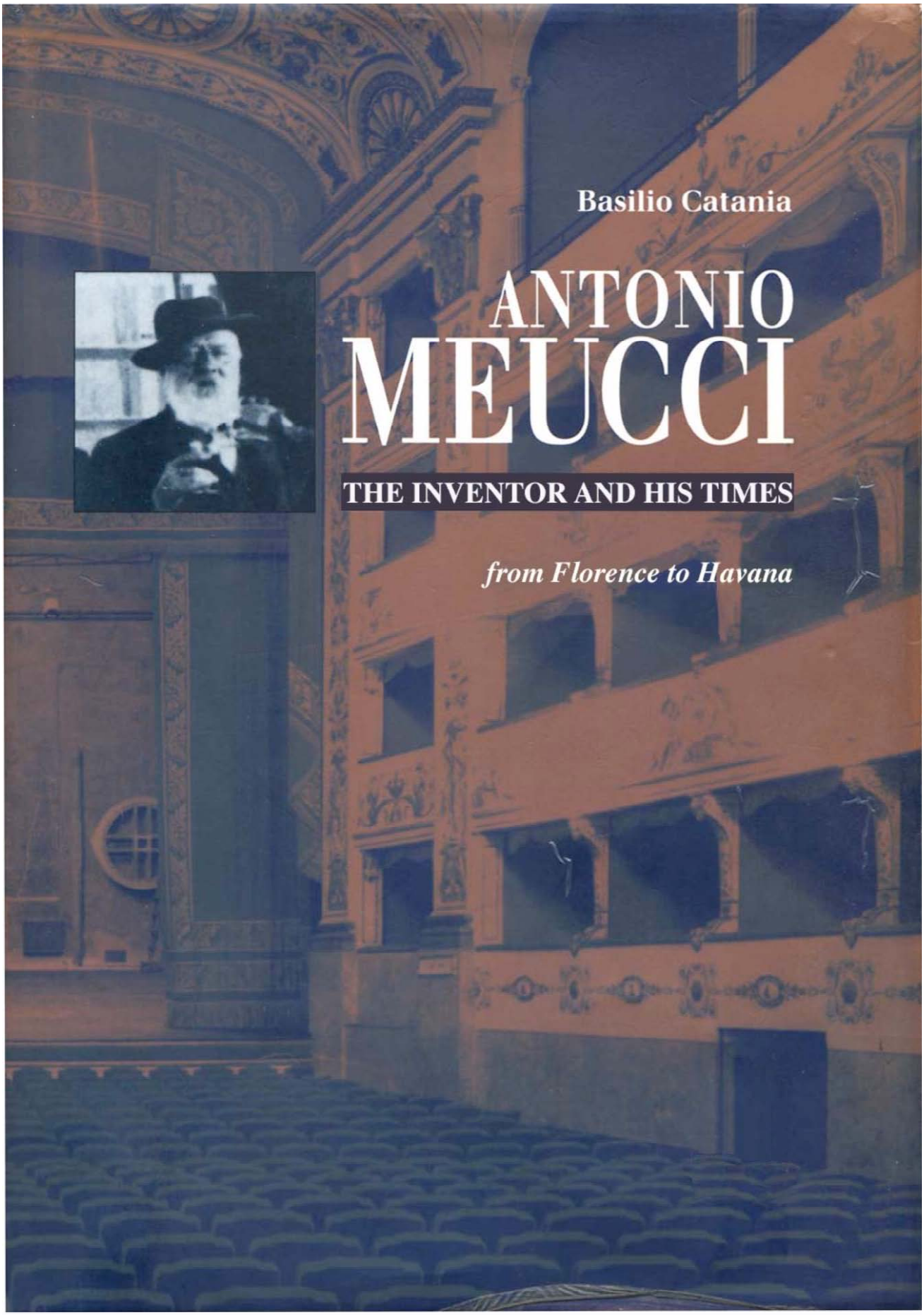

Basilio Catania

ANTONIO MEUCCI

THE INVENTOR AND HIS TIMES

from Florence to Havana

PRESENTATION

BY CESARE CALENO, SEAT EDITOR IN CHIEF

ANTONIO MEUCCI - THE INVENTOR AND HIS TIME. THIS EXTENSIVE WORK ALLOWS TO PARTICIPATE DIRECTLY IN THE EVENTS OF AN EPOCH RICH IN THE FERMENT WHICH WAS STIRRED UP BY THE FRENCH REVOLUTION AND UNFOLDED DURING THE ITALIAN RISORGIMENTO, BUT IN A MUCH WIDER HORIZON WHICH INCLUDES CENTRAL AND NORTH AMERICA.

BASILIO CATANIA SYSTEMATICALLY RECONSTRUCTS THE HISTORICAL, GEOGRAPHICAL, AND CULTURAL ENVIRONMENTS WHICH ACCOMPANIED THE TRACKS OF ANTONIO MEUCCI IN THE COURSE OF ALMOST A CENTURY: THE NINETEENTH CENTURY.

A QUARTER OF A CENTURY IN ITALY, IN THE FLORENCE OF THE GRAND DUKE, HIGHLY LIBERAL BUT ALSO DETERMINED TO QUELL THE YOUTHFUL INTEMPERANCES OF THE IMPETUOUS REVENUE-OFFICER. ALMOST TWO DECADES IN THE EXCITEMENT OF CUBAN LIFE, WHERE HIS JOB AS THEATER MECHANIC AT THE OPERA HOUSE OF HAVANA INTERTWINED WITH THE RESULTS OF A LIFE FULL OF CURIOSITY AND RESEARCH WHICH RANGES IN VARIOUS FIELDS, WITH A COMMON DENOMINATOR CONNECTED TO THE STUDIES ON ELECTRICITY AND ITS APPLICATIONS: FROM ELECTRODEPOSITION TO ELECTRIC SHOCK THERAPY, WHICH ALLOW HIM TO BE THE FIRST IN THE WORLD TO ENVISAGE THE POSSIBILITY OF TRANSMITTING THE HUMAN VOICE AT A DISTANCE. BUT THE CUBAN PERIOD SEES MEUCCI AS A FORTUNATE ENTREPRENEUR ENGAGED IN DIFFERENT ACTIVITIES: FROM THEATER MECHANICS TO GILDING THE HILTS OF THE GUARDS, TO WATER PURIFICATION AND SOFTENING AND EVEN TO TAXIDERMY.

THE FORTY YEARS OF LIFE IN THE UNITED STATES ARE THE LIVING WITNESS OF THE DIFFICULTIES WHICH ANY IMMIGRANT WOULD CONFRONT IN THE NEW COUNTRY, FULL OF OPPORTUNITIES BUT EVER SO DIFFICULT. THIS IS WHERE MEUCCI MET HIS MISADVENTURES, FROM THE UNFORTUNATE EXPERIENCE WITH A CANDLE FACTORY TO THE MANY FINANCIAL PROBLEMS ON ACCOUNT OF WHICH HE EVENTUALLY LOST ALL ADVANTAGES FROM HIS INVENTION.

AFTER HIS DEATH, THE IMAGE OF THIS MAN AND INVENTOR AROUSED GREAT INTEREST AND ENTHUSIASM, ESPECIALLY IN THE JOURNALISTIC ENVIRONMENT, BUT NEVER, PRIOR TO THIS BOOK, WAS SERIOUS AND DOCUMENTED RESEARCH CARRIED OUT WHICH COULD PROVIDE THE INTERNATIONAL SCIENTIFIC COMMUNITY WITH VALID ELEMENTS ON THE BASIS OF WHICH TO REVALUE THE GREAT FLORENTINE INVENTOR.

