; and, as the Tone is from 68 to 60, the two Dieses are between 68 and 74. Since he establishes them so that their differences are equal, for this reason one will be from 68 to 71 and the other one from 71 to 74. In this organisation they will have four Dieses in arithmetic progression, and he confirms all this without any contradiction. He adds: “However, if the proportions were equal, as Aristoxenus (and all his school) draws them, since all those who understand this profession say it –

The Dieses are the following:

Diesis of superpartiente 68 proportion 71. 68.

Diesis of superpartiente71 proportion 74. 71.

Diesis of superpartiente74 proportion 77. 74.

Diesis of superbipartiente 77 80. 77.”

It is extremely clear that the proportions of these four Chromatic hemiolic Dieses differ between one from the other by measure of their equal quantitative differences, and therefore they are exactly such as Aristoxenus teaches them to us. However, since it seems that this modern Aristarchus is doubtful about them, and is waiting for the opinion of those who are knowledgeable in this profession, he could have obtained it by now not only from the most knowledgeable, namely, Ptolemy, Galileo and Zarlino in the passages quoted above, but also in others, which I will show. It is quite an important matter that he does not want to name these, whom he understands to be followers of Aristoxenus and the members of this which he calls 'the School of Aristoxenus'. He should name them, if for no other reason, as an act of love, so that one could learn from them and their School something of their doctrine, albeit it should be different from his. He says at the end of this eleventh In-consideration: “I realise very well that, since [-91-] this modern Aristoxenus has realised that he cannot save himself with the shortening realised with regard to the Sound, either by dividing the String in equal parts, or by means of the proportions by assigning to us any equality of Intervals, or by way of providing us with a true Demonstration as he has promised, he retires behind a Screen in order to listen to what the World says about these most beautiful absurdities of his.” Oh what obstinate ignorance of the Author of the In-considerations and Imperfections, modern Aristarchus is this? Where does he find that the Author of the Opinion, new Aristoxenus is forced to resort to anything else but a true and real shortening of the String? Oh how brainy he is! I have said already that that shortening advised by the Author of the Opinion himself is, in the end, real and certain, rather than abstract and hypothetical, as this modern Aristarchus would have everyone believe what it should be understood that the Author of the Opinion implied. His words need no interpretation, since He is able to speak and he speaks clearly. As to his listening behind a Screen, if this were true, it would be aimed

at listening to what those who are knowledgeable say, while he would come out in the open and say to ignorant Charlatans, who often speak more about what they do not know: “Cobbler, shoes are your only competence,” and in our case, “Artusi, do not extend yourself beyond what you are good at, which is ringing the church bells, and nothing else.” Thus, it would not be reasonable to ascribe to him as malice, as this Artusi says, his own attack on Artusi's manifest malice, by virtue of which Artusi says these most beautiful absurdities, to quote his own words, without any restraint and respect, not even towards himself. [Twelfth in marg.] “Having dispatched (this is how this modern Aristarchus, Author of the Imperfections, begins his twelfth In-consideration) the Consideration of the two Chromatic Tetrachords so badly demonstrated (because of his lack of knowledge, as one has to understand) in a similar manner (these words are taken from the Author of the Opinion) and with extreme brevity (depravity one should say) we will complete the analysis of the soft or delicate Tetrachord described in the third part of his division of Euclid's words, which are these: “The Colour of the soft or delicate Chromatic proceeds by Intervals of four, four and twenty-two ounces through the four lines, being each of them divided into12 particles by shortening it by four, four and twenty-two ounces with wood stops and bridges, in order to obtain the Intervals which are necessary to build this Species”. He produces this demonstration in his usual way, but he describes with great diligence [-92-] the proportions which contain such Intervals. With regard to the first and larger diesis, he says that it is contained within the sesquiventinovecima,” (I agree with everything that he says after these words about the other three proportions of those Intervals, but I mark his words to obtain the Intervals which are necessary to build that Species and the others) since they want to be equal. I said that I agree with what he says up to his Description, because he added to it the numbers, but halved, and after them, the number of their differences whole or undivided, while it stands to reason that they should have been halved as well in this way 11, 2, 2. However, he, as the Author of the In-considerations and of the Imperfections, does not care about these inconsiderate statements.” He continues then: “It is very true that, since the four species of Diesis demonstrated in the previous Consideration do not appear to be sufficient to him, he wants to consign to us another three, each different from the others, and unequal, but, as Barba Zevaino used to say, “it will not end there.” He will want to invent a number of them which might approach the number of nine. This is not without a certain mystery, because some maintain that the Music is born of the Muses, who have the ability to sing, by virtue of a certain omnipotence of theirs. And thus, as a joke, he would be able to demonstrate his beautiful mind with this number of nine Dieses matching the number of the nine Muses. The Dieses are the ones listed below.

Diesis of sesquiuentinouessima Proportion 20. 39.

Diesis of sesquiuentiottesima Proportion 29. 28.

Diesis of sesquiuentisettessima Proportion 28. 27.” If the modern and new Aristoxenus, Author of the Opinion now describes three other Chromatic Dieses (beyond the four Toniaei Chromatic Dieses demonstrated above as to their proportions) and since these are different from those, being of equal quantity among them and in accordance to Aristoxenus' words, as it has been demonstrated, the first ones belonging to the Chromatic Toniaeus, and these to the soft Chromatic, according to the intention of Aristoxenus, not as the inventor of those, nor of these, nor of any other which has been described, or are yet to be described, but as a simple successive demonstrator of them, and, as I have produced so-far the witness account of Ptolemy, Galileo and Zarlino of the all above mentioned Dieses, Semitones and other similar Intervals and also of every particular [-93-] Tetrachord of Aristoxenus, now I also produce this one by saying that in the second Column of that Table of the Chromatic Genus in the partially preserved chapter 14 of the second book of his Harmonics Ptolemy describes the same soft Tetrachord with the same numbers 120, 116, 112, 90, and Galileo, at page 109 of his Dialogue provides a description with he same numbers, adding their proportions written as words in this way: Sesquiventinovesima between 120 and 116, Sesquiventottesima between the same 116 and 112, and supertredicipartientequarantacinque between that 112. and 90, which is a very obvious printing error, since that 3 with the addition of the other 1 should be another 1 and it should say superundicipartiente quarantacinquesima. Equally, Zarlino in the third exposition in the second Chapter of the fourth book of his Supplementi notes those same numbers and writes down their proportions in whole words, namely, sesquitrentesimanona between 120 and 116, sesquiventesimaottava between 116 and 112 and super13partientequarantacinque between 112 itself and 90, because, similarly, that 3 next to that 1 must be another 1, and it should read sup11partiente quarantacinque. From here one can see clearly that Zarlino copied with his eyes closed this Tetrachord as well as the other one from the same Dialogue by Galileo. I will allow that some other saying by Zorzo Burattino should answer to that such elegant one of barba Zeuaino’ s quoted by him, but I will highlight the public and great Blaspemy that he utters, which is particularly serious for him who professes to believe, as we will see very soon in the following thirteenth In-consideration of his, in the sacred Theology. This Blasphemy is the fact that he attributes to the false Muses of the idolater heathens the omnipotence which belongs only to God, by describing it also as certain and undoubted. Ah, trembling from head to toe he should turn pale with shame. Let him correct himself, as he himself should correct those who commit such iniquity. In fact, this is job and his duty. But do let us go back to the work that we have left behind. After this new Aristarchus, Author of the In-considerations has worked hard to separate the third Diesis from the Tone and Semitone with whom it accompanies itself, as he says, in this Colour. “Since this Proportion has a larger denominator than each of the other three proportions of the Diesis which I have demonstrated, it will be larger, and the Interval of the other two Dieses separately considered will be larger.” Where did he find, who taught him, in which School did he learn this important Doctrine which he describes at page 10, he narrates [-94-] at page 22 and he repeats at page 41. Not only he highlights in the margin, but he quotes in the Index as an absolutely certain Mathematical rule that the Proportions which have larger Denominators are larger than the others. Which is this greater Denominator of the proportions of the three Dieses which he has demonstrated? In these three proportions the 29 is Denominator of the 30, which is his Numerator and is larger than 28 which is Denominator of the 29, which is its Numerator. Therefore, according to the doctrine of this modern Aristarchus the proportion from 30 to 29 will be greater

than the proportion from 29 to 28, where since the Denominator 28 of the 29 is larger than the Denominator 27 of its Numerator 28, the proportion itself from 29 to 28 will be, according to the same doctrine of the new Aristarchus, larger than the proportion from 28 to 27, and for this reason, consequently, the proportion from 30 to 29 iteself will be much greater than the proportion from 28 to 27; but this is completely the opposite of the truth. In fact, the very sesquiventisettecima proportion is not only greater than the sesquiventottecima proportion, but much greater than the sesquiventinouecima. Gemma Frisius demonstrates that it is true that the smaller of the two numbers formed in the superparticolare and superpartiente proportion is called Denominator in the small part of his Arithmetica which is headed 'On the Proportions', where he says: “Equally between 16 and 14 there is the proportion 1 1/7, which is sesquiseptima. The beginning of the word is always the term Sesqui, then it is completed by the denominator of the fraction which comes from the division,” and quite a bit further on. “The name of this proportion begins from the word 'super', the middle comes from the numerator of the fraction which comes from the division, and it is completed by the Denominator of the same Fraction. For instance, if one wants to wants to write as one word the proportion which lays between 7 and 4, the result of the division of 7 by 4 is 1 ¾. Therefore, the proportion is called supertripartiensquarta. Similarly, Oronce Fine says at Chapter 2 of the fourth book of this Practice of Arithmetics. “Let us give the example of two superparticulares ratios, for instance the sesquialtera which is from 3 to 2, and the sesquitertia which is within 3 and 4. You will reduce the Dominator 1 ½ of the Sesquialtera ratio into the 1 1/3, Denominator of the Sesquitertia following the Doctrine of the sixth Chapter of the first book, and so on.” Johannes Martinus Blasius in the first Chapter of the third Treatise of his Practice of Arithmetics describes it clearly with these words. “The Numerator is the number which represents the part of the whole, or the parts of the whole, and such number comes to be located above a short line. [-95-] The Denominator is the number of the parts of the whole which represents denomination of the whole and as such it has to be written always under the line. For instance:

$$\frac{5}{3}$$ Numerator,
Denominator.

Although just the clear authority of these famous experts of arithmetic should suffice, I want to add these other words nevertheless to corroborate it. Tartaglia in the tenth notabile of the first Chapter of the seventh book of the second Part of the General Treatise: “The third and last way (which is very popular with music theorists and others) is such. They put the antecedent number above a sign in the shape of a break, and the consequent underneath that sign. In other words, if they want to represent the double proportion, they write it in this form 2/1, and if they want to represent the subdupla, et cetera.” It will be noted that Tartaglia calls antecedent and consequent in this case what the other authors quoted above call numerator and Denominator. These are called by Boethius Followers and Leaders. He says in the twenty-fourth chapter of his first book of the Arithmetic, I call the larger numbers Leaders, and the smaller ones Followers. Ludovico Baeza says in his book Doctrine of Numbers says at the chapter 'on finding the square and cubic Root in the fractions': “For instance, the square root of 4/9 is 2/3, because the root of the numerator is 2, and the one of the denominator is 3.” In the chapter headed 'On the division of the fractions' he says, when we need to divide 3/4 by 2/5, multiply 3 by 5, whose result is 15, and this is the numerator. Then, 4 multiplied by 2 gives 8, which is the

Denominator, as one also can see from here 3/4 x 2/5 is 15/8. Stifelio in the first book, at the second small section of the sixth Chapter of his Arithmetic Introduction says this: “4/3 5/4 6/5 7/6 you see how in these the names vary according to the different Denominators, namely sesquitertia, sesquiquarta, sesquiquinta, sesquisexta.” Now, you can see that it is not true, what the Author of the In-considerations, the new Aristarchus says here, repeating what he said earlier in his fourth In-consideration, namely that: “Brother Luca, in the second Article of the sixth Distinction of the Third Treatise, declares firstly that, since this larger Proportion has a larger Denominator, it is larger than the others, that have a smaller one, with these words: “But since in the fractions (as we said over there) the larger is the Denominator of the Fraction, the larger is the Fraction, so for this reason1/4 is smaller than 1/3 because 1/4 has 4 as a Denominator and 1/3 has 3 as a Denominator, and 3 is smaller than 4, and this 1/3 is larger than 1/4 for the same reason, and for this reason the Sesquialtera is larger than the Sesquiterza, and so the sesquiquarta et cetera.” Hence, [-96-] again for this reason a Tripla sesquialtera (for instance from 7 to 2) is larger than a tripla sesquiterza.”” Boethius himself again in the ninth Chapter of the second book of his Music says this. “The larger and smaller Proportions are recognised in this way. The half is larger than the third; the third is larger than the fourth; the fourth is larger than the fifth, and so on in this way. From here flows that the Sesquialtera proportion is larger than the Sesquitertia and the Sesquitertia exceeds the Sesquiquarta, and the same in the rest. From this derives that the Proportion of the superparticular numbers results smaller in the larger numbers, and larger in the smaller ones.” As a demonstration of this, he adds: “This is evident in the natural numbers. In fact, lay out the natural numbers 1, 2, 3, 4. The ratio from 2 to 1 is a dupla, from 3 to 2 is a sesquialtera, from 4 to 3 is a sesquitertia. The larger numbers are 3 and 4, the smaller one are 1 and 2. Therefore, the larger proportion is contained within the smaller numbers and the smaller within the larger ones.” In the fragments of the Musica speculativa of the Venerable Bede, it reads in accordance with this: “In fact, in the multiple ones the larger is the number, the larger the proportion. In the superparticular ones, when the number increases the proportions decrease.” Giordano also says in the penultimate Definition of the seventh book of Euclid’ s Elements according to Campano’ s translation. “It is called Denominatio or a proportion the part or parts, of a smaller number in relation to a larger one, how large or many they may be. The number of the larger one is in relation to the smaller according to how it contains it, and the part or parts of the smaller one by which the larger exceeds the smaller.” Euclid’ s words translated into Latin by Campano are precisely these. “It is called Denominatio the part of the number of the smaller proportion in relation to the larger one, or the parts of the smaller number itself which are contained in the larger one, but the part or pars of the larger one in comparison with the entire smaller number or part exceed it because it is larger.” Finally, whether the numbers 27 and 28 are larger than 28 and 29, and of 29 and 30, as this not superlative expert of arithmetic maintains, it can be ascertained clearly from Boethius’ words on the natural order of those numbers, and, consequently, what is the doctrine of this modern Aristarchus, true author of the In-considerations, and even much more of those malicious tales. Therefore, it is clear if it is the Author of the Opinion, as this new Aristarchus says, or if it is himself who forces Euclid, Aristoxenus and all his followers (whom this man never mentions) [-97-] to talk nonsense. In fact, the Author of the Opinion himself has not demonstrated nor said that Aristoxenus or Euclid or other of his followers said that the species of the Diesis have to be nine, each one different from the other, as this modern Aristarchus maintains, seven demonstrated up to now and another two to be demonstrated in the

Enharmonic Colour. The Author of the Opinion demonstrated only three: One of 4 particles, which belongs to the soft chromatic Colour, another one of 4 ½ particles belonging to the Hemiolic, or Sesquialter Chromatic, and a third one of the Colour chromatic Toniaeus of 6 particles, while he demonstrated only one more in the Enharmonic Colour. These are the same in number and quality to those described by Ptolemy, Galileo and Zarlino in the passages quoted above of their own books. And thus, has he himself not forgotten (as this Monarch of himself adds too condescendingly and who remembers little about himself, talking nonsense by calling a poor man someone who lives of his Own riches as a nobleman, who can do, and does all sort of charitable donations, provoking the envy of this man who embarked on an ecclesiastical career to avoid poverty) that when he subdivides Euclid' s words, and when he gives their Italian translation, he says that the Dieses are only two and no more (instead of four as I said)? The first one is of three ounces, which is said by Martianus 'Tetartemoria'; (here is attributed clumsily as a potato [imputata/impatata] to the Author of the Opinion), namely, the fourth part (we accuse Artusi not to know any Greek, but he shows how competent he is in it, when he says at page 12. b of the first Cicada-speech of his Imperfections that the [gamma] is the first letter of the Alphabet. He would have translated better the meaning of his word 'Tetartemoria' if he had called it 'fourth madness') the second is of four ounces which he (or, rather, Martianus) calls Tritemoria, namely, third part (I would call it 'third madness' instead). Martianus mentions also the third Diesis Chromatic Hemiolic of 4 ½ ounces when he says further on: "The Third one amounts to the third part of a Tone and a half of a third (this new Aristarchus does not like this expression and so he omits it) and it is called Hemiolic and division of the Harmony, because it completes the measure of the Hemiolic." Then, as a conclusion of his twelfth In-consideration he continues saying first in his arrogant and slanderous way: "That the Demonstration is true in the same way as the others have been considered and known as false, this as well (he repeats the same Truth without contradiction) will [-98-] be found to be of that kind." He then adds. "In the division of the length of the line or String into equal parts, this is not true (according to his great ignorance) and, when the proportions are considered, one sees that it is very false, according to reason (or rather against reason)." Finally, he says: "When one comes to the shortening made on the basis of sound, rather than with regard to the total length of the line, as usual, he leaves our hands full of large flies. And perhaps, since this is not a new Invention, it is true the proverb which says 'he who does nothing does not make mistakes'." I have replied so many times to this ignorant understanding of his with regard to the sound, that it seems to me a good thing that I have to leave him not only with his hands full of large flies (as he likes very much to say, since he said it first at page 15 and the he repeated it at page 52); but with a head full of crickets and large moths. As to that sententious proverb ('he who does nothing does not make mistakes'), I presume that he says it about himself, so I will not say anything else, since it is true, as one could also say, conversely, that, since he has done something, he has made mistakes. This is all the more true, because he is prone and used to making mistakes not only in his actions (this is his nature) but also in his thinking. This is a great act of presumption on his part, namely that he can take anybody' s defence, however unreasonable. This poor man does not realise that, when he tries to defend those who do need at all his help with his very feeble strengths, he puts himself in a situation where he is in great need to hope, albeit vainly, that someone else will come to his rescue. A male dog that is full of himself but not large, should look out for himself. This Author of the Imperfections, not content with taking to defend Patricio in this In-considerations of his, [thirteenth in

marg.] who had been reproached unjustly (as he has said already and he repeats in this thirteenth In-consideration of his) embarks on a defence of Plutarch against the Author of the Opinion, who never did reproach Patricio, as it has been said, but instead he has demonstrated with every modest truthfulness and according to the opinion of every good expert in the field that he had committed a great mistake. Equally, he has never turned against him, as this modern Aristarchus says, nor he has inflicted such a blow to him because he wanted him to be considered (and so that he would be considered) a man not to be trusted, but he has let him be in that regard and consideration in which he his both with those who are knowledgeable and ignorant. Since he adds that "the Author of the Opinion brings forward an account by Plutarch translated by him into Italian in order to have the [-99-] chance to reproach him," I will explain here the circumstances regarding that entire situation, since he quotes again that account, so that you, Benign and sincere Readers, may know what is the impurity of the soul and of the spirit of this modern Aristarchus, who takes great delight in understanding everything in the opposite way as it should be understood. That passage by the author Plutarch translated into Italian by the Author of the Opinion and recited by this Author of the In-considerations and Imperfections, as it has been copied by him is this one: "However, Olympus is regarded (as Aristoxenus says) as the Inventor of the Enharmonic Genus, since all the Genera that had been used before him had been Diatonic or Chromatic." The circumstances that precede this account can be read at page 24 of the Parere itself and are these: "Now, having completed the examination which we have chosen to deal with, remembering that I have said (when I was about to examine the Demonstration of the Enharmonic Genus proposed to us by Patricio under the name of the musician Olympus) that Aristoxenus is deemed to be its inventor and I have promised to prove it somewhere else (I did this to avoid prolonging the progress of the Examination, which I have tried to realise as quickly as I could) it is clear that, since Patricio was going to provide us with a chance to do this somewhat further on, this is the place. After I have copied here the words that he adds on the subject, I will tell everything of which I have become convinced, namely that that Enharmonic distribution is by Aristoxenus, rather than by Olympus. So, these are the precise words added by Patricio. "Plutarch says that Olympus found what is beautiful in Music with this invention." And next to these he adds some words by Plutarch from his Commentary on music, which he translated into our language from the Greek in this way: "thus, it seems that Olympus, having enriched Music and having introduced into it things which were not practised or known by the first Musicians, he became the Leader of the Greek and beautiful Music." He has trusted so much the authority of this account (which is the only one that I present since he does not provide another one) that he has been moved to write that Olympus was the author of the proposed Enharmonic Distribution, or species. But this account by Plutarch, with its general nature in this passage, which attributes to Olympus the great honour to have enriched Music with new unspecified Inventions, does not say anything conclusive [-100-] regarding the specific matter of the Species in question. And if the general nature of those words had the strength to prove that particular detail, if it had it, it would prove also the validity of the words in another account by Plutarch, which he wrote in that Commentary on Music of his, and which were quoted somewhat earlier on by Patricio. I will add them here in my Italian translation." But Olympus from the Musicians" et cetera." These are the words that have been already recited. To these the Author of the Opinion himself adds these others (as the new Aristarchus writes): "However, these do not prove or infer by themselves that, even if Olympus invented the Enharmonic Genus, he also invented this Distribution or

species. Moreover, even if this passage seemed conclusive with regard to that particular detail proposed, one should not trust Plutarch more than one should trust Aristoxenus who has been quoted by him. These words by Aristoxenus (if indeed Plutarch refers to the music theorist Aristoxenus) do not appear in his Harmonics, which I have at hand, and it is a very solid conclusion that who reports a fact has not to be believed if there is a lack of clarity in the process of referral." This modern Aristarchus stops there, convinced to be able to bite to shreds the Author of the Opinion with his slander, as he does, and in the way that will appear, after I have added the following circumstances which I promised to add earlier on, and which are these: "Since the words of Plutarch produced by Patricio are not a sufficient and adequate testimony to prove that the proposed enharmonic species is by Olympus, the Inventor of that Genus, consider, if you please, if the evidence which I will have put forward is sufficient and adequate to persuade and convince the minds of others, as the have convinced mine, to think that that Species or Distribution of the Enharmonic Tetrachord is really by the music theorist Aristoxenus." I do not present here these accounts as evidence to avoid excessive prolixity and the great effort required to copy them, but they can be read near the end of page 25. They begin with the words: "At first then Euclid in his brief musical Institution," and they continue up to the middle of page 37, up to the words "I could put down my pen here, et cetera." Instead, I will draw your attention to the words of the Author of the Opinion in the previous case. They are: "I will tell all what has convinced me that this Distribution is by Aristoxenus rather than by Olympus." The other ones further along are: [-101-] "And if the general nature of those words had the strength to prove that particular detail, if it had it, it would prove also the validity of the words in another account by Plutarch, which he wrote in that Commentary on Music of his, and were quoted somewhat earlier on by Patricio. I will add them here in my Italian translation. But Olympus from the Musicians, et cetera." I will also add these: "Consider, if you please, if the evidence which I will have put forward is sufficient and adequate to persuade and convince the minds of others, as the have convinced mine, to believe that that species, et cetera." In this way I hope that it will be clear if the intention and the words of the Author of the Opinion had been aimed at provoking hurt and not at grasping the chance to accuse Plutarch of being a liar. But the mirror in which the Author of the In-considerations and Imperfections looks at himself reflects only his own image. A long journey of empty words would await me, so, instead, I return what I intended to say on this matter, while this modern Aristarchus concludes that the Author of the Opinion did not make himself very clear when He says: "Moreover, even if this passage seemed conclusive with regard to that particular detail proposed, one should not trust Plutarch more than one should trust Aristoxenus who has been quoted by him. These words by Aristoxenus (if indeed Plutarch refers to the music theorist Aristoxenus) do not appear in his Harmonics, which I have at hand, and it is a very solid conclusion that who reports a fact has not to be believed if there is a lack of clarity in the process of referral." Artusi comments and interprets those words and attacks the Conclusion itself with the same words of the Author of the opinion, saying: "I want to say with this conclusion that, since what Plutarch relates is not found in the Writings by Aristoxenus which I have in hand, one must not trust Plutarch as a teller of lies (the Author of the Opinion does not mention lies)." This is not at all what the Author of the Opinion says, but that one should not believe or trust him (and he adds) more than one trusts Aristoxenus' account quoted by Him." This modern Aristarchus continues: "But if it is true that Aristoxenus, as the Historian Suida and many other important Authors (never mentioned) say, possessed many and many books of Music,

Arithmetic, History and Philosophy, can it not be also that Plutarch, a man of great judgement, mind and very well read, might have [-102-] read some work by Aristoxenus which has not come down to us, and, as a historian whose aim is to tell the truth, he has related these matters in a way that is proper of a truthful man?" Who has denied that Aristoxenus had so many, and many, and maybe even more books on Music, Arithmetic, History and Philosophy? All scholars and literary men do everything to have the largest number of different books, and, had this Author of the Imperfections and of the In-considerations said, as it would have been appropriate, and somewhat more conclusive on his part, that, as to those Harmonics of Aristoxenus, which have come down to us incomplete (not because the Author of the Opinion has described them as such, but by adding that one can read at the beginning of the book of those which is headed the first "we have shown this earlier," and a little further "This was shown by us in the earlier books," and a little further "As we have seen earlier, when we investigated this matter by itself," and also "As we have shown in the earlier books that some movements derive from the first ones," then at the end of the third book one reads "After this, one must say what is the difference and in of which kind according to the species," hence one finds not only that the rest of that third book is missing, but also all the fourth book; a fact which Athaeneus mentions in his fourteenth book of the Dinners of the wise men, with these Latin words translated by the Xylander "Aristoxenus wrote in the fourth book on Music that women in antiquity used to sing a certain song called Calycea) it is possible that Plutarch read them complete and in their entirety, and therefore, that he quoted from that part which is lacking, hence are missing, as far as we are concerned, just as all the other books of this Writer and Author are missing, very sadly, which are mentioned not only by Plutarch himself, but also by Athenaeus. Here, what advantage and support does he bring to Patricio' s theory that that Distribution of the Enharmonic Tetrachord is really Olympus' the fact that this new Aristarchus says that "Plutarch, as a historian whose aim is to tell the truth, has related these matters in a way that is proper of a truthful man?" What history is he referring to? None other than the fact that Olympus distributes the same Enharmonic Tetrachord in that way. Where does Plutarch say that Olympus did this? All Plutarch says is: " It seems that Olympus, having enriched Music and having introduced into it elements which were not practised or known by the first Musicians, became the Leader or chief [-103-] of the Greek and beautiful Music." After he had described and told also the way in which it is thought that he found it, Plutarch mentions someone called Olympus no less than eight times in that Commentary of his, referring both to the Olympus who was the pupil and lover of Marsyas, and another one, who was a Flautist. He mentions Aristoxenus no less than six times within those quotes, adding that he says in the first book of the Harmonics that Olympus sang some lugubrious verses on the death of Python accompanied by the Tibia in the Lydian tone, and (in the second of the same Harmonics) that Plato, after banning from his Republic the Lydian and Mixolydian Tone or Mode, he did not ban that one because he did not know that they were in some way useful to the well-ordered Republic, because he had devoted much study to Music, having been a Listener and a pupil of Diogenes of Athens and Metellus of Akragas. Nevertheless, that cannot be read in the first book of Aristoxenus' Harmonics nor this in the second book which we have at hand, as I said, and particularly in their Latin translation by Gogavino which was published in Venice in the printing shop of Valgrisio in 1553. However, even if we suppose that everything that Plutarch relates about Olympus is true and that it could be read in Aristoxenus' books, what support does this bring to Patricio' s Cause? The Author of the Opinion

argues whether the Division of the Enarmonic tetrachord proposed to be demonstrated by Patricio as by Olympus, is by Olympus himself or by Aristoxenus, rather than if Olympus was the person who discovered the Enharmonic Genus, or otherwise. Moreover, it is agreed that he was the person who found the genus, but we are talking about this particular Species. It is called a particular species because, besides this one which is thought to have been invented by Aristoxenus by Ptolemy, Galileo and Zarlino, and has been described by Aristoxenus himself, there is the one by Archita, the one by Didymus, and the one by Ptolemy. Galileo is not the only one that provides a description of the specific and particular species of Olympus himself in this Genus found by him - at page 110 of his Dialogue in the first Table of the Henarmonic Genus under this Heading: “Very ancient Hypaton Enharmonic Tetrachord found by Olympus, et cetera”. The Description that he provides there is this one: [Bottrigari, Aletelogia, 103; text: E. 6144 Ditono superdiciassettepartiente 64. 1632. differenza. D. 7776 Diesis Maggiore superquindicipartiente 486. 208. C. 7984 [sqb] 8192 Diesis minore supertredicipartiente 499. 208.]

[-104-] but Zarlino also provides one (in the third Chapter of the fourth book at page 124 of his Supplementi, in the first Species in the following way and in their smallest radical numbers).

[Bottrigari, Aletelogia, 104; text: 384 Hypate Meson superdiciasettepartiente 64. licanos meson 499 supertredicipartiente 486. Parhypatehypaton 512 supertripartienate 1449. Hypatehypaton]

In this passage Zarlino himself calls into question whether we should believe for this reason that Olympus was the Inventor of this Genus and he discusses this topic widely. Both these Writers, namely Galileo and Zarlino, are the two which are quoted by the Author of the Opinion, Il Patricio at page 31, where he also adds the numeric Descriptions, and, after those, the one produced by Boethius in the fifth Chapter of the fourth book of the Music with different numbers, but which contain the same proportions. Then, this Author of the In-considerations and of the Imperfections says: “Nor in this case it is any use to our scope to say: “the Jurists say that this conclusion is true in this case. Titius asks Antonius a hundred scudi and says that he needs to have them because of an Instrumento made withi his father, and he is refused, et cetera. One does not believe Titius, who is the relatore, if not in as much as he demonstrates via the Instromento. Therefore one should not believe the relatori, if there is no manifest proof of what is relayed. Et fatta con ggrandissimo stento piú Conchiusionj per la parte. I say, he adds, that the aims are different in the two situations. Titius' aim is to obtain and extract a hundred scutes from Antonius' hands. As a guarantee towards the damage that may happen to Antonius through his giving up the money, it is necessary that Titus gives Antonius manifest proof of what he reports, if wants him to part with this benefit of those one hundred scutes, since there might be truth or falsehood because of the advantage that Titius hopes to gain. Therefore, because of his personal advantage and because of the loss that might ensue for Antonius, it is necessary to provide manifest clarity of what is reported.” Benign and sincere Readers, did you ever read a better written Example? This eminent Doctor [Lawyer add. supra lin.] wants to reduce the general law formulated by that Emperor (since it is found, as he says also in the ancient laws) to the particular case of the example produced by him through his authority in glossing and interpreting the law. He continues: “But the aim of the Historian, who does not hope for any personal gain

and damage (note this idea of hoping for damage) to anyone else, is only to tell the truth, but, as a this is true Historian, I repeat that it is necessary to accord him one' s trust without a manifest clarity of what is relayed." Although [-105-] the goal of the Historian is to tell the truth, it does not follow that many Historians did not intersperse their Writings with some lies, and maybe for no other reason than because they believed the false stories of others. These historians have been believed until other Historians wrote differently from them. This is understood as to the Historians who write freely, but trust is not given by intelligent readers to those who relate the stories found in the Writings of others (this is avoided as fault and silliness by judicious and acute Historians) as being covered by this universal law of the Emperor, if those writings which are mentioned are not extant. Let this be said as a reply to what this Father of the Impertinences where he says: "Aristotle quotes the opinions of Melissus, Parmenides, Anaxagoras and other ancient Philosophers, without their works being extant. So, since there is no manifest clarity with regard to his reporting their opinions, should one not believe Aristotle?" When Aristotle reports the Opinions of those and of other Philosophers, he does not refer to any particular work of theirs, so it does not matter if the writings of those Philosophers which contain the opinions quoted by Aristotle are not extant. Moreover, it is not inconceivable for many judicious men of letters that Aristotle created those many Opinions under the authority of those famous Philosophers, namely, Empedocles, Anaxagoras, Democritus, Zeno, Aeschilus, Anaximenes, Parmenides, Leucippus, Heraclitus, Democritus and Hippocrates in order to dispute and refute them, as He did. Nor will it be the case that Aristotle is a liar because of this. In this respect, the Conclusion adduced by the Author of the Opinion (with those words that this modern Aristarchus calls ignorantly, poignant, but which are appropriate and effective) will be true. This Author of the In-considerations takes up this Axiom again in order to attack it more strongly and says: "O how Cato realised this trick when he sang courageously:
Do not always hear what someone tells you
Those who talk deserve to be believed only little.