THE RESEARCH CONDUCTED BY BASILIO CATANIA ON THE LIFE OF ANTONIO MEUCCI, GATHERING ANY DOCUMENT THROUGH WHICH THE PERSONAGE COULD COME BACK TO LIFE, IS ACCOMPANIED BY AN EQUALLY ACCURATE “INVESTIGATION” INTO THE SOCIETY, THE CULTURE AND THE SCIENTIFIC BREAKTHROUGHS OF THE TIME, SO AS TO ALLOW THE READER TO FULLY PARTAKE IN THE TROUBLES, THE JOYS AND THE VERY SENSATIONS OF AN EPOCH.

BASILIO CATANIA WAS BORN IN MALETTO (CATANIA) IN 1926. HE GRADUATED AT THE POLYTECHNIC OF MILAN IN ELECTRICAL ENGINEERING. HE WORKED FOR APPROXIMATELY TWENTY YEARS AT MAGNETI MARELLI, CONDUCTING RESEARCH IN THE FIELD OF GROUND AND SATELLITE RADIO LINKS. HE THEN MOVED TO TURIN'S CSELT, OF WHICH HE WAS THE DIRECTOR FOR MANY YEARS. HE PERFORMED RESEARCH IN THE FIELD OF RADIO COMMUNICATION AS WELL AS IN THAT OF CIRCULAR WAVEGUIDES, FIBER OPTICS, OPTOELECTRONICS, ARTIFICIAL INTELLIGENCE AND COMPUTER AIDED DESIGN OF INTEGRATED CIRCUITS. THE RESEARCH ON FIBER OPTICS IN PARTICULAR MADE CSELT FAMOUS WORLDWIDE. PROFESSOR AT THE MILAN AND TURIN POLYTECHNICS, HE IS THE AUTHOR OF SOME SEVENTY PUBLICATIONS AND TEN PATENTS.
IN ACKNOWLEDGEMENT OF HIS EXTENSIVE RESEARCH WORK, HE WAS AWARDED THE *AMBROGINO D'ORO* PRIZE OF THE CITY OF MILAN, THE *EUROTELECOM* PRIZE FROM THE KING OF SPAIN ON BEHALF OF THE EUROPEAN UNION, THE *IEEE FELLOWSHIP* AND THE *GUGLIELMO MARCONI* PRIZE FROM THE ITALIAN ELECTROTECHNICAL ASSOCIATION (AEI).

ANTONIO

MEUCCI

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Basilio Catania

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OUTLINE OF THE WORK

Volume One
Florence 1808-1835
Havana 1835-1850

Volume Two
New York 1850-1871

Volume Three
New York 1871-1889

Volume Four
Post Mortem

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FOR SOME REASON, I SUSPECT THAT THE AVERAGE READER HATES FOREWORDS, INTRODUCTIONS, PREFACES, AND THINGS OF THE SORT. PERHAPS IT'S BECAUSE HE/SHE FEARS THAT THEY ARE INTENDED TO INFLUENCE OR RESTRICT HIS FREEDOM OF JUDGEMENT. PERHAPS IT'S BECAUSE THEY DELAY THE READING OF THE CENTRAL TOPIC, WHICH INDUCED HIM/SHE TO PURCHASE THE BOOK IN THE FIRST PLACE. OR (PERHAPS) - UNDER THE BEST OF CIRCUMSTANCES - IT'S BECAUSE THE AVERAGE READER DEEMS THAT THE VARIOUS FORMS OF INTRODUCTION ARE INTENDED TO SATISFY SOMEBODY ELSE, MAYBE THE AUTHOR HIMSELF, OR EVEN A CELEBRITY, SUMMONED TO PLACE HIS AUGUST SEAL WITH A VIEW TO DIGNIFY THE PRODUCT THAT IS TO BE LAUNCHED: IN OUR CASE, A BOOK ON ANTONIO MEUCCI.

BY THE SAME TOKEN, I ASKED MYSELF HOW I COULD PRESENT THIS WORK, WITH THE SINCERE INTENTION TO MEET THE NEEDS OF THE READER. MY ANSWER TO THIS WAS: MAKE THE INTRODUCTION VERY SHORT.

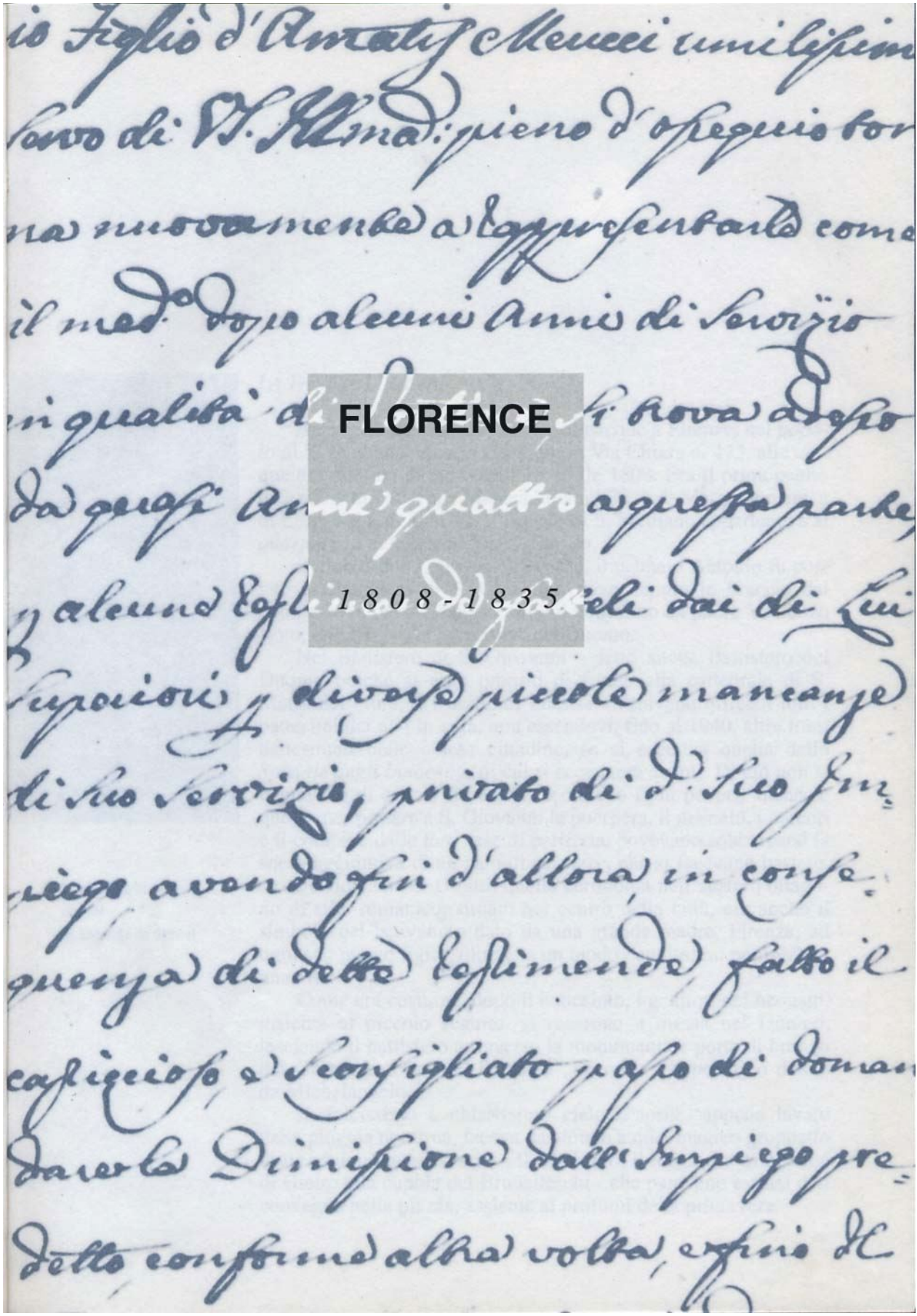
LIKEWISE, I HAVE TRIED NOT TO INTERRUPT THE THREAD OF THE STORY WITH FOOTNOTES, CLARIFICATIONS OR EVIDENCE SUBSTANTIATING THE FACTS, ALTHOUGH THIS WAS MY INTENTION AT FIRST. THEREFORE, DOCUMENTS AND NOTES ARE TO BE FOUND IN THE APPENDICES OF THE VARIOUS SECTIONS OR IN SHORT INSERTS, CONTAINED IN THE CHAPTERS IN TINY PRINT WHICH THE READER CAN SKIP AND GO BACK TO LATER, THEREBY AVOIDING HAVING TO INTERRUPT THE READING OF THE MAIN TEXT.