He said that one should not believe some things that certain people say, as in the case of Titius, but he did not say not to believe every story, as the Author of the Opinion says." Oh, how well Artusi shows himself to be the real Author of the In-considerations, since he does not [-106-] realise that he is slaughtering himself with his own Knife. If the meaning of the first verse is (I entrust myself to the interpretation proposed by others) that one should not believe some people in some things, therefore not everybody is to be trusted in everything, and one must not trust Plutarch, being one of them, as to what he reports there. This Author of the Imperfections and In-considerations then adds explaining himself better (since it is necessary that I be pedantic) that "one must not trust those who discuss at length," wanting to prevent those who are talkative and ciarlatori from being believed. Therefore, the Author of the Opinion, as someone who is chatty and talkative, must not be believed in anything that he says by himself, and thus he has slaughtered himself with his own knife of the saying which he says that the sententious Cato sang boldly in those verses. As the Pedant that it is necessary to call him, he has explained this sentence in his usual way, which is very different from its real meaning, and from the good exposition made by Ascensio and by Manicinello, who where the first commentators of that little book full of moral Teachings, which was written in heroic Couplets by Dionisius Cato at the time of the emperor Commodus (as one is drawn to conjecture) or Severus, namely, around the year 190 anno Domini. Hence, they are

called commonly Cato’ s verses, not because they were really composed by one of the two Cato, major and minor, or, as we call them, Uticensis and Censorino, as this modern Aristarchus appears to believe, not considering that both one and the other Cato had been dead many tens of years before the poets Vergil, Lucan, and Ovid (which are mentioned by name in detail in the second half of this booklet) were born. Besides, it should not be news to him, new Aristarchus, who professes to be an expert of beautiful sayings, perfect sentences, and rare proverbs, that such dictated sentences are said to have been uttered by Cato' s mouth [Therefore, somebody who struts about pontificating is called a ‘Cato’ add. supra lin.]. Now, the Latin commentary to these verses written by that Ascensio is this: “He condemns the fault of excessive credulity and loquacity. He says that, if you do not want to be deceived, do not believe to those who are loquacious, and if you want to be believed, speak sparingly. This is the construction, he adds: Do not believe to him who relates something, namely, to him who cannot keep quiet. Little trust, namely credulity, has to be given (add this) to those who talk a lot.” The Italian translation is this one: “Cato condemns the fault of excessive credulity. If you do not want [-107-] to be deceived, he says, you must not believe those who are chatty, and if you want to be believed, speak sparingly. Do not always trust some things that someone tells you, namely, do not trust who cannot keep quiet. Little credence must be conferred (he adds) to those who talk a lot.” This is what one can find written in Ascensius' writings, which have been printed correctly, and not with these words: “One should attribute little credence to those, et cetera,” as this father of the Imperfections and of the In-considerations alleges, since he cannot quote, if not always in a mangled way, everything that he alleges, as I have said many other times, and as I am about to repeat once again very soon. For this reason he struggles and works hard to convince us that we must give credence to the simple tale told by those who relay it without manifest clarity of what has been reported, and so, acting like a Philosopher with a cursed mind, he quotes an Axiom by Scoto: “Truth is the adjustment of the object to the Intellect,” and he extracts this consequence and conclusion: “Hence, since the human intellect is the cause of the truth, one must believe in part to who reports the story, notwithstanding the uncertainty of the fact. This is what Cato wanted to say.” In this Conclusion this true father of the In-considerations maintains that the human mind is the cause of the truth. How does this happen, if, according to the Axiom, the truth is the adjustment of the object to the Intellect? If we must believe Aristotle, what is true and false is presented to the Intellect. How is it possible then that the Intellect is the cause of the truth? And what kind of cause is this? Not the material cause nor the formal nor the efficient, nor the final one. Which other one then? The instrumental. Oh, I say myself that bell-ringing is much more suited to this Philologist than dealing with Sciences and Liberal Arts. However, consider, Benign and sincere Readers, how great is the steadiness of this modern Aristarchus, who says: “One must trust who reports information to an extent,” while he adds that this was Cato’ s opinion. He had said already that one should trust who reports information absolutely, without certainty of what has been reported. Then, in order to show [-108-] his incoherence and flippancy more clearly he continues: “And if one believes him, one has to believe him in everything, or in some things, as I said, according to the opinion of those who are more wise than he is, and how experience, which is the practical Mother of everything, and reason require. The conclusion of our modern Aristoxenus will be false.” I will leave it to your sincere judgement to establish how this conclusion by this modern Aristarchus stands on the very strong foundations of both experience and of solid Reason, Benign and sincere Readers, as I also leave it up to you to decide how rightly and properly he said thus

that experience is the real Mother of everything, as it has been called Teacher by people more knowledgeable and erudite than he is. Do not think that this trial is finished, since He, brought down like a new Antheus, rises again strengthened with more boldness, or like an hydra, which, after some its seven heads have been cut off, grows back not only seven, but seventeen others. He says: “However, I do say that, if one should have to believe him, sacred Theology would emerge destroyed.” Thus, this new Aristarchus, or rather, new Antheus, having succeeded in preventing anyone from adopting the strict conclusion of the Law-makes in other fields, now wants to show impertinently that its use is not allowed in Sacred Theology, since it would be destroyed by it. Not knowing that we are not allowed to mix what is sacred with what is secular, erupts into that vane and empty protestation of trust, which, if one looks carefully, will turn out to be not as firm and solid as he goes round foreshadowing. This Author of the In-considerations asks the modern Aristoxenus another question, saying: “Let this modern Aristoxenus tell me if had not trusted his Teachers, when they taught him, and when he asks advice on a passage that seems difficult to him, and seems easy for others, what would he know that is good and beautiful, even if he has no certainty as to whether what they have said and say to him is true or false?” Now, since the modern Aristoxenus, Author of the Opinion has other matters to deal with (as I have already said) than listening to these flippant remarks, I, being free from important matters, and having taken delight in replying to him at another time, and, in short, [-109-] having decided that this Harangue is entirely mine, I tell him (so that he might not be able to say that he has been left without reply on this occasion, while he had received one on all the other matters) that the modern Aristoxenus, once he reached the age when he was able to understand and distinguish, he never trusted the authority of a single person, but he has trusted the truth that the two main Mathematic disciplines (Arithmetic and Geometry, and, consequently, the other two which are subject to those, Music and Astronomy) bring with themselves, as they are established on the first degree of certainty. Then, he has trusted the opinions of Plato and Aristotle concerning nature, and believes in what the common Sense has shown him and shows him still now. He trusts what is right and honest in moral matters, and in this way, trusting his advisers whenever he needs to, he gains knowledge of what is beautiful and good. This Author of the In-considerations and of the Imperfections, after he repeated the same thing with these affirmative and no longer interrogative words, adds: “He has trusted his Teachers, and now he trusts the knowledgeable people whom he asks for advice, because they have made and make a solemn declaration to teach the truth and the true Foundations of the Sciences.” Then, he adds: “The entire World trusts Historians, because everybody knows that they have made a particular study out of reading ancient Documents, Annals, records and legal Instruments, which provide credible evidence without any other clarification as to how they were reported.” I reply that a Historian is believed until another Writer provides a different account of the same fact. The Author of the In-considerations can vouch that what happened to the historians Pirausto and Labieno happens also to many other Historians nowadays, but, since this modern Aristarchus continues by saying: “I am surprised as to how this man, who acts as if is wiser than anyone else, had stated such a conclusion without any other Declaration.” I say to you, Benign and Sincere Readers, that I am much more surprised at the inconsiderate incoherence of this new Aristarchus. He said a little earlier that the modern Aristoxenus or Author of the Opinion not only has been advised and taught by his Teachers, but that even now he trusts the knowledgeable persons with whom he confers and whom he calls upon for their advice. However, now he adds that he acts as if he is wiser than anyone else.

Who confers with knowledgeable persons and seeks advice from them is not overconfident in his knowledge, and who [-110-] is convinced of his knowledge does not confer with knowledgeable persons, nor does he seek their advice, but he talks and acts on the basis of his own beliefs, just as one can see clearly that this Author of the In-considerations and Imperfections speaks and acts without conferring with knowledgeable persons and without seeking their advice, since if he did this and if he did abide by their good advice, he would not publish in print these so many Imperfections and In-considerations of his, through which he makes himself known not only as not very wise, but as not very modest. Thus, being a false adviser and adulator of himself, what happens to him is the complete opposite of what he is convinced that it is happening to him, since he gains eternal shame instead of glorious Fame. Then, this modern Aristarchus says, talking about that conclusion: “However, Alessandro di Nevo on the Decretale titulum de Appellatione at the Chapter 'As it appears' and Abbate in the same passage demonstrate that it is both true and false in the Laws.” This, at last, is the end and conclusion of this thirteenth In-consideration, which is so long and whimsical. Now, if there is somebody who is able to search and read the written and printer papers of Alessandro de Nevo on the Decretal, and also those by Abbate and finds under the Title de Appellatione the Chapter 'As it appears', he will be a great man indeed, because he will have found something that does not exist. Therefore, should we trust this true Father of false reports, as we have found him to be always, when this needed to be proven, without clear evidence of what he relays? How surprising is it that he has made such a great fuss and has thrashed about to such an extent in order to make us believe that who reports information must always be believed, and one should seek no other confirmation of what has been reported? It would have been enough for him to present the privilege of this exception and immunity of his and his exception to the fact that somebody else might run through this field so boldly against the clear disposition of the Laws. However, so that this other falsehood may be shown clearly for what it is, which consists in his saying that in Law said Conclusion is true and also false, I say that the Chapter 'As it appears' and the other one of those juriconsults deals specifically with the trust that has to be granted or not granted to a public messenger, who is a sworn bearer of Citations relating to his report of the Citation and of the matters connected and related to them. That chapter is the nineteenth and the Notabile 64 of Alessandro da Nevo: [-111-] “I come now to the third principal point, namely, if one should believe a Messenger, et cetera.” And at Notabile 64 it says: “If the the Messenger could refer to someone what he cites in the place of his, et cetera.” Abbate, Notabilia 4, says: “He notes in the fourth text 'Valde Notabile' that a Messenger is believed not only on the simple citation, but also on these, et cetera.” The Notabile 12 says: “I ask and call in doubt if one should trust a Messenger. At first the mere Commentator infers, et cetera.” Natta, in his Counsel 634, Notabile 14, third volume says: “In fact, if a disposition refers to anything else (I do not want to relay all that Notabile in its entirety) it does not achieve its scope, if there is no clarity about the reporting. On this matter the Text in Littera in Testamento 1. 1. and following De conditione et Demonstratione is very good, and it does what Baldus says in the 1. civile De conditione et Demonstratione, where he maintains that when a document refers to another one, then it as to be produced as well, because one follows the other one as to the nature of what is relayed. If the document, to which reference is made, is not extant, the perfection and understanding of the reasoning is removed, and one document without the other one has no authority. Add to this what Baldus says in the first book at the end of the Consilium de Episcopo et Clericis, where he asks whether, when a Statute refers itself

to another, one should trust the Statute to which reference is made. He makes this distinction: either the Stutute refers the tenure of the other Statute, and then the Statute which relays the other one is sufficient, nor it is necessary to anything else [signum] Quibus, in primo Constit Consilio" (and the reason of this is that the Statute a law in itself, whether it refers or does not refers the supposed words of another statute). He continues: "or it does not refer the tenure of the other Statute, and in that case, if there is no certain disposition, it is necessary that there should be clarity on the Statuto which is reported, otherwise the Statute which refers to the other is useless. He adds the said place in Testamento ff. de conditione et demonstratione. Similarly, Baldus says in the second book Consilium de erroribus advocatorum, 16. [signum] si, et cetera, and then in the Consilium 618, Notabile, Fourth part. Natta says this on the same topic. "The referent is worthless where there is no trace of what is reported." l. in Testamento ff. On the consideration and demonstration of the Authors. If anybody in a Consilium de Edendo. "Not to be and not be apparent are the same thing." L. "there are two people named Titius" ff. "de testamento tu." "if it were" ff. On things that are uncertain." Baldo' s Doctrine can be seen later on, since I do not want to write a long essay on this, also because I have said more than enough about it. This new Aristarchus begins his fourteenth In-consideration by saying: "I was convinced that this modern Aristoxenus would have been happy with having attributed seven species of Diesis to Aristoxenus, or to Euclid as a follower of Aristoxenus, whose words he set himself to commentate, something which is very far from the intention of one and the other of them. However, I see that they want to adopt some others, having demonstrated that they are not sufficient and apt to achieve their goal. However, approaching as he usually does the Demonstration of the Enharmonic colour, of which Aristoxenus and his followers have passed down to us only one Species, he still wants to give us the form of two other Dieses in their proportions, which are different from the past ones, so that they will reach the number of the nine Muses, as I told you a little while back." As usual, this true Father of the In-considerations and of the Imperfections pretends that, when he decides to refute the Demonstration of Aristoxenus' Enharmonic Tetrachord made by the Author of the Opinion, modern Aristoxenus, he is surprised by the occurrence almost abrupt and sudden of two Dieses different from the other Seven, which are different between each other, according to him. Therefore, he says that they turn out to be nine in total. Then, he forgets himself and unveils this fabrication of his by saying that they come to reach in this way the number of the Muses, as he said a little earlier. It is true that he said this around the middle of his twelfth Inconsideration, at page 42, where he contrasted it with the sententious saying of Barba Zevaino: "It will not be there." However, since he says that those nine different Dieses have been attributed to Aristoxenus or to Euclid, his follower, by the Author of the Opinion, I say, the Author of the Opinion has not attributed any other Dieses to Aristoxenus nor to Euclid, nor in a different way, than those that have been assigned by Ptolemy, Galileo and Zarlino in those passages quoted above and which will be quoted in future when the need will arise. And since this Father of the In-considerations also says that those Dieses are very far from the intention of one and the other, namely of Euclid and Aristoxenus, if he had, I point out, that good memory, or if he proceeded to the review of what he as written, which is appropriate and is necessary to be done by attentive and diligent Writers, he would have remembered and he would have noticed what I myself have reminded him of in such similar cases, namely, of the fact that he wrote (at the beginning of his fourth In-consideration at page 8) that he has not been left as a Secretary nor heir to Aristoxenus' Opinion. Hence, since he has no authority on the matter, he should be

quiet, as he also should have been when he said that the Author of the Opinion set himself to commentate the [-113-] words of Euclid as a follower of Aristoxenus. In fact, when he said this, he made a grave mistake, because the Author of the Opinion has not set himself with diligent industry to write a commentary to them, but to produce a linear demonstration, and thus he has strived to achieve his aim, and has achieved it in the eyes of every competent scholar. However, do let us try to move on quickly. This modern Aristarchus says, after reciting the words of the Author of the Opinion and having proceeded to their Demonstration, but not without some alteration, as it is his habit: “This Colour, namely, Aristoxenus' Enharmonic, will be ordered in this way necessarily, according to the proportions assigned to us by the modern Aristoxenus.”
[Bottrigari, Aletelogia, 113,1; text: A., B., C., D., 40, 39, 38, 30, Diesis enarmonico, Ditono incomposto 24, 3.]

He tells the truth, following the radical numbers of the proportions which have been assigned (but not according to the linear Demonstration produced by the Author of the Opinion) which this author of the In-considerations repeats here as well in linear form, namely, 120, 117, 114, 90. However, in the strain to show himself as an excellent Mad-matematician, he forgot to divide their differences 3, 3 and 24 (which occur between 120 and 117, between 117 and 114 and between 114 and 90) by 3, thus reducing them to 8, 1, 1, which occur between 40 and 39, between 39 and 38, and between38 and 30. Then, he adds: “I proceed to the demonstration of this and I say that he (namely, the Author of the Opinion) assigns to us two other species of Enharmonic Diesis which can be added to the total number with the other seven. They are the following.”
[Bottrigari, Aletelogia, 113,2; text: Diesis Sesquitretanouesima, 40, 39, Diesis Sesquitrentotttesima 39, 38]

Artusi continues: “He cannot deny that all these nine Diesis are not different one from the other, since they are contained within different proportions in their radical terms. The Ditone contained in this colour is uncompounded instead of sounding for the reasons mentioned above; nevertheless, one of the main considerations taken into account by Aristoxenus has been to appeal to the ear.” Therefore, this Aristarchus says that the two Dieses (I call them hermaphrodite because he calls them sometimes masculine and sometimes feminine) can be added to the number of the other seven mentioned above, and that the Author of the Opinion cannot deny that they are not different. I say, however, that he does not deny this, but he states that they are different, because the first seven are Chromatic, and of Chromatic species, which are different between each other, namely, the Chromatic Toniaeus, [-114-] the soft or delicate Chromatic, and the Chromatic Hemiolic, while these other two are simple Enharmonic Colours. The Cromatic Toniaei are considered as Semitones, because they divide the Tone of 12 ounces, or particles into two equal parts. The soft Chromatics, are considered as somewhat smaller than the semitone, because they divide that Tone of 12 ounces or particles into three equal parts. The Chromatic hemiolic are considered to be in sesquialtera proportion with the Enarmonic ones and rather larger than the soft Chromatic or soft ones. The Enarmonic Dieses are considered as real Dieses, because they divide the Semitone of six ounces or particles arithmetically into two equal parts, or that Tone of 12 ounces or particles into four parts. I state that it is impossible for the uncompounded Ditone of this Enharmonic Colour not to be less sounding, because it is borne of two sounds which are different

in high or low pitch. But if this Artusi wants to mean 'sounding' as 'consonant', with that inaccurate language of his, and that Aristoxenus, among his other considerations, kept this one as one of the main ones, namely, to satisfy the sense of hearing, I say that this modern Aristarchus shows himself as a man of limited reading and of even more limited memory. In fact, Aristoxenus calls the ditone dissonant near the end of the second book of his Harmonics, and seeks it out in particular when teaching the reader to find the dissonant Intervals instead of the Consonants. This Author of the Imperfections and real father of the In-considerations adduces that rule of Aristoxenus as a demonstration, albeit badly understood by him and inaccurately quoted, as he is used to, in the first Cicada-speech of his Imperfections at page 31 b and 32. As to the fact that one of the main Considerations made by Aristoxenus consists in the necessity to satisfy the ear, I am not aware nor do I believe that Aristoxenus said this, nor that it is true. However, I am certain that he has called and established the sense of hearing as Judge and Arbiter of the sounds in many and many passages of his three books of Harmonics which have come down to us incomplete. I know that I said this and produced many of these passages to accompany this statement, while this Author of the In-considerations denies that Aristoxenus wanted anyone to trust the mere sense of hearing. Then, he continues thus: “The Author (namely, of the Opinion) says that if both the strings mentioned above are sounded together, one will hear that interval which he has described in those terms. What would he like? Perhaps, that I should hear a Octave Unisona instead of a Diesis?” I reply to him: Does it seem to him such a great marvel, something that is so impossible? If he had the ability to remember, as he should have, he would not think this strange, remembering that his signore Patricio, when he makes a Demonstration [-115-] [-117-] of this Tetrachord of Aristoxenus, shows a major Semitone sesquiquindicesimo as a something that appears to be part of half a heap, and, similarly, that he sounds a sesquiquarto Ditone of Didymus and Ptolemy in his Demonstration of the Diatonic Tetrachord of Aristoxenus instead of a Semitone. And what else? In the same Demonstration he sounds that Diapason unisona which surprises so greatly that true Father of the In-considerations, Imperfections and Slanderous statements, as it seems. Therefore, the Author of the Opinion has not spoken impertinently or excessively, as one will hear when both these Strings A D and A E are sounded together. This very modern Arisarchus confirms that this is true later on, when he says: “Having been those parts established according to the necessary proportions, who doubts that I will hear that interval, and not another? And, even with regards to its size I will find the extremities of the uncompounded Ditone through the proportions assigned to myself. Who does not know that instead of it I will not hear a fifth, but a dissonant interval in the way that I have demonstrated above?” Our Signor Patricio and even less his boaster, Champion, defender and protector knew this. Artusi will be able to know now that such absurdities are his own and do not belong to wise and knowledgeable people. This Author of the imperfection and real father of the In-considerations says, having dreamt to have witnessed this: “Come on, he has made mistake in the demonstration of this Colour, as he did in the others.” Where is this blunder of the Author of the Opinion? To whom has this modern Aristarchus shown his demonstration? What glorious pride of his is this? He has said himself: “Who doubts that, having been those parts established according to their size according to the necessary proportions, he will not hear a fifth, but a dissonant interval, and the rest.” He proves this perhaps by saying: “Lately, he has shown fully how little he understands of these concepts by his intention to remedy it through the means of the shortening of the string, not realised with the bridges, but in relation to the sound. Do this Demonstration and all of the others prove that all of his

Demonstrations are not according to the Aristoxenus' intention, as he proposes at the [-116-] beginning of his Opinion and in the middle at page 36 and 37?" Does it seem to you perhaps, benign and sincere Readers that this is a demonstration of the blunder of the Author of the Opinion? Does it seem to you that one might be successful in turning his words against him and say that this, and the other conclusion that he as drawn prove how well he understands these musical concepts and the Demonstrations that he attempts? And, as he says, to the fact the Author of the opinion "to remedy this resorts to the shortening of the string not realised with bridges but in relation to the sound (the words 'variety of' are missing) I do not want to reply anything else but what I have already replied many other times, namely, that he has retorted in this impertinent way because he does not understand the words of the Author of the Opinion, who, despite the fact that he always expressed himself with every clarity of words, he added these very words at the end of the Opinion for no other reason than for greater dilucidation of what he had said. "To sum up, that accidental shortening of those has to be understood in relation to the variety of the sound, rather than to the total length and quantity of the proposed String, since all of these different sounds, which the ear distinguishes and hears or does not distinguish and does not hear, can be obtained through a single String and an instrument that is called Monochord for this reason." I am absolutely certain that the Author of the Opinion himself does now intend now, nor when he wrote that Opinion of his to make any alteration, however minimal, to the reductions and shortenings of the lines or strings which he made always in entire and rightful conformity to the proposed and assigned by Aristoxenus between one and the other sound of the Intervals of his Tetrachords, as before him Ptolemy, Galileo and Zarlino have understood as well. I have always quoted the passages where each of them mentions this and the numerical description, just as now I say that Ptolemy does, in the case of this Enharmonic Tetrachord of Aristoxenus in the second Column of the Table of the Enharmonic proportions at the end of chapter 14, which is incomplete, of the second book of his Harmonics, in this way: 120, 117, 112, 90. Galileo describes it at page 110 of his Dialogue in the third Description in the following way:
[Bottrigari, Aletelogia, 116; text: D. F. G. a, 120. 117. 114. 90. superquattripartientequindici. Sesquitrentottesima, sesquitrentanouesima. 24. 3. 3. differenza]

[-117-] Zarlino, in the third Chapter at the third Exposition of the fourh book of this Supplementi at page 128, describes it in a similar way, thus:
[Bottrigari, Aletelogia, 117; text: 120. 117. 114. 90. Hypate meson. Superpartientequindici Ma uuol ueramente dire, superquattropartientequindici, Lycanos Hypaton. sesquiuentesima ottaua, ma uuol ueramente dire, sesquitrentesimaottaua., Parhypate Hypaton., Sesquitrentesimanona, ma uuol ueramente dire sesquitrentesiamanona., Hypate hypaton.]

In truth, this Usarti, father of the Imperfections and true Author of the In-considerations, cannot deny to have seen these numerical Descriptions and also all the others which I have produced, in the first place in Galileo' s Dialogue, since he has imitated it in every part of it and also particularly in putting the letter of the alphabet which signifies the String itself before every number of each Tetrachord which he describes, although, because of his imperfection and in-consideration, he has written them in inverted order in the Diatonic intense Tetrachord, since he has put the letter A, which means Are, next to the highest string measuring 90 particles, the letter D,

meaning D sol re, next to the lowest, which amounts to 120 particles. If it were so, it would be because of the reason of the Semitone, quoted elsewhere, which sits between the two lowest strings, namely those of 120 and 117 particles. Equally, in the case of Zarlino' s Supplementi, he appears to have known them well, because he has copied his Description of the Enharmonic Tetrachord, which is at page 117, almost entirely, and that of the soft Diatonic tetrachord which is in the third Exposition of the third chapter of the same book at page 119. Artusi quotes those Supplementi a few other times, namely, in his fourth In-consideration at page 10, where he says: "Zarlino demonstrated this at Chapter 14 of the fourth book of his Supplements at page 169," a passage which is no more than a page removed from those Descriptions, and, in short, he copies all the other ones in that book. This new and modern Aristarchus closes this fourteenth In-consideration of his with one of his most elegant jokes, saying: "Perhaps, does he not make great noise and clamour with this Euclid, Ptolemy, Gaudentius, Boethius and so many other Authors, that he seems to want to line up so many Captains to conquer the fort at Minerbio." To this joke, if I were allowed to reply, I am not sure that I would not reply that his own Exercise leaves him the burden and worry to send his army through the Culina towards Montebudello to execute that conquest of which he is so fond. However, I want to address what he adds, which is almost that "one has to accord positive credence without any other right of reply to him alone as expert of everything or [-118-] of the opinion of Aristoxenus and as universal heir of his doctrine, and that this is enough to say 'the Teacher said it." Had this Author of the In-considerations considered a little the title with which he addresses the person that he slanders, which title is 'the Author of the Opinion', which is really the subtitle of that booklet, besides the main title, which is Il Patricio, he would not have resorted so inconsiderately to that saying, namely 'The Teacher said it', which applies much more appropriately to him himself. Had he considered this, he would not be, as he really is, the Author and true Father of the In-considerations. Now, since this Usarti, modern Arisarchus, is convinced to have satisfied his congenital malice entirely, as far as he is concerned, he repeats what he has said of more slanderous adding new malicious insults in his fifteenth In-consideration, which he begins in this way. "And since it seems to me that it is high time to conclude this book of Considerations, this will be the last one. Here I will collect many matters which can be called absurdities with reason and I will touch on some of them, not all, but those which seem to me to be appropriate to alert the Reader to them, since I want to turn my pen, which is forced to deal with this trifles, to other matters." I would have believed for sure that it would have been better for him not have written all that he has written and published in print so-far, since, while he believed to gain reputation by writing and publishing his Writings, he has lost the consideration and presumption of knowledge in which he might have been kept easily by others. This is more so, because he calls trifles these matters, in which his pen has been kept occupied under duress, as he says. Who has exerted this duress, this violence on him? Nothing but his own natural slanderous and malicious disposition, which continuously disquiets and perturbs his soul, not allowing him to rest if not as far as he disturbs and molests who delights in peace and quiet. And where do you believe, Benevolent and sincere Readers, that this modern Aristarchus would be turning his pen that, while now is busy in these malicious trifles, he says to want to turn elsewhere? You imagined that he would be turning it to anything else but to a [-119-] similar writing of his entitled Apologetic Letter by Burla, Burlesco Academic, to the Reverend Don Vincentio Spada from Faenza, or to another little work, with a not brief Title, and with a much longer subtitle, namely Musical judgement by Signor Cabalao, noble of Poveia,

Academico Infarinato on the discrepancies occurred between the most erudite Zarlino and signor Doctor Vincenzo Galilei, Florentine nobleman, Mathematician, Music Theorist, Practical musician, lute player and School Teacher, where many impertinences, fantasies and musical Chimeras, which are mentioned in the Discourse recently printed are unveiled, together with the Letter preceding this judgement addressed to Galileo himself and dated 8 April 1590. He begins by saying: “Since you have not been left satisfied with the Correction made to your new Dialogue of the ancient and modern music, but you have entered the Scene with so many absurdities, fantasies, Chimeras and phantasms from your other work, which have changed shape and reappeared like a new Gratianus, and, since you require for the World to uncover you as an obstinate, ignorant and malicious man on the basis of your new Impertinences, I am content, et cetera.” The final words of the end of that Judgment, entitled again 'Apologetic Treatise in defence of the Works of the Reverend Zarlino from Chioggia', which begins: “While these two signori Accademici were involved in discussions on certain matters, et cetera,” are these: “Art has learned from Nature, and has Nature as its Leader in all its workings, and not the other way round. Your actions, as well as your belief in the opposite of this, signor Doctor, are the height of madness.” The beginning of that Apologetic Letter is this: “O Lord, what is this that one hears about you? What have you done? A whisper, a din, a noise so great, which has moved my brain from a place to another, for the love of you.” The end of it is this one: “Imitate Adriano, Cipriano, Merulo, Porta, in your works, as these are approved Authors who belong to the good School. Leave aside the trifles of certain Modern composers and stick to a pure style, and thus you will acquire incredible praise, as a novel Cicero, Livy and Caesar. However, as long as you are enveloped by ignorance, and you live without the will to progress further in your understanding, believe me, you throw away your time trying to capture crocodiles, and trust me, your lips have only just touched the waters of the spring of Parnassus. Now, I entrust you [-120-] to God. From our Chancellery, 14 January 1588.” Finally, this is his how his signs the letter: “Your most cordial Friend. Il Burla.” This man then continues in that fifteenth In-consideraiton: “He says that the Semitone is part of the sesquiottavo Tone, and his words, namely, of the Author of the Opinion, at page 10 are these: “The sesquiottava, which is the Tone, is larger by itself than the Semitone, since the Semitone is a part of it.” Who is so dim, as far as music is concerned, who does not know that the Tone is larger than the Semitone? This modern Aristarchus does not want to do anything which will not show him as the true Author of the Imperfections. Therefore, by means of his natural malice, he quotes those words of the Author of the Opinion (which he adds, as being very well known, in that passage to greater proof of his Argument) in an imperfect way, as he is used to doing. I will add this Argument of his in its entirety, but I also add first the words written by Patricio in his linear Demonstration of the Diatonic intense Tetrachord, to facilitate the understanding of the entire matter. His words are the following: “Patricio, as we have seen, maintains that the Interval of a Diatonic Semitone of Aristoxenus is left over between the first String A and the second B, once the first six first equal particles from A to be have been taken away. However, since Patricio, imagining that he is making a Semitone resound between those Strings, makes an uncompounded Ditone resound instead, for this reason the Author of the Parere builds the following syllogism. Now, since the entire String A, as well as the whole of the String B, is divided equally into 30 equal particles, and, since between A and B there are 6 of those particles, which is one fifth of both the entire String A and of the B string, and thus the B remaining of 24 equal particles, up to the end of both the first one A and of the second one B, 24 particles, which are the four