HOWEVER, I MUST HIGHLIGHT THAT THE OVERALL DOCUMENTARY MATERIAL THAT I HAVE COLLECTED IN EUROPE AND IN AMERICA AMOUNTS TO SOME THIRTEEN THOUSAND PAGES OF PRINTED OR TYPED RECORDS AND SOME ONE THOUSAND PHOTOGRAPHS AND MANUSCRIPTS. THERE WAS NO WAY TO SQUEEZE ALL OF THIS ROUGH MATERIAL INTO A WORK WHICH IS ALREADY CONSPICUOUS AS IT IS. THEREFORE, IN AGREEMENT WITH STET, I HAVE DECIDED TO DONATE THIS COLLECTION TO THE *MUSEO STORICO DELLE POSTE E DELLE TELECOMUNICAZIONI* OF ROME, AND DUPLICATES THEREOF TO THE *GARIBALDI-MEUCCI MUSEUM* OF STATEN ISLAND, N.Y. (USA), WHERE IT CAN BE CONSULTED BY DEMANDING READERS AS

WELL AS BY OTHER EXPERTS IN THE FIELD. INDEED, NOTWITHSTANDING THE MAGNITUDE OF THE PRESENT WORK, THERE IS STILL PLENTY OF ROOM FOR FURTHER RESEARCH AND IN-DEPTH STUDIES ON THE TOPIC. AT ANY RATE, THE READER WILL FIND AN INDEX OF THE MATERIAL COLLECTED IN SPECIFIC SECTIONS OF THE GENERAL BIBLIOGRAPHY, AT THE END OF EACH VOLUME, AS THE VARIOUS VOLUMES OF THIS WORK WILL BE PUBLISHED SUBSEQUENTLY. THE PUBLISHER IS ALSO CONSIDERING OFFERING TO SCHOLARS INVESTIGATING THE SUBJECT AN EXTENSIVE COLLECTION OF SUCH DOCUMENTS IN THE FORM OF CD-ROM DISCS.

FINALLY, THE READER SHOULD BE AWARE THAT ALL THE DATES, NAMES, PLACES AND CIRCUMSTANCES MENTIONED IN THE FOREGOING DOCUMENTS HAVE BEEN INSERTED IN THIS WORK IN VARIOUS WAYS, SOMETIMES IN THE FORM OF DIALOGUES BETWEEN THE CHARACTERS INVOLVED, SO AS TO MAKE THE READING LESS BURDENSOME. MOREOVER, THE GAPS OF DOCUMENTED INFORMATION WERE INEVITABLY FILLED WITH LOGICAL DEDUCTIONS -- THOUGH VERY CAUTIOUSLY -- AS SHERLOCK HOLMES'S RULE, ACCORDING TO WICH, *ELIMINATING THE IMPOSSIBLE, WHATEVER IS LEFT MUST BE THE TRUTH*, CANNOT BE ENTIRELY RELIED UPON.

I DEDICATED SIX YEARS OF MY LIFE, WORKING ALMOST FULL TIME, TO SHED LIGHT ON THE LIFE OF ANTONIO MEUCCI. IT SEEMED RIGHT TO ME, AS THE TELEPHONE - OF WICH MEUCCI WAS THE PIONEER - HAS BECOME AN INDISPENSABLE TOOL FOR SOCIETY, AS WELL AS BECAUSE THE LIFE OF THIS MAN CANNOT FAIL TO MOVE ANYONE WHO UPHOLDS THE HIGHEST VALUES OF MANKIND. YET, MY COMMITMENT WOULD HAVE BEEN VAIN WITHOUT THE CRUCIAL CONTRIBUTE OF STET, ESPECIALLY THAT OF DR. UMBERTO SILVESTRI, AS WELL AS OF A GREAT DEAL OF PEOPLE, WHO ARE LISTED AT THE END OF THE BOOK, BUT WHOM I WOULD LIKE TO THANK HERE, IF COLLECTIVELY, BEFORE WE RAISE THE CURTAIN ON THE FIRST ACT OF ANTONIO MEUCCI'S STORY.



FLORENCE

1808-1835

THE CHILDHOOD

Antonio Santi Giuseppe Meucci was born in Florence, in the S. Frediano quarter, parish of Cestello, in 475 Via Chiara, at five o'clock in the morning of Wednesday, 13 April 1808. He was the first-born child of Amatis, son of Giuseppe Meucci, aged 32, and Maria Domenica, daughter of Luigi Pepi, aged 22. The S. Frediano quarter belonged to the S. Spirito district (or delegation).

On the following day, Thursday April 14, the newborn Antonio was taken to the Battistero di S. Giovanni (the baptismal church of S. Giovanni) where, held by Antonio Tassi, the godfather, he was baptized by father Vincenzo Boni, one of the baptizing priests of the Duomo.

The Battistero di S. Giovanni - also known as the Battistero del Duomo for it stands facing the cathedral of Sta. Maria del Fiore, Florence's Duomo - is where baptism was administered to all of the children born in the city, since, up until 1940, there had been no other baptismal fonts in the churches of the city, with the exception of the one situated at the *Spedale degli Innocenti* (the Foundling Hospital), which will be mentioned later. The Florentines certainly did not complain about this, not even the poorest ones, although the latter, in order to take the mother, the infant, the relatives and the godfather from their homes on the outskirts of town to S. Giovanni, had to take upon themselves the additional cost of a couple of coaches, which they had to squeeze into. Indeed, the ceremony in the austere Romance octagon, situated in the center of town, also symbolized the welcome bid by a great mother, Florence, to every one of her newborn children, in addition to being a most respectable way to begin one's life.

The house where Antonio Meucci was born (the second to the right)

As was the custom, after the baptism, the parents of the new- born child together with the small party attended mass at the Duomo, exiting the baptistery through the monumental bronze door by Ghiberti, which was said by Michelangelo to be "of paradise."

The sweet, clear April sky, just washed by the night rain, provided the background to that magical set of architectural jewels - the Baptistery, the exquisite belfry by Giotto and Brunelleschi's dome - which seemed to have convened in the square, together with the scents of Spring.

The Battistero di S. Giovanni and the Duomo of Florence

As can well be imagined, it was a moment of great emotion for Amatis and Domenica, who, in turn, clasped in their arms the first life they had brought into the world.

Grandfather Giuseppe, Amatis's father, "tall and slim" like the cypress trees of the Tuscan hills celebrated by the poet Carducci, and with a curled mustache, had shining eyes, whether out of pride or masked emotion, was not clear. In Florence - he thought to himself - there are many Meuccis, that do not even know each other and who knows where they all come from. Yet grandfather Giuseppe felt that this first son of Amatis, Antonio, son of Amatis, son of Giuseppe Meucci (that is how people called themselves at the time, in order to distinguish themselves from others of the same name whom they were bound to come across, since the city's founder families were few), would have become known worldwide. All grandfathers are the same…

Also the maternal grandfather, Luigi, was happy, although, as usual, he was overprotective of his daughter. Indeed, he hobbled beside her, supporting her and constantly asking whether she was not feeling too weak alter the difficult birth, telling her it would have been better if she had stayed in bed, for surely the men could have taken care of the baptism by themselves… that at least they could do!

Registration of Antonio Meucci's baptism (Archives of Sta. Maria del Fiore, Florence)

After mass, it was time for everyone to go home. The men, among whom there was also Francesco Tassi, father of the godfather and a great friend of Giuseppe Meucci's - said they would gladly walk home (also to avoid having to hide a coach). Domenica, however, with little Antonio in her arms, the grand mother and grandfather Luigi, who did not leave his daughter for an instant, took one of the many coaches that were stationed around the baptistery and went home to Via Chiara, urging the men not to be late, for lunch was to be served at one o'clock sharp.

Amatis, the happy father, was feeling overjoyed and suggested they cross the Arno by way of Ponte Vecchio and head for Palazzo Pitti, from where they would make their way home, turning to the right of Piazza Pitti towards Via S. Agostino. Indeed, Via Chiara coincided with the short stretch of today's Via de' Serragli which extends between Via del Campuccio and Via S. Agostino. The route suggested by Amatis was by no means the shortest, but it was undoubtedly the most… noble. Yes, because the popular *oltr'Arno* districts - namely the ones on the left bank of the Arno - such as that of S. Spirito, which included the S. Frediano quarter, certainly did not offer the splendid sights of the right bank (unlike Paris), with the exception precisely of the vast area of Palazzo Pitti and the elegant Boboli garden situated in the back of it.

Amatis led the group of men, excitedly communicating outlandish projects for the newborn child to Antonio Tassi, the godfather, who walked beside him, delighted that he and his godson shared the same name. Grandfather Giuseppe and his great friend Francesco Tassi followed a few steps behind; excited by the happy event - which also marked the onset of their third generation - they were getting carried away making comparisons with the past and forecasts for the future, plunging into political considerations. Both, being almost the same age, had grown up under the rule of the Lorraines. Of the Medici they remembered only what they had heard from their fathers, since the Medici dynasty had ended on the death of Gian Gastone in 1737, a few years before the two friends were born.

"I don't understand," Francesco Tassi said to grandfather Giuseppe, *"how you, looking like an Austrian the way you do, can sympathize with the French. Freedom and equality are grand words, but what has changed for us Florentines? The French come and what do they do? They expel Grand Duke Ferdinand and after a while they come out with a Duchess; "Grand Duchess" Elisa Baciocchi, sister of Napoleon … And do you know what the difference is? That Elisa Baciocchi doesn't come from an aristocratic family, like the Medicis or the Lorraines, and that she rides a horse instead of a coach!."* And here Tassi, as a true Tuscan, made a grin implying the double meaning of his words.

"Well, yes, Francesco," Giuseppe Meucci replied, *"I agree with you on that: the music doesn't change simply because the musicians do. And perhaps you are also right in saying that the old musicians played better… but it's the score that is different! When it is played well - and by an Italian orchestra - you'll see…"*

Apparently, neither one was upset with the Lorraines, who ruled Florence from the fall of the Medici to the unification of Italy, thus for over one hundred years, disrupted only by the French intermission which lasted some fifteen years and occurred during the period in question. Those one hundred years were almost equally distributed among Francis of Lorraine, first Grand Duke (who succeeded the Medici), Peter Leopold (who subsequently rose to the throne of Austria), Ferdinand III, his son, and Leopold II, son of Ferdinand III and last of the Grand Dukes, who was forced to flee from Florence when the unification of Italy was accomplished. Therefore, each of them ruled Florence for approximately one quarter of a century, save for Ferdinand III who, expelled by the French and restored to power after their final defeat, in 1814, ruled for approximately 19 years on the whole.

It can be easily understood how each of the Lorraines, having ruled a sufficiently long period of time, was able to guaran-

tee exceptional political stability to the Grand Duchy. Furthermore, they ruled quite well for the time, and this was also due to the great skills of Maria Theresa of Austria, who exerted her direct influence over three of the four Grand Dukes of Tuscany, namely Grand Duke Francis, whom she was married to, Peter Leopold, her son, and, in part, also over Ferdinand III, her grandson. In turn, however, the Lorraines - and Maria Theresa of Austria herself - were strongly influenced by the Italian political environment, which, to a certain extent, allowed them to rule longer, having sufficiently met the desires of the people, and having given impetus, in particular, to humanistic and scientific progress. Furthermore, the influence of Vienna, upon the separation of the thrones of Tuscany and Austria attained under Peter Leopold, was mitigated for a long time, conferring to the Grand Duchy of Tuscany a character of its own, independent and typically *Tuscan*.

The small group comprised of the two Meuccis and the two Tassis soon came within sight of the Arno and joined the small crowd which, a little after the striking of noon, gathered at the Ponte Vecchio. Here, although its view was obstructed by the shops of the goldsmiths and jewelers, the presence of the Arno was felt for the slightly more humid air and the captivating gurgling of its waters, swelled by the rainfall of the previous days, which mingled with the chatter of the passers-by, making it sweeter and softer.

Having descended the few steps on the other side of the bridge, the small group accelerated, taking Via de' Guicciardini, and slowed down towards the end of the street, which leads to Piazza Pitti. Here, the sight was far from pleasant: in the huge square facing the monumental palace - the aspect of which was fearful on account of its rusticated walls, juxtaposed in three decreasing orders of length - instead of the few grand ducal guards with their perfect uniforms and accurately controlled carriage, were the bivouacs of the undisciplined Napoleonic soldiery, as shabby and insolent as - so they said - it was brave in battle.

Amatis suddenly grew worried that they might be provoked by the soldiers and invited his friends to leave the square, rapidly deviating towards Via S. Agostino, which led them straight home, because - he said to them with doubtful indifference - it was really getting late and Menica would be furious if lunch were to get cold…

Little Antonio grew splendidly: he was hardy and lively, and with each passing day he looked more and more like his grandfather - grandfather Giuseppe, that is - on whose lap he often played. Perhaps, unlike his grandfather, he had a fine and sensitive personality. Amatis hoped that he would not take from his grandfather also the marked passion for women,

which old Giuseppe carried with him - perhaps now more than ever - ever since his more ardent years. On the contrary, Amatis was a very strict man, in every sense, but particularly in that which concerned his duties towards work and the family.

Amatis believed one should always be consistent with commitments made and with the wise rules of life. But he was also a good and generous man. On his mother's death, which occurred a few years after the birth of Antonio, he took it upon himself to support Giuseppe, often also putting him up for the night. Also for this reason he was forced to move into a bigger house, which entailed much greater costs. On the other hand, the two small rooms rented on Via Chiara were barely sufficient for him and his wife Domenica, and when their child Antonio was born they decided to look for a bigger place.