fifths of those entire lines A and B, it follows that the whole line A is in proportion 30/24 to the (larger) part of the second line B, which is a sesquiquarta. However, the Sesquiquarta is a proportion composed by two proportions, sesquiottava and sesquinona added together, and the sesquiottava, which represents the Tone, is larger by itself than the Semitone, since the Semitone is part of the Tone. Hence, the sesquarta proporiton is much larger than the proportion of the Semitone. So, between the entire line A and the larger part of the line B there is the sesquiquarta proportion, and, if they are plucked together, one will not hear the Diatono Semitone [-121-] of Aristoxenus but the compounded Enharmonic Ditone of Didymus and Ptolemy, which lays within that sesquiquarta proportion. As, et cetera." Thus, once can clearly see that this cannot be regarded as a sproposito by the Author of the opinion, but a dispropositon and one of the Impertinentie of the Author of the In-considerations and Imperfections, this modern Aristarchus, who, not content with his slanderous censuring of others' Writings, proceeds to detract even from them even too openly. Here is a most wide demonstration of this. He says: "I do not know a man, who professes to have translated from the Greek into Italian the works of Aristoxenus, Briennius, Euclid, Ptolemy and other most grave authors, might say such things. However, it is true that those translations were not made by him alone, but that the most kind signore Ascanio Persio, professor of greek Letters and Reader in the Studio in Bologna contributed to them greatly." O what great temerity, o excessive boldness. I can state in front of you and assure you that I do not know how a man of such a respectful habit as this Usarti wears, who has made a vow of humility, should say and do so spetiatamente such things. Where has he found and from whom has he heard that signor Ascanio Perseo, professor and great expert of Greak letters, and for this public reader in the Studio of Bologna, a gentleman really adorned by every noble quality, contributed greatly to Knight Bottrigaro' s Italian translations of the music books not only by Briennius, but also by Aristoxenus, Euclid, Alypius, Gaudentius, Plutarch and by many other very important Writers? How will he be able to justify himself for such so grave offence caused to others in his macchiata Conscience? I am absolutely sure that signore Ascanio Perseo will never be able to confirm nor will he ever confirm the words of this precipitoso Writer, if indeed he deservs the name of Writer, since the title of Schicheratore is more suited to him. After he has discussed this biting and slanderous assertion, even in the beginning, he does not talk about it any further. He continues: " He deals, I say, with the Semitone in that place, but let him say which Semitone he refers to, since they are many and of different types." However, this modern Aristarchus, doubting with good reason that he will silence as an answer from the Author of the Opinion, which is what he deserves and what [-122-] would be appropriate, answers himself in this manner: "He means Aristoxenus' Semitone, of which he is in the purpose of talking (Artusi' s own locution). What have the Antipodes to do with the Gaza marina? (this is good) the Cuckoo with the dog? (even better. These are not insults, they are expression that would make Saturn laugh)." He continues further: "If he is describing to us two sorts of Tone in the Diatonic Tetrachord which are different from the Sesquiottavo Tone, according to the intention of Aristoxenus, and he demonstrates to us three species of Semitones, none of which has anything to do with the Sesquiottavo, since this Tone is never considered or mentioned by him in these distributions, what a sproposito is this?" It is a notable thing indeed that anyhing that this Censor of little judgement does not understand is classed as a sproposito. He confesses here that the Author of the Opinion describes not just two species or sorts of Tones different from the Sesquiottavo one in that Diatonic Tetrachord according to the intention of Aristoxenus, but three species of

Semitones, of which none of them has anything to do with the Sesquiottavo Semitone. Then, he adds immediately that this Tone, namely the Sesquiottavo, has never been considered nor mentioned by him, namely by Aristoxenus, in these Distributions. Now, how can it be that, if the two species of Tone, which are different from the Sesquiottavo, are according to the intention of Aristoxenus, that Aristoxenus, I do not say named them, since he did not mention them ever in his three incomplete books of his Harmonics, but he did not consider that one? Moreover, if the three species of Semitones demonstrated by this Author of the Opinion do not match the Sesquiottavo Semitone, why is this surprising? It would be very surprising if, on the contrary, since the Tones from which these Semitones derive are different, they would concide with the Sesquiottavo. But if they did match them, they would not be built according to the Aristoxenus' intention. The Author of the In-considerations continues: “If he speaks of the Ptolemy’ s Semitone contained within the terms 16 and 15, and is defined by them, it is not part of the Sesquiottavo Tone, but of the Sesquinono, thus the Sesquiquindicesimo and the Sesquiventiquattresimo added together as its components contribute to the re-composition of that Sesquinono Tone.” Where has this true Father of the imperfections found that the sesquiquindicesimo Semitone, to which this Author of the Opinion was not referring at all in the passage, cannot be a part and a component of the Sesquiottavo, but only of the Sesqminono Tone? As one adds the sesquiuentiquattresimo to the sesquiquindicesimo to restore the Sesquinono Tone, similarly, does one add the supersettepartientecentouentottecimo with the sesquiquindicesimo (mentioned by Zarlino at the end of the eighteenth chapter of the fourth book of his Supplementi and called by him mezano) which has then its place between the [sqb] fa, Synemmenon, and the [signum] high, as the remainder of the Sesquiottavo Tone of the Division between a la mi re and [signum] mi and a first portion of the following Sesquiottauo Tone between that [sqb] fa, G re sol fa ut, in the above mentioned Synemmenon Tetrachord? In this way: [Bottrigari, Aletelogia, 123]

Thus, it is manifestly clear how little attentive this new Aristarchus is in his writing, who adds as good conclusion of this little Discourse of his: “Therefore, this modern Aristoxenus does not talk about Ptolemy’ s Semitone or about the one of the Ancients, which would be a inconvenience to his purpose, but about Aristoxenus' one. However, although Aristoxenus, as I said, other times in his fragments never refers to the sesquiottava proportion, ne to the sesquiottavo Tone, but simply to the Tone, nevertheless this man takes delight in wanting that Aristoxenus says what he himself says, and he does everything to reduce the matter to his taste and to his designs.” Who is more forgetful than this Father of the In-considerations is truly a forgetful man. In my opinion, a cricket has a greater memory than he has. A little earlier, he says that what the Author of the Opinion says is an absurdity, and now he says that he is not talking about Ptolemy’ s Semitone, nor of the ancient, since it would be an inconvenience to his plan. However, since he continues saying, as he has said already, that Aristoxenus does not mention the sesquiottava proportion in his fragments (namely, in his Harmonic Elements which have come down as fragments) I state that he shows that he has read those books of Aristoxenus with scarce attention. In fact, although Aristoxenus never mentions the sesquiottava proportion, nevertheless he says, according to Gogavino’ s Latin translation, after the half of his first book of those Harmonic Elements: “The third, which quae distinguishes <the scales> in simple, et double, et multiple. In fact, in whichever sequence you will take them, you will find them to be simple or multiple.” I also say that the Author of the Opinion takes pleasure, or rather, the greatest delight, not in the fact that Aristoxenus says what

he says, but that he himself speaks in accordance with Aristoxenus, [-124-] and that he does anything to reduce the question according to his designs, which consists in having produced those linear Demonstrations to explain the doctrine of Aristoxenus according the numerical Descriptions which Ptolemy, Galileo and Zarlino have done in the particular passages of their Writings which I have quoted above. Also, if the Author of the In-considerations when he talked in this way had and has a different opinion, he should believe me when I say that he was wrong in the past, and he is even more wrong now. Now, who does not know this modern Aristarchus, Usarti to slander as much as he can the Author of the opinion, pay attention to his method, which is to avoid quoting specific passages, as he as always done in the past even at page such-and -such of the pages in that very Opinion which he wants to censor, but he recites some individual words out of context, modifying them as he is used to doing. However, I will quote them here to unveil his trick. He continues: “Hence, he (namely the Author if the Opinion) says further on that two strings produce the Diatessaron formally and in actuality. In the same respect, he does not distinguish between actuality and potency and he says that they are potentially found. Then jumping on a colt with or without a harness he adds: “I see that I have to teach him the difference between potency and actuality. I have to have great patience with this man.” Can anyone say better? Can anyone expose better an idea of his? Did he mean the whole Fornaro, the Boccaccio of the Aposa printed at the Porta Ravignana? “But,” he says, “one has to teach her,” where he puts the feminine gender instead of the masculine as a quirk of his, or rather, a bad habit. He repeats: “I have to have great patience.” First of all, those rimes, namely, difference, patience, potency grate on one’s nerves, but, nevertheless, let us look at some passages in the Opinion declared suspect by his Censorship, which have just been hinted at by this Author of the Imperfections and In-considerations, modern Aristarchus. Firstly, one reads at page 18, line 4: “Since between the first and furthest and lowest string A, as it has been stated firmly in the beginning, and the entire furthest and lowest string D, because of their resonance of a Diatessaron, there comes to be the sesquiterza proportion, it follows necessarily that, et cetera;” at line 12, one reads more or less the same words, which are: “And between the whole of that first String A, and the whole of the fourth and last String D, one finds, because of the underlying [-125-] Diatessaron which is found between them, whose sesquiterza proportion, et cetera.” Similarly, at page 20, penultimate line, and at page 25, one finds almost the same words: “And since between the whole of that first String A, and the whole of the Fourth one D we have supposed firmly that there is the Diatessaron contained within the sesquiterza proportion, it follows that, when one subtracts from that sesquiterza proportion, which is found in potency between the two extreme Strings A and D the sesquiquarta proportion, which is smaller and it is found in potency between the larger part of the third middle String C, and the whole first low String A and the last one D, because of the conversion, et cetera, it follows that the remainder in potency is the sesquiquindicesima proportion, which, et cetera.” Thus, the alteration made by this unfaithful, not to say, as I would be entitled to do with every truth, false reporter of quotations, who precisely for this reason would like that those who reports should be believed without looking for confirmation in their Writings, which are quoted. I am referring to the alteration and corruption of the “firmly supposed Diatessaron,” thus quoted in his writing once, twice and three times by the Author of the Opinion, into the “Diatessaron formally in actuality,” as this Author of the Imperfections writes in this fifteenth In-consideration of his. But, as rightly and truthfully it has been said 'underlying' in the beginning because of the resonance of the Diatessaron between

them, or, “because of the underlying Diatessaron between them,” and also “the Diatessaron firmly underlying,” I could easily imagine that you, Benevolent and Sincere Readers, would understand very well the meaning of the words of this Author of the Opinion without any other explanation or commentary on it. However, to illustrate even better the lack of knowledge and the great malice of this modern Aristarchus, I say that, since in the first of Patricio’ s Demonstration of the intense Diatonic of Aristoxenus through the four Strings, it had been supposed firstly that the first of those (and these are his very words) “in every tetrachord, where the first String and the fourth one sounded the consonance of a Diatessaron, or fourth, as we prefer, should be divided into 30 equal parts equal in measure between them.” After this premise and division, he comes to the [-126-] distribution of those parts and continues: “Of these 30 parts 6, which are contained in the difference of the length from the first to the second, namely, String, sound between them a semitone, and from this one, because of the length of the third string there should be a space which is double the first, namely, 12 of those parts which sound an entire Tone. The fourth String is of the same length until the end, which are the remaining 12 parts of the 20 mentioned above forming another Tone, as you can see from the example provided below with the 30 parts all divided.” One should not (in this case, as perhaps in many others) confuse potency and actuality. Actuality has to be understood first and foremost as the action or Operation, whatever we want to call it, which is realised by dividing each of those Strings in 30 equal parts and in assigning those 6, 12 and 12 parts, or differently, according to the distribution of the proposed harmonic Intervals, from which the proportions of the two shortened middle string with each other originate. Potency has to be understood here as the supposition made by the sounding interval of the Diatessaron, or Fourth, which, before anything else, it is ordered by Patricio as laying between the first low String, and the entire fourth and highest one, both not divided, so that the Sesquiterza proportion, the form of that Diatessaron is contained in potency or virtually, since it is not apparent, between them. The Author of the Opinion has not spoken, if not appropriately, when he said, as it has been shown that he did, that between the first and extreme low String A (as it has been firmly stated from the start) and the entire fourth String itself, or D, there is also the sesquiterza proportion, because of the resonance between them. The same goes for the other similar passages in that Patricio, Opinion, quoted by me for this reason. Therefore, the Author of the Opinion has done nothing but speak with reason, as it has been shown, when he said that between the first and extreme low String A (as it has been firmly supposed from the beginning) and the fourth String itself, namely D, there is also the sesquiterza proportion in potency between them because of their resonance. The same goes for the other similar passages within Il Patricio, Opinion which I have quoted for this reason. Therefore, it is eminently clear to me that the Author of the Opinion has no need to learn or to be taught by this modern Aristarchus, the philologist. How can this Father of the In-considerations and Imperfections presume to be able to teach others if he has not learned enough for himself? Since he adds disdainfully, “I need great patience in dealing with this man,” I say, that if being patient is too much of a burden for him, either he should wear it, or, if he can, he should cast it away completely, since when he carries this burden, he shows clearly that he does it with disdain [-127-] and it despises it. Nor am I aware that he has to have any patience, let alone ‘great patience’, as he says, with this man, but I am completely sure that this man, namely Knight Bottrigaro has to be not only very patient, but exceedingly so with the immodest nuisance of this Aristarchus, the musical philologist, whose Doctrine and Science of distinguishing and demonstrating

the difference between Actuality and Potency which he says that it is necessary for him to teach, is such, that he proves to be a great expert of Ari sto tle; hence, it is necessary that who, in his stubbornness, sets himself to read those ten or twelve lines of his writing, needs infinite patience. As for me, I am surprised, I am astounded, and I am overcome by laughter at the imbecility of this man, which is so great, and at his own presumption. Who can ever help laughing, when one reads that elegant conclusion of his: “When two Strings, being in unison, do not sound anything but one sound,” what would he want them to sound? A Seventh or a Ninth? He says a little further: “There are cataste [stacks] of these absurdities,” a word which shows a really great absurdity, because the Romans called Catasta the place, the square, the Market where the slaves were sold, or the stocks, as we call them commonly, namely, those large square pieces of wood where the feet and the legs of the misbehaving servants were locked in at that time, in the same way as we are used to lock up those of the delinquent prisoners after their sentence in our day. This Author of the In-considerations says: “He (namely the Author of the Opinion) says that first and lowest tetrachord of the Modern theorists spans from the Proslambanomenos to the Parhpatehypaton. Do Modern Theorists follow the Division of the largest System of the Tetrachords built in the same way as the Ancients built their own? Or do they follow Guido of Arezzo’ s Division into hexachords, which is called Deduction?” It would be a truly great surprise it, if this Modern Aristarchus, a perverted Spirit, setting himself to censor a passage in somebody else’ s writings, he quoted it without altering and falsifying it. At the end of page 23 of that Patricio, Opinion, one reads this: “from Gammaut to Cfaut, first and lowest Tetrachord of our Modern Music Theorists, rather than from Proslambanomenos to Parhpatehypaton.” However, as a reply to the question that he poses, namely, if Modern musicians follow, or use the Division of the largest System into Tetrachords, as the Ancients did, [-128-] or Guido of Arezzo’s into Hexachords, which some call Deduttione, but not Guido himself, I say that modern practical musicians, when they teach singing they use the division of the largest, more than perfect, and overabundant, System ordered by Guido of Arezzo. This Division begins in Gammaut and is distributed into seven Hexachords, namely, as those Practical musicians say, via [sqb] square, or hard, and by b round, or soft (I will leave out that system of theirs which they call 'by Nature', which I deem useless). Each of these Hexachords contains a specific Tetrachord of its own in imitation of those of the Ancients, which is always the beginning of the following one. Here is where the duplication and triplication of the Syllables originates, which are inserted then in the Hexachords following the sequence of the seven Gregorian Letteers of the alphabet, namely, [gamma] ut, made up of the [gamma], Gamma (which is not the first letter of the Greek alphabet as I said that this man – whom I do not know how to call, but whom I shall call true Father of the In-considerations – says in the In-considerations and in the first Cicada-speech of his Imperfections, almost at the end of page 13 b, but it is the fourth letter of the Greek alphabet) and of the single Syllable ut, as it is the remainder of that first Tetrachord and of the other following Cfaut, which is composed, similarly, of the sole capital C and of the two Syllables fa, which signifies the end of the Tetrachord, and by the syllable ut, which is repeated and signifies the beginning of the other following third Tetrachord. Then there is the Ffaut, which is itself composed of the capital F and of the two same syllables fa, ut ut, one of which denotes the end of the Tetrachord C fa ut, and the other one the beginning of the conjoined Tetrachord, which we call of the round b, or flat. Then there is Gsolreut, which is composed by the capital G and by the tree Syllables Sol, re, ut, the first one of whom is the first note or sound of the Hexachord C fa ut, the second one signifies

the second note, or sound of the Tetrachord Ffaut, while the third one heralds the beginning of the disjointed Tetrachord, which is called via [sqb] square, and also the fourth Hexachord. Then there is csolfaut, which is composed by the sole lower case c, to differentiate it from the other one, and of the three same sillable sol, fa and ut. The first one, sol, is the fifth sound or note of the Gsolreut Hexachord, the second one denotes the end of that Tetrachord, and the third one as a sign that there the fifth Hexachord begins. One can see all this clearly in the graphic Description which I add herewith for the sake of concision, together with what is left of the entire distribution of the 22 notes or sounds in that more than perfect and overaboundant System [-129-]