Before the advent of the French, Amatis was employed at the so-called *"Buon Governo Comune"* or *"Buon Governo Toscano,"* commonly known as the *"Buon Governo"* - expressions which accurately represented the paternalism of the ruling dynasties of the time - as *Custodian of the Square of the Buon Governo*, which more or less corresponds to a modern-day non-commissioned officer of the municipal police, detailed for *Piazza Montecitorio* or *Piazza del Quirinale* in Rome. The Grand Duchess Elisa Baciocchi certainly did not worry about expelling the lowest ranks of the employees of the Buon Governo, therefore, Amatis had no trouble keeping his job, even after the arrival of the French. On the other hand, his colleagues ad superiors were well aware of the fact that Amatis was constitutionally immune to any political contamination, hence he was unable to give any sort of trouble to the old as well as to the new rulers.

His salary was not very high, but Amatis had become familiar with all the administrative meanders, whereby to obtain bonuses and subsidies to supplement his salary, taking advantage of all possible opportunities, but also trusting his proven integrity as a government employee. Sometimes, however, not even the subsidies sufficed and Amatis was forced to present petitions to the Buon Governo, requesting advances on his salary or even loans. A dozen petitions signed by Amatis Meucci can be found in the State Archives of Florence. Domenica helped him as she could, knitting until late at night by the dim light of the oil lamp to earn some money making cotton or woolen socks, commissioned by her neighbors.

In the new house on Via dello Studio (house no. 765) in the S. Margherita de' Ricci quarter, on 27 September 1809, Amatis' family was gladdened by the birth of a little girl. She was baptized Maria Maddalena Elisa, but everyone called her

Maddalena. One might say that, from the birth of the firstborn son Antonio, every one and a half years Amatis' family was blessed by the birth of a new child. Indeed, Domenica brought into the world nine children on the whole in the first fourteen years of marriage. However, four of them died very young. One was little Maddalena, who died on 7 November 1813; she was just over four.

The small door of 44, Via de' Serragli (formerly 475, Via Chiara)
Notice that four families still live there

When Domenica became pregnant with her third child (another girl) Amatis was forced to move the family again, thus they went to live on Via dei Pucci, in house no. 6119, in the S. Michele Visdomini quarter. The reader must know that at the time the Napoleonic numbering system was in force, according to which the houses were numbered regardless of the street they were on. Therefore, as there were in Florence slightly over twenty thousand houses, the street numbers (i.e. house numbers) went from 1 to over 20,000. On 29 May 1811, Maria Assunta Adelaide, called *Adelaide* by everyone, was born in the house on Via dei Pucci. But soon thereafter Domenica became pregnant once more and, needless to say, they had to move yet again. The new house, number 6766, was located on Via dei Pilastri, in the S. Ambrogio quarter. This is where their third daughter was born on 13 August 1813; Domenica decided to call her *Luisa* - who was later nicknamed *"Gigia"* - obviously in grandfather Luigi's honor. At her baptism she was also given the names Maria Giuseppa. However, the name Maria was given to practically all newborn girls (sometimes to the boys as well) while Giuseppa was obviously thrown in to please the paternal grandfather.

When in February 1814 the French left Florence - taking with them as a *souvenir* countless works of art - and the Lorraines were restored with Ferdinand III, Amatis was overjoyed. No, he just was not cut out for revolutions, for the winds of popular democracies and things of the sort; he was made for order and discipline, although, after all, being a man of the people, he was one of those who had to… endure discipline.

Amatis, the father of Antonio Meucci

Just over a year later, the Vienna treaty was signed, which marked the victory of dynastic Europe and of the conservative courts over France, whose revolutionary ideology and philosophy of popular sovereignty (the so-called democracy), wanted people to be not *subjects* but *citizens* in every part of the world. The Vienna treaty drew up the new political map of Europe. In particular, Austria gained Milan, Venetia and Trieste, which were joined administratively under the so-called Lombardo-Venetian Kingdom, thus shattering the illusions of the first idealists of Italian unification. The rest of Italy was divided into eight States, in addition to the Republic of S. Marino, namely, from the North down: the Kingdom of Sardinia - comprised of Piedmont and Sardinia, and now also Liguria,

which was taken away from France - the four Duchies of Parma, Modena, Massa and Lucca, the Grand Duchy of Tuscany, the Papal States and the Kingdom of the Two Sicilies. No-one seemed to notice the great fire - which was to start burning some years later and would then ignite all of Europe (actually almost the entire world) - smoldering under the very ashes of the French defeat, a defeat which failed to drag into its own tomb the ideals of democracy, vented by the revolution, along with the blood and the corruption that had accompanied them.

Antonio was growing up and it was his second year in elementary school, or, as it was called at the time, the school for *reading and writing*. He had therefore already entered the age of discretion, as they say. At school he immediately displayed such outstanding intelligence and skills that Amatis, although burdened by the strained financial conditions and his many children, began to search for a way to allow his eldest son to pursue his studies.

"There are more than six years to go for the Accademia!" grandfather Giuseppe said, seeing him so wrapped up in the projects for his son Antonio, *"You know they don't admit anyone under thirteen, actually, they suggest waiting till fourteen or fifteen. So… why dream and brood over it, Amatho'?"* (No matter how hard he tried, every now and then he could not avoid aspirating his ts, the way Tuscans do). But it was no use, for Amatis was just that way. He could not even begin to think that someone who is responsible for a family shouldn't start to worry in due time and in great detail about everything that *needed to be done*.

It was Gigia's turn to play on grandfather's lap, grandfather Luigi, naturally, who now spent more time in the house of his son-in-law, also to see for himself how the latter treated his poor daughter, to whom he had inflicted the distress of three pregnancies, after that first, painful delivery… Grandfather Giuseppe couldn't stand him and when grandfather Luigi arrived grandfather Giuseppe left, muttering a stiff *"How are you?…."* And he went off to chat at the vintner's - where he occasionally attempted to dishonor some provocative servant out doing her shopping - or he would go for a walk, taking his little nephew Antonio along, also in order to deliver him from the mawkish influence of grandfather Luigi.

One of the destinations of their walks was the construction yard of the new Goldoni Theater, at the corner of today's Via de' Serragli and Via S. Maria.

"*Grandpa,"* little Antonio once asked, pointing to an outdoor area, to the left of the main building, "*why are all those steps shaped like half a doughnut?" "Because,"*

grandfather Giuseppe replied, *"next to the theater they are going to build a big arena, like the ones of the ancient romans, for daytime performances… And, do you know how the ancient romans called these theaters, shaped like half a doughnut, as you say?.… Am- phi- the -a-ters !…"*

Many curious people strolled around the yard of the Goldoni. Of course, there were other theaters in Florence - the most important one being the prestigious Teatro della Pergola, built more than one and a half centuries before - but there were none on the left bank of the Arno. The aim in erecting a theater there, which was attributed to Ferdinand III, was *to build a pole of attraction for the middle-class in the living fabric of the S. Frediano and S. Spirito quarters, popular quarters characterized by the presence of the lower classes and artisans*.

The Goldoni Theater was inaugurated on 7 April 1817, in an atmosphere that was not quite favorable, owing to the frequent famines and typhus fever epidemics which had prostrated the Florentine population. The secret aspiration of its conceiver, Luigi Gargani, was that the Goldoni Theater, being so close to Palazzo Pitti, would become the official theater of the Court - a role which traditionally belonged to the Teatro della Pergola - but this did not happen in the years that followed its inauguration. Notwithstanding, the Goldoni became known as the *Grand-ducal Theater*, or *Goldoni Grand-ducal Theater*, for the few times that the Grand Duke honored it with his presence. As for the rest, the Goldoni was frequented, especially on Sundays, by the common people of S. Frediano, who favored tragedies, their excitement rising to fever pitch upon the deaths of tyrants and traitors.

Shortly before the inauguration of the Goldoni, Amatis had once again moved with his family, this time taking a big step in order to avoid having to look for a new house more or less every one and half years, in other words, upon every new birth. Indeed, they moved into *Casa Pasqui*, in the central quarter of S. Michele Visdomini, where they stayed for fifteen years approximately, precisely from 1817 to 1332. The so-called Casa Pasqui was simply Florence's house no. 6412, owned by the *Most Illustrious Mr. Filippo Pasqui* (he is thus mentioned in the religious census of S. Michele Visdomini), who was also the owner of the adjacent house no. 6411, where he lived with his wife and children. The two houses were in an excellent position, at the junction between Via de' Servi and Via del Castellaccio, a stone's throw away from Piazza del Duomo and one block away from the Accademia di Belle Arti (the Academy of Fine Arts), where Amatis had decided to send Antonio, when he reached the age. Until 1821 both houses were indicated as belonging to Via del Castellaccio, while after 1821 as belonging to Via de' Servi. Fortunately, the

Napoleonic numbering system was still in force, therefore it still remained *house no. 6412*.

The first child to be born in Casa Pasqui (on 11 September 1817) was Giacinto Luigi, *Gigi* to the family. According to the documents retrieved at Florence's State Archives, during his first months of life Luigi endured many hardships. For reasons unknown, but certainly connected to Amatis' indigence, the

LO SPEDALE DEGLI INNOCENTI - THE FOUNDLING HOSPITAL

The Spedale degli Innocenti stands today, in Florence, in the same site - Piazza della SS. Annunziata - where, on the basis of the project by Brunelleschi, its foundation stone was laid on 19 August 1419. From the outset its purpose was to care for abandoned children.
Its construction underwent various interruptions and vicissitudes that delayed the opening of the Spedale, which occurred only on 25 January 1445. The first child abandoned by her parents was taken in by the Spedale on 5 February 1445; she was given the names Agata and Smeralda. Thereafter, the young foundlings cared for at the Spedale were given names like Degli Innocenti, Innocenti, Nocenti, Nocentini, as well as Azzurri, Azzarri, Azzerri, Azzorri and others still. An excerpt from the excellent work of 'Lo Studiolo,' listed in the bibliography, reads as follows (translation):
"…Originally, the foundlings were left in the "pila" (basin) or "presepe" (crib), namely a holy water stoup of sorts situated under the outside colonnade, to the right (visible in the ancient seal of the Spedale), over which there was a small window that communicated with a room on the inside where a woman was on duty, always on the ready. The first year, ninety infants were left there. This "pila" was removed in 1660, when the famous "rota" (wheel)[1] was built on the left side of the same colonnade, to which, in 1875, on the occasion of its closing, the famous inscription by Isidoro Del Lungo was added, which reads: "For four centuries - until 1875 - this was the 'ruota degli Innocenti' (the wheel of the innocents) secret shelter of miseries and guilts - which are relieved by the charity that never shuts any door." In 1699 a grating was put up around the "rota" in order to prevent older children from being left there. This unique children's town (…) was to provide an exceptionally taxing and extensive public assistance service, considering that only during the first three years the Institute took in as many as two hundred and sixty young lodgers.
The Spedale was financed essentially by its patron trade guild [*Arte della Seta,* the Silk Guild, Editor's note]. *Indeed, ever since 1488, all the silk merchants were obliged to pay one soldo per lira on the spinning and weaving of silk and two soldi on the weaving of imported silk. In addition, there were the provisions as well as gifts and bequests which, with the passing of time, formed a conspicuous fortune. According to a statistical survey of 1506, there were four hundred and fifty "mouths" inside the Spedale and eight hundred and seventy children outside* ["children put out to nurse," Editor's note]. *Women were invited from the town and from the country to nurse the children, and they were paid a small sum for their service; at times women "slaves," of which there were*

[1]The 'rota' was actually a wheel, revolving on a horizontal plane, on which the child was placed. By turning the wheel the child was picked up on the inside, without there being any possibility to identify the person who had brought him. The 'rota' was walled up in 1875.

The "rota degli innocenti," whereby foundlings were introduced into the Spedale

many in the high class homes, were recruited for this purpose. From the outset, the legal institution of adoption was favored. More often, however, children, both boys and girls, were temporarily raised by families, and at the age of seven, they returned to the Spedale: the former after having learned to read and write, and having been taught grammar and some trades, were sent to artisan shops where they easily found lodging, whereas the girls worked for the Silk Guild. In the "Ricordi dello Spedale" (Memoirs of the Foundling Hospital) it is written that the Grand Duke himself did not hesitate to pick up unfortunate adolescents and send them to work on his war ships.

In June 1577 Grand Duke Francis, on a visit to the Spedale, having been informed that there lacked wet-nurses, said that in Spain dairy cows were kept to provide milk for children… he thus had one sent from Romagna which provided milk that can be fed to children and that is good for them. This is the oldest recollection of artificial nursing…

According to a statistical survey of 1774, in one year an average of nine hundred and ninety children was admitted into the institute with a mortality rate that reached frightening peaks (up to 83%).

The most frequent cause of death was smallpox; for this reason, already in 1756 the first vaccination experiment was performed…

On December 7, 1805, a decree issued by Maria Theresa regent of the throne of Tuscany marked the beginning of a new era in the history of abandoned children; an attempt was made to avert the abuse of the introduction into the foundling hospital of legitimate children, who could be admitted into the latter only once the doctor of the Spedale ascertained the actual financial difficulties of the family[2]… Since it was discovered that the infants. often taken to the Spedale in precarious conditions, were damaged by the need to take them out once again to be baptized in San Giovanni, with a decree issued on Maria Theresa's own initiative, an absolutely exceptional event in Florence, it was established that a baptismal font would be built in the Spedale.

In 1841 one thousand four hundred and two children were placed in the 'rota'…"

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[2]This might be the case of the little Luigi Meucci.

newborn child was initially entrusted to public charity, at the *Spedale degli Innocenti*. A few months later (February 1818), however, he is registered, under the name of *Luigi*, in Amatis' home, and thus he continued to appear in the following *religious censuses*, up until Luigi got married and formed a family of his own. However, until 5 April 1820, the date on which the Tribunal validated the parents' recognition, he was registered by the Buon Governo as *Giacinto degli Innocenti*.

This leads to think that Amatis and Domenica, after having entrusted him to the *Spedale degli Innocenti*, took him back into their home to raise him, earning the small compensation that the *Spedale* granted to the families that offered to raise the young foundlings until they came of age, as is better described in the insert.

Prior to the birth of Luigi, yet after the 1815 Lent census, another daughter was born in the house on Via de' Pilastri, by the name of Maria Giuseppa, the baptism of whom, however, has not been traced.

However, Maria Giuseppa no longer appears on the religious censuses after the one of 1817; therefore she must have died between the ages of one and two, presumably in one of the many typhus fever epidemics that broke out in Florence at the time. Another little girl, the baptism of whom has not been traced, is registered as Maria Assunta in the 1819 religious census and indicated as deceased in the one of 1820, when she was not even two.