[Bottrigari, Aletelogia, 129; text: Fine dello Essacordo settimo Ee, la dello Essacordo sesto dd la, sol del Tetracordo settimo cc sol, fa, [signum] mi. sesto bb fa Fine dello Essacordo quinto A a la, mi, re, g sol, re ut, principio settimo et settimo quinto f fa, ut, quarto e la mi, terzo d, c sol, fa, ut, [signum] mj [sqb] fa sinemmenon Dine dello, G, disgiunto, congiunto, E, D. C, fa, ut, mj, [Gamma]]

Therefore, it appears to be true, as the Author of the Opinion says, that the first and lowest Tetrachord of our modern practical Musicians spans from Gamma, ut to C fa, ut, according to the division made by Guido of Arezzo following to the Ancients and inserted into his Hexanchords, and, consequently, it appears that the opposition raised by this modern Aristarchus is truly slanderous. In fact, as someone who expects too confidently from himself, and despises others indiscriminately, he dares so much to oppose and contradict the writings of the Author of the Opinion so inconsiderately, and saying these words: “It was his precise duty, since there is no other division followed by Modern Theorists between the four strings of the first and lowest Hexachord.” Take note, if you please, Benevolent and Sincere Readers, of what a great expert of musical matters this Author of the In-considerations and Father of the Imperfections is, considering that alteration of those words (from Gammaut to Cfaut - which is what the Author of the opinion wrote -, from the Proslambanomenos to the Parhpatehypaton, “where” - he says - “is the lowest Tetrachord of Modern Musicians”) which this modern Aristarchus did with malice and lack of consideration. Where does he find written that there is a tetrachord between Proslambanomenos and Parhypatehypaton? How little observant he is. There is a trichord, or, as we say, a Third, rather than a Tetrachord, as this modern [-130-] Aristarchus has let slip from this pen, and (what is worse) and he has allowed to be published in print. He has the audacity to want to reprehend and to correct who writes with every accuracy and sound doctrine. Conversely, he himself becomes deserving of great reprehension and severe correction, when he recites that passage with the greatest ignorance, thinking to be fit to reprehend others. He continues: “But what will I say of the time spent around thickening his book with pages, to demonstrate that this Enharmonic species described by Signor Patricio is not Olypus' invention but Aristoxenus?” What great felicity has this Censor in exposing in his writing a concept wanting it to be understood not for what he writes and says but for what he would like to say when he writes. Now, pretending to be sorry for the time which has been wasted, in his opinion, by the Author of the Opinion producing authorities to demonstrate that that Enharmonic Tetrachord described Patricio as Olympus' is by Aristoxenus, resuming this spat which he had already presented in his thirteenth In-consideration in order to thicken (as he says with regard to the Author of the Opinion) his own book with pages, he adds these other reasons to the ones he mentioned above, which he should have never avoid to mention because of their intellectual beauty and of their rigorous

liveliness. This is the first one. Was he there himself? Then, repeating ironically his dispute about whether one should believe what is related to him, he repeats what the Author of the Opinion states in his book at page 31, namely, that Boethius, when he describes that Enharmonic Tetrachord does not say whose it is. But if he does not say it openly, he does say it tacitly through the comparison with those of other Authors, which do say it. And, since this harmonic Aristarchus cannot proceed but with biting words, he says further on that the Author of the Opinion shows the great study which he has made around Pietro Hispano, so that he might know with much greater clarity that the Author of the Opinion himself has studied Burleo, and for this reason he is capable to form syllogisms and draw good conclusions without approaching Pietro Hispano, let him have a taste of these which he has composed. Everybody who talks too much is a liar; the Author of the In-consideration talks too much; hence the Author of the In-considerations is not a honest man. This seems to me an argument mixed in the way of the Baroco, which should not be abandoned in any way. Every virtuous man is modest when he speaks; the Author of the In-considerations is not modest in his speaking, hence the Author of the In-considerations is not a virtuous man. Or, also: every [-130-] good person is truthful; the Author of the In-considerations is not truthful; hence, the Author of the Inconsideration is not a good person. This is enough in this respect. This modern Aristarchus answers to what the Author of the opinion writes to prove his conclusion, which is (as he says) that “the Author of the Opinion says that Euclid never mentions Aristoxenus if not in the passage where he deals with the Modes, and, since he demonstrates the Diatonic and Chromatic Genus according to Aristoxenus' doctrine, therefore the Enharmonic is also described by Euclid according to the intention of Aristoxenus. This is that species which he describes, hence it follows that this is Aristoxenus' species and not Olympus'.” Do not you think that someone who argues in this way is not good at repeating the arguments which he intends to contrast? Here are the very words of the Author of the Opinion at the end of page 26 and at page 27. “Therefore, since the Genus is divided here into three species, and into those distributions which Aristoxenus himself adopted, since Aristoxenus divides the Diatonic Genus into two Colours or Species, and he describes both of them according to the same Distribution that Aristoxenus adopts, and, since he distributes the only species of the Enharmonic according to Aristoxenus, it follows, that Euclid wanted to demonstrate to us this Enharmonic Colour as well as proceeding from that Author himself from which the other five species of Harmony proceeded; but those other species of Harmony are really by Aristoxenus, hence, this individual one is also by Aristoxenus. So much so, that Euclid never mentions any Music Theorist (this fact itself is kept quiet by the same Aristarchus) in his short Harmonic Institution mentioned above, except for Aristoxenus. He does this where he deals with the quantity of the Tones or modes. He did this perhaps because, as it had been said, he belonged to the school of Aristoxenus.” As a second reason, that modern Aristarchus says this: “Euclid could not have described the two Colours, namely, Diatonic and Chromatic, according to Aristoxenus, and the Enharmonic one according to Olympus as Olympus himself invented it.” What about the fact that it was again described by Aristoxenus? If Euclid had lived before Aristoxenus, the fantasy of this Author of the In-considerations could be, as we say, smoothed over, but, since Aristoxenus preceded Euclid, and knew the followers of the sect of Aristoxenus, [-132-] this dreamed-up fantasy completely vanishes. He adds to this as a third reason: “Who gives me clear proof and manifest evidence of this, so that I may and should believe it?” Ptolemy, I reply, Boethius, Galileo, Zarlino. What more? Aristoxenus himself in the above mentioned passages of their writings which mention Aristoxenus.

As to Olympus, Galileo and Zarlino provide specific proof, and Boethius by indirect comparison, as I have said earlier, and the Author of the Patricio has written in the Opinion itself at page 31. Now, I do not want to miss the chance (as I have missed it two other times) to show that I would be very grateful to know the reason and the motivation why Patricio, having taken to demonstrate the Tetrachords of the three Harmonic genera according to the Distribution or Division realised by Aristoxenus, and therefore having approached the explanation which Euclid provides, having demonstrated the first two, namely, the Diatonic and the Chromatic one, when he came to provide the demonstration of the Enharmonic, he left the truth of Aristoxenus and embraced the shade of Olympus, but he stuck to Euclid' s words, as he himself writes on this matter in the sixth book of the Deca historiale of his Poetics at the Dinstinction Melody at page 86. He did this, even if he was familiar with the Dialogue of the ancient and modern Music by Galileo where, at page 110, as I have said already, he mentions the Enharmonic Tetrachord of that Olympus specifically, and the one of Aristoxenus with their great difference. It is a strange transition, as very strange is also what this Author of the In-consideration does, adding, without any verbal consolation, namely: "Has it not remained a mystery how and in which manner the Ancients accommodated those Harmonies, and within which spans, if the modern Aristoxenus displays confusion between the Writers, and of a kind that who wants to believe one has to go against another one?" This transition is all the more strange and more ridiculous, since the Author of the Opinion says so because he has not understood Patricio, although he speaks clearly, and despite the fact that the aim to which are directed his words is manifest. The words are at page 303 in the seventh book of the Deca historale, and they have been quoted by the Author of the Opinion in his book at page 32. They are these: "It has remained a mystery how they accommodated within these spans the first Tones and the Dorian, Aeolian, Ionian, Lydian and Phrygian harmony and the other six named above. And, were it clear, it would happen to be too lengthy to explain it in practice." It is obvious that they are much more clear because of some other words which he has written at page 286, which are these: "Apart from what it has been said, it will suffice to us an elegant memory which has been recorded in his book by Vincenzo Galileo (this is why I said before that Patricio was familiar with Galileo' s Dialogue), and this consists of a Greek Ode by a certain Dionysius, which has signs above every Syllable, of the kind that the music writer Alypius uses to indicate the notes of each Tone, namely, Dorian, Phrigian and the others. It is reasonable to deduce that those signs indicate how and in which Tone those Syllables must be sung according to the signs of the notes which they denote. The following example will show this, et cetera." Therefore, the fact that this modern Aristarchus says, in conformity with Patricio, that it has not remained a mystery how and in which manner the Ancient accommodated those Harmonies and between which spans, if the modern Aristoxenus appears to be confused as to the Writers, and in such a way, that if one wants to believe one, he has to contrast another one, this has no other aim than to accuse falsely of confusion the modern Aristoxenus himself, Author of the Opinion. Moreover, he has shown with great clarity how Patricio was mistaken in this matter of that obscurity at page 34 of the Opinion, where he says this precisely. "Therefore, I conclude according to Aristoxenus, via the clear explanation produced by Euclid, et cetera. I will explain now, how it has not remained a mystery, but, to the contrary, how it is very clear how the Ancients organised within those spans, namely within those Tetrachords, not only the three main Tones, namely, Dorian, Phrygian and lydian, but all the others mentioned above. This will be done with great succinctness, with reference to the above mentioned Chapters 10, 11 and 14

of the second book of Ptolemy' s Harmonics and to what Euclid adds, when he deals with those Tones, to what we have shown here a little earlier with reference to his short Harmonic Institution." At page 35 he says: "The Philosopher Gaudentius then and Alypius, from whom Boethius took his Tables of Characters, or ancient musical Greek signs, which he put in the third, fourteenth and fifteenth Chapter of the fourth book of his Music, deal with this so abundantly and clearly in the Fragments of their musical Institutions that no mystery has remained unsolved as to how those Tones were accommodated in all their species among those Tetrachords, quite to the opposite of what Patricio says." At this point the Author of the Opinion quotes what [-134-] I recited above that Patricio wrote at page 286 of the Deca historiale of his Poetics in the sixth book at the Distinction Melody, namely, "But it will be enough with all this," which follows up to the words "The following example will clarify this further." Here the Author of the Opinion adds: "That is the beginning of the first of the three compositions, which Patricio, convinced to have a clear understanding of ancient musical practice, reduced consequently to the Lydian tone, and having been greatly mistaken in certain parts of that reduction, I will talk about this in detail elsewhere and at a more appropriate and comfortable time – namely, in his Melone, a Discourse about music at page 10 and 11 – adding also everything which is necessary to reduce all of those three principles to our modern musical Practice." He adds that "Patricio, after he said: "Those signs, as far as I know, were not used in a different way in this Matter that our Singers use the notes and our instrumentalists the Tablatures," he also adds: "All of these facts provide us with reliable evidence that not only these Odes and Hymns were sung in this way, but also that all the other melic of lyric Poems were sung in the same way with the appropriate signs on each Syllable of the verse and were varied according to the seven or eight above mentioned Tropes."" How does the modern Aristoxenus display his confusion when dealing with different Writers? Which ones are these? Which is the confusion because of which, if one wants to trust one of them, he has to go against another one' s opinion? He says later on: "Do they compare three or four together, perhaps?" Who are these who should be compared together? The Author of the In-considerations adds this: "If these are not compared together, how could he not remain in the dark?" What darkness is he talking about, if Patricio himself hints at the way to clarify these matters, and the Author of the opinion unveils it, and he does so completely, in his Melone, musical Discourse mentioned above? This modern Aristarchus, Author of the Imperfections, says then that "the Author of the Opinion at page 31 of it says these precise words: "From all these facts we can gather now without a doubt that Olympus' two Dieses, albeit they are of an identical size and quantity between them, they are not equal to those by Aristoxenus, but the first one, as well as the second one, are considerably larger. Hence, both of them added together [-135-] are larger than the exact half of a half of a Tone, something which the ones of Aristoxenus do not do."" He discusses to himself these words (albeit dressed up and with a clear printing mistake, showing the acuteness of his eagle-like brain) and proposes new and very subtle doubts, in this way: "First. If the two Diesis attributed to Olympus are of the same size or quantity, how will it be possible that one is in a larger proportion than the other one? Second. In other words, if the terms of their proportions are one larger than the other one, how could they represent the same quantity? Third. If they are larger than the exact half of half a Tone, what is the exact half of half a Tone? Fourth. Of which Tone is he talking about, of the Sesquiottavo, or of the other one, which he describes according to Aristoxenus' doctrine? Fifth. If he is talking about the Sesquittavo, what is the point in calling this a Tone, since it has never been mentioned by Aristoxenus? Sixth. If it is

one or the other of the ones he describes, which is its right measure? Seventh. If he describes it with proportions, how will he divide it in two equal parts, avoiding that one should be larger than the other one? Eighth. If he wants to find out this right half within parts which are proportional within the continue quantity, what is the point of using proportions? Ninth. If he wants to find it using proportions, how will be able to demonstrate it, if it cannot be divided by certain particular rational numbers? He does not say 'half of the Tone', but 'half of the half', which turns out to be one fourth of the Tone." Now, since he awaits a new answer to these resolute questions of his, I urge him to be patient, since I am about to answer them, not repeating them or summarising them for reasons of brevity, but just mentioning their number in the sequence. Therefore, as to the first one, I say that, although there is no mention in the words of the Author of the Opinion of a proportion, that doubt must not be reduced to proportions, according to reason, and he must be content with this. Nevertheless, to avoid for him to be left with such a dry reply, I will say that Olympus' two Enharmonic Dieses, which are of an equal, or rather, identical quantitative size as Intervals, are reduced to different proportions by comparing together the proportion of the length of the String of one Interval with the proportion of the length of the string of the other one. Does this not happen clearly [-136-] in the first and lowest Diatonic intense Tetrachord of our modern Musicians, so to speak, granted good leave by this modern Aristoxenus, were it necessary, between [Gamma] ut and Cfa, according to the specific numbers assigned by Ptolemy according to his own particular distribution? These numbers are 120, 108, 96 and 90. The Tone between 120 and 108, and the Tone between 108 and 96 are of an equal, or rather identical quantitative size as Intervals, namely of 12 particles or ounces which are equal both in one and the other one. Nevertheless, the sesquinona proportion of the first one between [gamma] ut and Are is smaller than the one of the second which is sesquiottava and is between Are and [sqb]mi. This same answer will be able to be used with certainty to reply to the second doubt or question, if one swaps what follows in what comes before. I reply to the third question by saying that the exact half of the half a Tone is the Enharmonic Diesis. As to the fourth one, I say that he is not talking of the sesquiottavo Tone, but of Aristoxenus' Tones. The fifth is neutralised by answering to the fourth one, but I state that the sesquiottavo tone itself was never considered by Aristoxenus. The answer to the sixth one is that 6 parts which are equal with each other out of the 12 in which the Tone is divided constitute the exact half of one and of the other Tone described by the Author of the Opinion. The one described by proportions with which the seventh question deals will divide it by means of proportions according to Stiffelius teachings at Chapter 8 of the second book of his Arithmetic, while the post courier runs with him (exactly as the Author of the Imperfections says on this matter at page 34 b of the first Cicada-speech of his Imperfections), Tartaglia at chapter nine of the seventh book in the second part, and in the same way as Euclid, who is still and does not move, demonstrates in the second proportion of the first problem of the eighth book of his Elements. Thus, one of the two proportions will not be greater than the other one. To the eighth one, where he says: "If he wants to find out this right half within parts which are proportional within the continue quantity," and then: "What is the point of using proportions?" I would answer (without a doubt and for good measure, thus eliminating that confusion of proportional quantities) that [-137-] Ptolemy, Galileo, Zarlino and the Author of the Opinion have added a particular proportion non only to those Tones, Semitones, and Dieses, but to the Ditones, Semiditones and other Intervals, not because it is at all necessary, but just as a means to show their terms in the length of their Strings, in which length they are compared to

each other, so that anybody who understands proportions can find them on the Monochord or on the unison Tetrachord with ease. Finally, I reply to the ninth proposed question. Although, since it is almost the same as the seventh, the seventh itself would be sufficient as an answer to it, I will add nevertheless for greater clarity, that the sight of the noble intellect of this modern Aristarchus is occupied, impeded and corrupted by the excellence of those high mathematical Speculation. Therefore, being unable to know and discern the important content of the second Proposition of the first Problem of the eighth book of Euclid' s Elements and Chapters 8 of Stiffelius' work and 9 of Tartaglia' s, authors that he calls postal couriers, who are, in my opinion, solicitous, assured, diligent and trustworthy, he asks here as something impossible what he makes his signor Luca say and signor changeable Usarti not only agrees to, but states as an universal and assured truth in the same above mentioned first Cicada-speech of his Imperfections at page 34 b and at page 46 b of the second Cicada-speech. However, it is not always thus. Therefore, as already the Author of the Antartusi has demonstrated copiously and with great clarity when he corrected those other passages in the Cicada-speeches of his Imperfections, I will demonstrate how each proposed proportion can be divided not only into tow, but into three and how many more proportional parts one wants by using certain numbers and certain fractions. But why am I saying "I will demonstrate"? He demonstrates it himself in those passages above-mentioned passages, and he provides a simplified rule, which, however, it is imperfect, so that he can uphold his reputation as Father of the Imperfections, and it shows conclusively that, divided the proportion superquadripartientecinque, namely, from 9 to 5 into two equal parts, the median term is root 45. He says: "It is written thus because this root cannot be extracted with certain and determined numbers, to demonstrate its irrational nature." However, should he have the light of his Intellect, and had it not been eclipsed so strongly by his persuasive ignorance, he would have added that, if one wants to reduce that middle term to rational numbers, as the extreme terms of that proposed proportion are, he should have squared both of those extreme terms, namely, multiplying one term by itself, and then the one with the other one and to take the resulting product [-138-] as the middle term, so that the larger term is 81, the middle one is 45 and the smaller at the other end is 25. It is clear from this that, if any given proportion can be divided by certain and determinate numbers, one would be able to find, were it necessary, that right half that this modern Aristarchus wanted that it should be demonstrated. "What then one should observe," he adds, "is that the Author of the Opinion says 'the exact half of the half tone' rather than the half of the Tone, but the half of the half, which is a quarter of the Tone. Therefore he meant that the two Dieses are greater than the half of the Tone or exceed it, rather than exceed the exact half of the half of a Tone." This could be accepted by the Author of the Opinion as the caring correction of a mistake which he did not make himself, but was the responsibility of the printer, or the Copyist or who took care of revising that print, since in the Original penned by the Author of the Opinion one reads 'the exact half of the Tone' (the word 'half' was crossed out 'and of the' turned into 'of the'). This error, which did not appear in the Table, is not the only one, since these others, which amount to some important omission, have not been noted: at page 28, line 18 one should read 'at the end of Chapter 13 and at Chapter 14' instead of 'at Chapter 14'; at page 29, line 6 'Matter, have' should read 'Matter, as he also did in the first Chapter of his fourth book inserting the Proem of his Harmonic Elements. And in the second chapter the first 9 Speculations added to those Elements', and some others further on. I am completely sure that this will not cause any doubt to those who are familiar in some way with the

practicalities of printing, and particularly to the Author of the Imperfections himself, as he is very familiar with printing and printers. Therefore, at page 4 of his In-considerations, where he talks about the Printers, in the second of those Imperfections, he says this precisely: “Since it is a prerogative of the Printers to omit some word sometimes and occasionally entire lines, for this reason, et cetera.” However, since this Aristarchus arrives to his conclusion with that most plebeian proverb which he has used may other times not only in these In-considerations of his but also in the Imperfections, namely that the Author of the Opinion “caught a large Fly, and still he acts as an superior expert of Arithmetic,” this cannot be taken but as extreme slander, and this conclusion of his discourse must be left without a reply. [-139-] However, consider, Benevolent and Sincere Readers, what a judicious man he is, he, who, while he insists on and berates a small error, which is not really the responsibility of the Author of the Opinion, falls into a very grave mistake which is entirely his own. He says: “And if the two Dieses are nothing else but the Apotome contained within the Proportion supertredicipartiente243, which is larger than half a Tone, how could it not be larger than a quarter of a Tone, whatever this Tone is?” On which basis does this Arch-little-teacher say that the Apotome is contained within that Proportion which is from 256 to 243? Ptolemy, at Chapter 8 of the first book of his Harmonics demonstrated that the Limma (or the Remainder, which is called the smaller Semitone by more modern Music Theorists) is found within that proportion 256/243, while the Apotome (namely, the 'Cut', which was called Semitone by the Ancient and the larger Semitone by the Modern Theorists) is formed by the proportion super139partiente2048, as Boethius also relates at chapter 17 of the first book and at chapters 25 and 29 of the third of his Music. This modern Aristarchus, Author of the In-considerations should have said Lemma instead of Apotome without adding the proportion superpartiente243. However, while here he introduces his great privilege to be able to make this and any other howler according to his taste and pleasure, it is mandatory that everybody else, whether they like it, or not, should be happy with it, and let it go. He adds: “When he (namely the Author of the Opinion) continues by saying: “But the first one and the second must be considerably larger,” if he refers to the two Dieses of Olympus, as he seems to be doing in his opinion, he said earlier that they are of the same size, and if he says now that they are one larger than the other the contradiction would be to open and clear. If he means that those Dieses of Olympus are one larger than the other one compared with those of Aristoxenus, the ones of Aristoxenus which he described are so many in number that I ask you to look for which ones he is talking about.” Had this new Aristoxenus repeated the words of the Author of the opinion which precede these ones, which are these: “the two Dieses of Olympus, although they are of the same size or quantity with each other, they are not the same as those of Aristoxenus, but, et cetera,” or the ones that follow, which are these others: “Hence, all of them put together exceed the exact half of the Tone, which those of Aristoxenus do not do,” he would have not struggled to achieve that understanding that he deems strange, because the Author of the Opinion, as he does, writes clearly. In fact, from the first ones [-140-] it is evident and clear that he is talking about the Dieses of Olympus, and that they are of the same size as and quantity, because they are really so. He also adds that, albeit they are all equal to one another, they are not the same as those of Aristoxenus, because those of Aristoxenus are contained within smaller distances. From the following words it is clear that all the other Dieses of Olympus, since they are contained by larger distances, they exceed the exact half of a Tone, which the ones of Aristoxenus fill exactly when they are added together. This can be clearly seen by comparing the size of those two Dieses of

Olympus (each of which comes to amount to 3 1/20 particles, which added together give a total of 6 1/10 particles) with the size of the two Enharmonic Dieses of Aristoxenus, which, since they are both of 3 particles, give a total of 6 particles, which is equivalent to the exact half of the Tone of Aristoxenus, which is of 12 particles equal to each other. Thus, it would have not been very laborious to find out of which Dieses the Author of the Opinion wants to talk about here, and to know clearly how one of those Dieses is larger than the other one, because the one of Olympus is of 3 1/20 particles and the other one of Aristoxenus is 3 particles. Now, since this true Author of the In-consideration does not want in any way or by any means to fail to appear to be a diligent Thinker, and a really perceptive Mad-Matematician, he adds: “I will say, however, that those, namely, the Dieses which are attributed to Olympus, are, as to the proportion, the same as those that our modern Aristoxenus has described in the demonstration which he has made of the soft or delicate Chromatic.” You can see, Benevolent and sincere Readers, that this is so true, as all the other observations, which derive from the deluge of the great loquacity of this man, are true. Both one and the other of the two Chromatic Dieses demonstrated by the Author of the Opinion in the soft or delicate species, as it should be easy for you to remember, are of 4 particles out of the 120 into which it is equally divided the proposed entire string. Hence, according to the proportions, the one of the first and lowest is from 120 to 116, and it is a sesquiventinovesima from 30 to 29; the one of the second and higher Diesis is from 116 to 112, namely sesquiventottesima from 29 to 28, as we have said that also Galileo and Zarlino state about both of them. However, these two Dieses of Olympus are both equally of 3 ½ equal particles, and according to the way that Ptolemy wrote his Tables by sexagene they are 120 and 116, 57 for the first [-141-] and lowest Diesis, and 116.57 and 113.54 for the higher one. However, according to the normal practice of Musicians , as they were described first by Boethius, Galileo and Zarlino, they are the ones that can be read at page 31of the Patricio, Opinion after these of Ptolemy, namely, from512 to 499, the first and lowest, which is contained thus within the proportion supertripartiente499, and the second one and higher form 499 to 486, thus contained, with the same quantitative difference of 13 particles, within the proportion super13partiente486. Therefore, comparing together the Proportions of the first and lowest two, 30/29 and 512/499, their difference is 7485/424, and compared together the proportions of the tow second and higher ones, namely, 29/28 and 512/499, their difference is 7047/6986. Thus, it is manifestly clear that the proportions of Olympus' Enharmonic Dieses are different from those of the Dieses of the soft or delicate Chromatic of Aristoxenus, described by the Author of the Opinion. Consequently, it is also clear that the words of the Author of the In-considerations do not match the standard of an Excellent and perceptive handler of numbers, as he is convinced that other people should consider him because of his sing-songs, while they also look up to him as a Censore unequalled in our times in whatever profession. It is true, however, that he always ends up being wounded to death by the knife which he unsheathes against other people and which turns back against him. He says as a conclusion: “Therefore, it is more reasonable to believe that Aristoxenus took advantage of Olympus inventions, rather than the other way round.” In order that appear to be speaking as a well-read man, he adds: “It seems to me that Olympus lived a long time and many years before Aristoxenus.” Now, I do not want to waste time to demonstrate if this conclusion is really appropriate in the first place, or if it is a conclusion indeed, since it is something that it appears too clear because of its turbid, or, as he is used to say, absurd impertinence, just as it is also the following tacit objection which he composed: “But, since the

Author of the Opinion (he continues) might deny that Aristoxenus had the opinion or thought that the Tone has to be divided into two equal parts, so that he might hide behind a screen disguising that this is his hit, I will provide him with the proof, on the basis of the authority of the good Authors, and of those which he has quoted." He continues: "Ptolemy says in the twelfth Chapter of the first book of his Harmonics, but we will relay now the Descriptions of Aristoxenus, which are of this kind. He divides the Tone sometimes into two equal parts, sometimes into three, sometimes into four, and other times into [-142-] eight. Moreover, Aristoxenus himself in the second book of his fragments, past the middle of it says: "The Tone is the measure by which the Diapente exceeds the Diatessaron." Of the parts of the Tone, we sing the half, therefore, this conclusion based on the words of Ptolemy and Aristoxenus is clear." I would like to respond to this tacit objection assembled by him, but I state freely that I do not understand which one it is, because of its great confusion. In fact, if he maintains that, since the Author of the Opinion denies that it is Aristoxenus' intention that the Tone should be divided into two equal parts, he wants to prove that this was Aristoxenus' own division, this is something that the Author of the Opinion has never denied and never will deny. Therefore the demonstration which he makes is redundant, especially since it has been produced by the Author of the Opinion on the basis of the very words of the Authors quoted by this modern Aristarchus. Part of it can be read at page 27, namely, "But we will laugh now, since it is missing, between the words 'Tone' and 'in two parts' the word 'now', et cetera," and partly at page 30 of that Opinion, namely, "the Tone is the one through which, et cetera", together with other words of the same Authors, such as Euclid and Boethius, which this modern Aristarchus has not been able to gather. And, since he says that the Author of the Opinion might deny this "in order to hide behind a screen, since this is his hit," I will reply to him and say what I replied to this very expression pronounced by this Modern Aristarchus at the end of his eleventh in-considerations, namely, that, in the eventuality that the Author of the opinion retired behind a screen, he would retire behind it as Apelles did, in order to learn by listening to passers-by who are very expert in the Arts, and to say boldly to the ignorant and presumptuous ones, should this happen, "Shoes are your only competence", or, as the Citharoedus Stratonicus said famously to a blacksmith, who wanted to compete with him in Music: "Cannot you hear that you speak beyond your hammer?" Go away, modern Aristarchus, go to tend to play your Bells, since this one, rather than disputing about Music, is your own Art. This is what was also answered to someone who, having been a greengrocer wanted to act as a Musician: "One should practice the Art that one knows." Thus, this conclusion will be true and clear. In order to further corroborate it that modern Aristarchus adds that "Valgulius, a man of an equally great mind (I cannot repress my laughter at this elegant way [-143-] of talking) as Aristoxenus was, says the same. Moreover, he defends Aristoxenus from those who hold the opposite view." In order that defence, whatever it is, may be available to peruse, it will not be too onerous for me to copy here all of Valgulio's words, albeit many, which are contained within that little work of his which is entitled On the Music of Plutarch, some way further on from the half of it, which are proposed to you first of all in this way: "The tone cannot be divided into two parts which are called equal Semitones. What Aristoxenus thought possible, thus they think to be able to demonstrate it with the numerical proportions. The Tone, they say, consists in the sesquioctava proportion. The Interval of a sesquioctava, in which the Tone consists, cannot be divided into two equal parts. Therefore, they say that the Tone which is contained within sixteen and eighteen units is called a Sesquioctava Interval, and it cannot be divided by any number except the