On 23 October 1818, Amatis' third son was born, Giuseppe Gustavo, *Beppe* to the family, who was destined, finally, to honor the paternal grandfather with his name and to become the pet of his older brother Antonio. Antonio was already eleven when Beppe was born and immediately felt like a second father to him, thinking of all the things he could teach him and how he would protect him from all dangers. Furthermore, his name was Giuseppe, like his favorite grandfather…

The fourth and last son, and indeed the very last child, was Roberto Lodovico Maria, who was born in the Pasqui home as well, on 15 September 1822. Unfortunately he died on 7 August 1824, when he was not even two.

THE ACCADEMIA

On 27 November 1821, at the age of thirteen and a half, Antonio Meucci was admitted to the Accademia di Belle Arti (the Academy of Fine Arts) of Florence, at the *School of Elements of Drawing*. To be admitted, one had to pass an aptitude test, since the Accademia, though free of charge,

could not take in more than a certain number of students. At the end of the first year, 1822, Antonio Meucci was judged as having *'Fair Disposition'* by maestro Pietro Ermini and his assistant Mr. Roster. Antonio thus gave great pride to his father, who had sensed that 'fair disposition' many years before, but was aware of how strict the teachers' judgments were. Suffice it to say that a famous Florentine architect, Primo Meucci, the son of a jeweler - but not a relative of our Meucci - was given the following judgment: *"He makes fair progress, but hardly attends."* Other judgments on students of the *Elements of Drawing* can be read on the same page on which the one on Antonio Meucci is reported: *"Bright and talented;" "Displays disposition but it is too early to judge;" "Has missed many lessons;" "Passable for his youth;" "Fair disposition,"* and so on.

Admission and appraisal of Antonio Meucci at the Accademia di Belle Arti

The current director of the Accademia di Belle Arti, Prof. Domenico Viggiano, commenting on the fact that in the years following 1822 no other records on Antonio Meucci can be found in the Students Registers, observed that *"at the time, once admitted, attendance was not always regularly registered over the subsequent years."* On the other hand, the sworn statement (affidavit) released by Antonio Meucci in 1885, when he resided in the United States, reads: *"…my father sent me to the primary schools of Florence until I was about fourteen years of age, when I was considered advanced enough to attend the School of Mechanics and Drawing (Accademia di Belle Arti) of Florence. I remained in the school about six years."*

Students Register of the year 1822 at the Accademia

It was thanks to the deceased Grand Duke Peter Leopold - who had his own chemistry research laboratory - that, with the statute of 3 October 1784, the ancient *Accademia delle Arti del Disegno* was transformed from a simple *corporation* of artists into an institutional body, giving it its current name, and that it was to teach technical in addition to artistic programs which were truly advanced for the time. Indeed, according to Leopold's statute, the main purpose of the Accademia was to provide *public and free education, not only in the area of fine arts but also in professional activities, involving drawing, connected to the economic stimulation of Tuscan artistic manufacturers*.

Antonio Meucci's certificate of attendance, issued by the Accademia

However, it is worth highlighting that, although the Accademia was truly free of charge for all worthy *subjects* - regardless of their social condition - Antonio's schoolmates actually all came from wealthy or well-to-do families, the reason certainly not being a latent discrimination on admission, but the obvious need for the less prosperous to send their children off to work early in order to integrate the family's income. Furthermore, the students of the Accademia were, at the time, all

boys: girls began to appear only five years after Antonio's admission.

Just how far-sighted Peter Leopold's initiative was can be deduced from the speech for the inauguration of the Accademia, pronounced on 1 January 1785 by the first Secretary of the latter, Giuseppe Bencivenni Pelli, who was also Director of the Galleria degli Uffizi: "*…Do not all aim to become Painters or Sculptors, but simply content yourselves with bringing in to the Mechanics Trades, in which many of you must seek their fortune, good principles of 'Disegno' (drawing), and with greater advantage to your families…"* (Notice the use of the word *'disegno,'* drawing, as synonym of *project*, similar to the English word *design*).

Bencivenni Pelli's speech, which clearly translated the thought of Grand Duke Peter Leopold, can be considered the prelude of the still distant institution of Engineering Schools, although in Milan there already existed not a school but a *Collegio degli Ingegneri*, which awarded the "title" of engineer to the autodidacts who displayed adequate technical skills. However, in order to obtain this said title, one of the essential requirements was *to belong to a socially distinguished family, in which no 'vile' or 'mechanical' art had been practiced for a long time*. In 1794, ten years after the founding of the Accademia di Belle Arti of Florence, but before other European cities, Paris gave life to the famous *École Polytechnique* and to the *Conservatoire National des Arts et des Métiers*, after which, as of the early nineteenth century, Engineering schools began to emerge in almost all European nations.

As regards the University, it was founded in Florence in 1321, and was later transferred to Pisa in 1472, for the *Priori* (the 'Superiors') felt the students caused too much turmoil, which was not welcome in Florence. Thus, Galileo, who taught mathematics at the University, had to ride on mule-back for many hours to go from Florence to Pisa. Under the Lorraines, in their effort to boost the arts and sciences, the University was moved back to Florence. However, like most other Italian universities at the time, it only focused on humanistic studies, with the exception of the renowned Faculty of Medicine. Furthermore, it is worth recalling the holistic vision of culture of the time, according to which all forms of knowledge were part of a single world, in which, therefore, science and art had an equal right to exist. Thus, it is easy to understand how Leonardo Da Vinci and Leon Battista Alberti were, at once, great scientists and great artists. In particular, it is common knowledge that Leonardo had a penchant for chemistry, which allowed him to develop new frescoing techniques. On the other hand, in Florence, ever since the twelfth and thirteenth

centuries, discoveries in the field of chemistry did not involve the arts alone (especially painting, which gained many new dyes) but also fostered the progress of craftsmanship, which was provided with better quality glass and enamels that were resistant to strong acids, and, therefore, in turn, were useful for the implementation of particular chemical processing.

At any rate, it is certain that, with Leopold's statute, the Accademia di Belle Arti filled an empty sector of higher education, offering to young people the opportunity to specialize also in applied sciences. Thus, in conclusion, the Accademia was to be considered an institution parallel to the University, as, on the other hand, it is still today, since it is accessed after the Liceo Artistico (art high-school), which is to say, at the age of eighteen.

Grand Duke Peter Leopold (Cloister of the Accademia di Belle Arti in Florence)

When Antonio Meucci entered the Accademia, it had undergone restructuring at least three times, after the intervention of Peter Leopold: once under Maria Luisa of Bourbon, in 1807; a second time in 1811, during the French rule, on commission of Prefect Fauchet and the Grand Duchess Elisa Baciocchi, culminating with the establishment of the *Conservatorio d'Arti e Mestieri* (Conservatory of Arts and Trades) as an integral part of the Accademia, to which the premises of the former Convent of S. Caterina were assigned; and a third time with the 1813 statute, which remained practically unchanged even after the French left Florence and Ferdinand III was restored in 1814.

In 1821, the Accademia was subdivided into three *Classes*: the traditional *Class of Arts of Drawing* (or *First Class*), basically dedicated to the *fine arts* such as Painting, Sculpture and Architecture; the *Class of Music and Declamation*, introduced by the French, who strongly promoted studies connected to the performing arts; and finally, the *Class of Mechanical Arts* (synonymous of the *Conservatorio d'Arti e Mestieri*) where all the disciplines belonging to physics and chemistry known at the time were taught. The *First Class* was situated in the old seat of the Accademia (which corresponds to the present-day one) at the end of Via del Cocomero (currently Via Ricasoli), which led to Piazza S. Marco; the second and third classes were located in the former Convent of S. Caterina, on the opposite side of Piazza S. Marco.