seventeenth, which cannot be divided, so the two Intervals which derive from one are unequal one from the other. The larger Interval is always the one that divides smaller numbers, than the one that divides larger ones. Therefore, the larger Interval is the Semitone, because it is between 16 and 17 particles, because it sits between sixteen and seventeen. These things that are said are true, and they are not doubted by any learned man, but they do not realise what they mean. For this reasons it does not follow that the Tone cannot be divided into two equal parts, although the number which lay between in the middle of the sesquioctava proportion cannot be divided as in numbers. But the String itself, in which various resonances of notes are created by dividing it appropriately with different divisions, as in a ruler, because its size is constant and continuous, can be divided into whichever portion or interval, therefore also in equal parts. In fact, I have talked above of the opinion of Panetius, Theophrastus, Porphyrius, and others, and the matter is really very clear in itself. Therefore, I did not establish the consonances of the Diapason, Diapente, Diatessaron, Tone and the others in numerical proportions and quantities in any way because the notes themselves and the Interval between them are numbers and quantities and they have such a great consideration within itself, when their qualities are at their most clear, but because the string and its parts which produce the notes have those such great considerations within themselves. Therefore, what goes against the ability to divide that section of the string where they set the Sesquioctavo Tone into two equal sections which would be two equal Semitones, when Mathematicians show that however large a section of a continuous quantity can be divided into infinite parts? I could easily demonstrate this mathematically on the Monochord [-144-] which the Pythagoreans call Canon, if it were not sufficiently clear what I took upon to demonstrate, namely that Aristoxenus is attacked falsely because he had established that the Tone can be divided into two equal Semitones. But did Aristoxenus really not know any Arithmetic - these are words that the Father of the In-considerations has learned and placed, in Italian, at the end of this sixth In-considerations -, he who wrote entire books on this subject? Did the doctrine of Pythagoras escape him, him, who had as a teacher Xenophanes, a noble Pythagorean?" With the words "But enough of this so-far" he completes this defence of Aristoxenus. I leave it up to your judgment to decide how good this defence is, Benevolent and sincere Readers, and I go back to the modern Harmonic Aristarchus, who, with the greatest perceptiveness puts forward another doubt by saying: ""However, can the Adversary (if he considers the Author of the opinion as such he has been greatly mistaken, since the Author of the Opinion – I am absolutely certain of this – does not want to be his Adversary in this or in any other matter; moreover he would never use that term 'sing-songs', which he has never said) say, when Aristoxenus says that the tone is divided into two parts without mentioning their equality or inequality, that one cannot understand that those two parts are unequal and not equal? (What a good man! As if to say unequal is something different from saying 'not equal'). I say, that Aristoxenus' words that follow explain the preceding ones, since, when he says that the Tone is divided into two parts, he also says that it can be divided sometimes into three parts and also into four. If one had to believe that those parts should be unequal, each of those parts considered by themselves would not be the third one or the fourth one of the Tone, as his words imply, but they would amount to more or less. Therefore, when Aristoxenus said that the Tone is divided into two, three, and four parts, he means that these parts should be equal, rather than the unequal ones which the proportions produce." This thesis has been submitted by the Author of the Inconsiderations for no other aim than to provide him with his answer, and one and the other have the function of filling the page,

thickening his book with pages, to quote what he says unjustly about others and allowing him be know for exactly for what it is. Even if Aristoxenus words were ambiguous, as the modern Aristarchus presumes them to be, which it not the case, since he says precisely this past two thirds of the first book in Gogavino' s Latin translation: "Let it (namely the Tone, as he said a little earlier) be divided into three parts: [-145-] let us modulate his half, third part and fourth part of it, but let the Intervals smaller than these be all inelegant and unpleasant to the ear." A little further he says (corrected some errors though, which are read there in, as they have been corrected by the author of the Opinion in the Italian Translation which he made): "It is necessary however, because the Tone in the Chromatic is divided into three parts, and the third part is called the Chromatic Diesis, the Enharmonic one is divided into four parts and its fourth is called Enharmonic Diesis, that the third part of one exceeds its fourth by an ounce. If, for instance, we take twelve parts, if they are divided into three parts, they form four fourths, but if they are divided into four, there will be three thirds. The third exceeds the fourth, and the third part the fourth part by a unit, which is a the twelfth part of the whole. Therefore, the Chromatic Diesis exceeds the Enharmonic one by an ounce. Two Chromatic ones exceed two Enharmonic ones by the double, namely a sixth, which is an Interval inferior to those which we use in Music. What does the word 'semissis' mean, other than one half, or 'trians', if not one third, 'quadrans', if not one fourth, and 'Sextans', if not one sixth? What does it mean if not that a proposed whole is divided into two equal parts, and that, similarly, the third, the fourth and the sixth part, if not that that hole is divided into three equal parts, each of which contains four particles which are equal with each other, and also, if it is divided into four parts, each contains three particles equal to each other, and if they are divided into six parts, they contain two particles which are equal between them? And if Aristoxenus himself declares it very clarly, saying: "Therefore the third part exceeds the fourth part, and the a third exceeds a fourth by a unit, which is a the twelfth part of the whole," and Ptolemy says himself in his harmonic Isagoge in the Latin translation by Pena: "These Colours are shown then in this way by means of the number. Let us suppose that the Tone is divided in twelve smallest parts, each of which is called an ounce of a Tone, and the remaining Intervals are divided in the same way as we understand that the Tone is divided. In fact, the Semitone is divided into sex ounces; the Diesis, which is a fourth of the Tone, into three parts; the Diesis, which is a third of a Tone, into four, so that the entire Interval of the Diatessaron is of thirty Ounces." He then says at Chapter 12 of the first book of his Harmonics in the Latin translation of Gogavino. "More recent Theorists draw more divisions, but do let us relay now the descriptions of Aristoxenus, which are these. He divides the Tone now into two equal parts, now into three, now into four and [-146-] occasionally into eight parts." He can read the words of one and of the other of these Writers at page 26 and 27 of the Patricio, Opinion. What can I say? Have we not seen what the Author of the In-considerations himself refers to them a few lines above, and he does so with the very same words of the Author of the Opinion? This proposition put forward this modern Aristarchus is useless, and much more useless is his Answer, to which he can but add, refusing to be defeated as he is, that this equality can be had in the line, or string divided into equal parts, as the modern Aristoxenus did. This is false. That one might achieve it through the proportions is very false, but this modern Aristarchus has not shown, nor he can show this falsehood which he mentions of the string divided into equal parts by Aristoxenus himself. That it is completely false that such division might be achieved through the proportions is so far removed from this intention of Aristoxenus that it is not necessary tos ay anything else. Beyond this, he says: "That

this can be achieved by means of the shortening with regard to the Sound, when one works on it with the Mesolabio, or with the help of the thirteenth proposition (instead of proportion, as one reads there, where we let it pass as a printing error) of the sixth book of Euclid, or using other instruments, like Zarlino (in many passages of this Institutioni, Demostrationi and Supplementi) and the Stapulensis and others have demonstrated, I will believe that it will be possible to achieve it, albeit the Author of the Opinion has not been able to expose it or demonstrate it as it should have been done." To discuss the shortening with regard to the Sound is definitely something very redundant. That this is very true, that Zarlino who has been called upon to help him and do him favours so many times by this modern Aristarchus, Author of the In-considerations, he will be the one (this is why I said at the beginning that he should proceed deftly with Zarlino himself) who with give him a check mate with a the move of a pushing pawn. So, Zarlino, at the end of the sixteenth chapter of the fourth book of his Supplementi musicali says this, precisely: "One should not be surprised if, because of the difficulty that is found in Aristoxenus, these, with their armed cross-bow, say that he divided the quality of the sound (rather than the quantity of the line, of the string, or the space in equal parts, as we want to call it) not like a simple mathematician within the continuous quantity, but as a Musician within the body of the sound (which is the opinion of the Father of the In-considerations and Imperfections as well). In truth, it is necessary to know first of all that many were mistaken when they had the idea to say that we sing the Tone divided into four parts. This has happened to them, because they do not understand that one thing is to take the third part of the Tone, and another thing is to sing a Tone divided into three parts. From this one can understand that Aristoxenus was not so aloof that he did not know that such division of the Tone made it impossible for the proportions which occur within sung and played intervals to turn out equal and proportional, since, in relation to the equal measure and to the quantity, to take the third part of the Tone is one thing, but, as to the proportion and the quality, he adds, "to sing the Tone divided into three parts is something different." The reason to notice is that Aristoxenus does not say that those parts are equal, but when he says above, that every consonant Interval is of different size if compared to a dissonant one, one should believe that these two quality, consonance and dissonance, are also contained under the domain of the quantity, from which, and not from anything else, one derives the proportions of the Intervals, since it is the foundation of every proportion. He makes this clear when he says: "But, since the difference among the Consonances are many, take one of them which is the most famous, and this is really the one which is believed to be derived from the magnitude, and let the magnitudes of the consonances be eight, of which the smallest is the Diatessaron. Did Aristoxenus not know that [kata megethos] means according to the magnitude or size? And that magnitude or size means quantity? He knew it only too well. Although these people try to preserve their own ratios by interpreting in their own way what this most Excellent Music Theorist says, they forget what ratios they talk about and they demonstrate the extremities of the Tetrachord they adduce as a means to preserve their ratios, because they confess that they are contained within the same proportion which contains those of the Diatonic, although they demonstrate through the proportions of those Intervals that that Tetrachord contains, that the Tones are not equal, and that Aristoxenus did not extract the ratios of the Intervals of his Syntonic from any of the Tones put in his Tetrachord, not even of the tone occurring in the Diatonic, since other are the proportions and parts which are born of the division of the sesquiottavo Tone divided into [-148-] two parts, and other the ones that they demonstrate in the Tetrachord which they propose,

in none of which one finds any equality of the parts in which those intervals are divided. Therefore, from what we have demonstrated so-far in this matter, one can gather how these and other followers of this most Excellent Music Theorist have been able to understand it. This modern Aristarchus should remain well taught around the doctrine of Aristoxenus, and knowing himself his Imperfections and his In-considerations, he should be quiet and stand corrected. He should hold for absolutely certain that, if the Author of the Opinion had judged appropriate and necessary to say and demonstrate what this modern Aristarchus says that he should have said and demonstrated, he would have been able to say it and demonstrate it (albeit that modern Aristarchus denies it), just as signore Patricio was not able to say it nor to demonstrate it, nor he has been capable to defend him, nor has he had the knowledge to do so, although he has bragged about it with excessive animosity. This new and modern Aristarchus says in the end: “As a close of these Considerations of mine, it is left for me to let everyone know that I have said and written what I have said and written so that the World and those who study this discipline may not be tricked by those who want to attack the intermediary with their beak, and so that they might know everything in the right way.” Thus, concluding his long empty tales, it behoves me as well to tell you, Benevolent and sincere Readers, that everything that I have everything that I have written in these pages so that you may not be left cheated by the excessive self-confidence and presumption of this Author of the In-considerations and Imperfections, and in order for you to be completely certain that “not everyone that owns a cithara is a citharoede.” For this reason, I do not want to omit to say that, if you need a Music Theorist, take him, if an excellent practical Musician and spiker of notes, take him. If you need a contralto, take him, if an organist, take him. If you need the services of an expert of Arithmetic, Geometry, Astrology, Cosmography, a Writer of Annals, approach him. If you require a Philosopher, both a moral and a natural one, do not leave him aside, as it is natural. If you need a Theologian, an expert of Metaphysics, do not look any further; if you need an expert of Logic, Dialectic, Rhetoric, or you need an Orator, a Poet, a writer of Verses, an expert in Jurisprudence, approach him. If you need a Medical physician, or a Surgeon, a Pharmacist, a Herbalist, a Distiller, an Alchemist, take him absolutely. If you need an expert of Sayings and Proverbs, both caustic [-149-] and pleasant, do not look elsewhere. If you need a Grammarian, a Pedant do not let him go in exchange for all the gold in the world. To sum up, and to conclude entirely, Betony has not got so may qualities, nor that honourable Saglino of the dumb of the Hospital of the Death, bless his soul, had so many rags of different shape and materials, wool, silk of various colours, brocade, both of gold and silver as a decoration, which are similar to the patchwork garments of the Ancients (Who has seen him wear it, as I have several times with five thousand other people, can testify fully and truthfully that he barks much more sound things than that Painter’ s Overall, which is mentioned not only at page 8 of the Cicada-speech of the Imperfections of this Author of the In-considerations, but in that other Invective mentioned above which goes under the name of the Burla Academico) which can reach the number of the Eccellent wonders the deep chest contains, and which the most distinguished tongue and the most agile hand of this true father of the In-considerations spits out. And if this short essay of mine on his many, graceful and monstrous qualities were denied that firm credence to which I aspire, being by someone who is a too suspect Narrator, because of my affection for him, I hope that the clear and manifest evidence provided by himself in the first two Discourses of his Imperfections, and even more in the second half of those very Imperfections with the addition of his In-considerations, will obtain and

achieve for him the due level of certainty. In order to obtain a complete and perfect portrait of his shrewd and judicious person, we should add to this the seven main Parts and the peripheral pertinent matters which he himself (albeit he attributes them to others with artful fabrication because of his usual modesty) has drawn successfully with his own pen at the beginning of the second Part of his Imperfections, almost as a Proem, and which he has coloured vividly with his most graceful paintbrush. What now? I seem to see you

“press your lips and raise your eyebrow.”

Most Benevolent and Sincere Readers, put an end to this surprise, in the absolute certainty that the Steganography of Tritemius (a most precious book and most famous because it contains, as Tritemius, its Author, states in a letter to Arnoldo Bostio printed in the first pages of His Polysophia as a conclusion to the exposition of Adolfo from Claudabanus, some secrets through which one can realise not only things that provoke not only the greatest marvel, but [-150-] the greatest amazement, and therefore they are considered absolutely impossible, and truly many others which have left a long way behind the incredibly extravagant feats of Scontrino and Colorno, men of our age, and those of any other Conjurer of our age however famous and renown, because of their timing and their artifice) has come into his possession.

Written at Bologna, when the second hour was sound of the night following the day 16 February, Last Thursday before Lent, 1604. Hercole Bottrigaro.

The copy was completed a few minutes before the second hour of the night following the day Sunday 10 October 1604 (according to my small watch in an box of almond wood with a band) in the pleasant villa which I own in the town of Santo Alberto. Hercole Bottrigaro.

Order of the leaves in Quaterni A. B. C. D. E. F. G. H. I. K. L. M. N. All are of three leaves.

The checking of this copy and its comparison with the Original were completed when my watch sounded the seventh hour of the night following the day Monday 8 November 1604. AT BOLOGNA.

[-151-] TABLE OF THE NOTABLE TOPICS CONTAINED IN THE PRESENT APOLOGETIC LETTER

F.

Theft made by Artusi from Knight Bottrigaro of what is contained from page 49 to 69 of the second Cicada-speech of the Imperfections of Artusi himself, 19. 31.

G.

Musical judgement of Signor Cabalao, nobleman from Padua, Academico Infarinato, on the difference between Zarlino and Galileo addressed to Galileo himself, page 119.

H. I

To attack anonymously an innocent person is an incivil and barbaric costume, page 72.

Aristoxenus' Harmonics, as we know them, are incomplete, page 102.

Melone was to easily persuaded to trust the Writings of others, page 13.

Praise of Patricio.

L.

The Diapason, and the Bisdiapason are called ‘univoca’ and ‘unisona’ by Ptolemy 20.

Definition of the harmonic Genus given by Artusi is different from the one given by Euclid, page 40.

The Quotations provided by Artusi, or which are found in the books that he quotes, if one finds them, they are always altered because some words are missing, or some are added, or some are changed and varied, page 26.

Apologetica Letter by Burla, Academico Burlesco to the Reverend Don Vincentio Spada from Faenza.

Letter by Verdicelli to the benign and sincere readers written at the end of the year 1602, page 1. 8. 14.

Letter written by Knight Bottrigaro to Artusi about the theft committed by Artusi to his detriment, the Copy of which is recorded at the end of the Dialogue Antartusi, page 19.

Artusi states that he has not been left as a S...., and even less a Heir to the Aristoxenus doctrine, page 7.

[-153-] When Artusi quotes his own words he quotes them in a way which is different from the way in which he had written them elsewhere, page 71.

Artusi has great presumption and is overconfident in himself and in his Authority, page 72.

Names of the cited Authors.

Music Theorists

10 – Ptolemy

7 - Galileo

12 – Zarlino

2 – Bede

3 – Boethius

6 – Euclid

9 – Plutarch

1 – Alypius

8 – Gaudentius

4 – Cassiodorus

5 – Censorino

11 – Valgulius

Writers on Arithmetic

4. Gema Frigio

5. Orontius Fine

6. Martinus Blasius

7. Nicolò Tartaglia

8. Boethius

9. Ludovico Baeza

10. Michele Stiffelius

11. Fra Luca

12. Giordano

13. Euclid

14. [[Nicolò Tartaglia]]

Italian Authors

Moral Philosophers

Cato

Ascensius, et Mancinello Commentators of the moral Couplets of Dionysius Cato himself

Desiderius Erasmus

Fra Gian maria verato,

et Iosef Scaligero son of Giulio Cesare.