All beginners were obliged to follow, at least for one year, the *school* of *Elements of Drawing* as well as lessons of *Anatomy*, *Perspective* and *History-Mythology*. After the first year, they were admitted into the other schools. Attendance was quite free and informal. In the school year 1821-1822, on the whole, the three *classes* of the Accademia comprised the following *schools*: *Painting, Sculpture, Architecture, Perspective, Drawing, Ornamentation, Copper engraving,*

The Accademia di Belle Arti of Florence today , seen from Piazza S. Marco

Counterpoint, Piano, Singing, Violin, Declamation, Mathematics, Mechanics and Chemistry.

It was the famous Mr. Felice Gori, who lived in the Conservatorio and was in charge of the *Museum of Machines* and of the *Laboratory for the manufacturing of physics machines and tools*, who accompanied Antonio on a visit to the Conservatorio, on his first day of attendance, at the beginning of the second year at the Accademia. They met at eleven o'clock sharp at the entrance of the building, on Piazza S. Marco, recently restructured by Giuseppe del Rosso, who retained practically only the plan of the previously existing Convent of S. Caterina (see Appendix *The Academy of Fine Arts of Florence*).

Having walked past the lobby and the wardrobe, Antonio was pleasantly surprised by the view of the large internal cloister, much larger and higher than the one at Via del Cocomero, and Mr. Gori allowed the new student some time to linger there. A cloister truly seems to possess the virtue of elevating the spirit to the level of the Maker. Perhaps it is that belt of walls - lightened by the recurring arches, whose lines project towards a vanishing point in the sky - which, protecting from the din of the life that clamors outside, soothes the soul. Or maybe it is the colors and scents of the garden, particularly tended and harmonious, that cheer the senses. Or it is the coolness and the play of shadows that raise the purity of the mind. The fact is that, in those propitious conditions, for learning as well as for contemplation, the teachings of the Maestri flowed into the minds of the adolescents like water from the mountain to the plain.

Mr. Gori took Antonio by the arm, bringing him back to more material thoughts: *"You see, Meucci, this is where the President's Office is, with its lobby… on the opposite side there are two rooms for the Administration. Then there's the entrance of the Scuola dei Fiori* [School of Flowers], *specifically set up for the ceramics artisans, and from here one also gains access to the rooms of the Director and of the Deputy Director…."* Then Gori showed him around the entire left wing which hosted the *Music Class* of the Accademia, which comprised the four *Schools* of: *Music, Declamation, Counterpoint and Violin.* Finally, through a long corridor, containing a certain number of halls shared by the various schools for the 'oratories' (lectures), they reached the back area of the *School of Chemistry*, first passing by the two rooms where chemical products were stored, then by the room where the fuel of the Laboratory was kept, then the *chemistry garden*, the room of the Head of the Department and, finally, the large room which hosted the *School of Chemistry.*

The school was open, and there were a dozen students handling all sorts of stills, retorts and bottles, carefully supervised by the famous Professor Carlo Calamandrei. Antonio was particularly fascinated by chemistry, as by anything that, although tiny, concealed great power. Mr. Gori allowed the new student to linger around the laboratory, after having introduced him to the famous professor. One of the students told him that the school of chemistry was open on Tuesdays and Fridays, from 11:00 AM to 1:00 PM. The great Calamandrei took the trouble to stress how, particularly in chemistry and mechanics, it was important to follow the rules of Galileo and Leonardo, which is to say, combine *"theory and practice… so that while Practice reveals the difficulties of phenomena, Theory may eliminate the former and explain the latter, and they may mutually correct their errors and communicate their truths."*

Once again taking Antonio by the arm, Gori took leave of Calamandrei and continued his tour, coming to the *Conservatorio d'Arti e Mestieri*, which opened with the *Halls for the collection of Machines and Models.* These included the *Museum of Machines*, followed by the three rooms that comprised *Mr. Gori's Laboratory*, all under his jurisdiction; needless to say, he gave a very detailed tour of them.

Gori was particularly proud of having repaired and restored many of the machines exposed in the *Museum of Physics and Natural History*, which also had been reorganized - like the Accademia - on commission of Grand Duke Peter Leopold. Once the Museum was reorganized by the Abbé Fontana, the Grand Duke renamed it *Museum of Physics and Natural History* - adding the word *Physics* to the previous name - and ordered it to be opened to the public in 1775. Back then, worthy professors worked there, including Giuseppe Pigri, who was also head of the School of Mechanics of the Accademia. Furthermore, thanks to Count Girolamo Bardi, who ran the Museum, free teaching of sciences was provided and the *Annals of the Imperial Museum of Physics and Natural History of Florence* were published, which contained articles by professors Giuseppe Gazzeri, Antonio Targioni Tozzetti, Filippo Uccelli and Giovanni Babbini. It is worth noting that, in Florence, Abbé Giovanni Babbini also held the *Chair of Theoretical and Experimental Physics*. Mr. Gori informed Meucci that every now and then the *School of Mechanics* of the Accademia organized guided tours of the Museum - especially with the aim to illustrate and study Galileo's many marvelous machines from up close - hence Antonio could take advantage of such visits to improve his culture.

Immediately after Mr. Gori's Laboratory there were the *Halls for the meetings of the Artisans.* Such meetings, which

took place on a monthly and sometimes bimonthly basis, were very important for the osmosis - often too animated - among the teachers of the Accademia and the artisans, potential users of the latter. The tour ended with a peek inside the *Office of the Professor of Mathematics* and the *School of Mathematics* (which also included *Hydraulics* and *Philosophy*), which was adjacent to the large *Exhibition Hall*, where the works of the Students of the Accademia were displayed and which also featured a convenient 'vestibule' (lobby).

Portrait of Galileo Galilei, by Justus Sustermans

Thus ended the visit, as well as Antonio Meucci's first day at the Conservatorio. It was past one o'clock, and almost all the schools had closed. Most of the schools of the Conservatorio had the same opening hours, from eleven in the morning to one o'clock in the afternoon. Only the days varied, but on the average each school was open only two days a week. The schedule was planned so as to allow the students to walk to and from even the farthest suburbs of Florence, and also to enable the artisans and professionals to attend the Conservatorio without entirely sacrificing their work, or, for those who had more time at hand, to follow more than one school.

The French culture continued to have a great influence in Florence, as well as in the rest of Europe, and not only on account of the legacy of the Napoleonic occupation. Indeed, many texts used in the Accademia were written in French, as well as many of the administrative documents and regulations. Thus, it was suggested that Antonio Meucci learn French, which he did with great pleasure, for it was a language that he liked and also because it gave a certain air of "enlightened" intellectual.

Antonio lived up to the expectations of the teachers who had seen in him that *'fair disposition.'* He immediately revealed an exceptional penchant not only for drawing, but for chemistry and mechanics as well, displaying a remarkably constructive talent. Indeed, as we shall see, Antonio Meucci, thanks also to the Accademia's strongly applicative approach, throughout the course of his life, proved to be an extremely valid and prolific *engineer.*

Two years of intense studies ensued, during which, every now and then, he would work for some artisan or at the Goldoni Theater, during the theatrical season, and this allowed him to earn some money to help his father support the family. But the family was large and the *nine mouths* (including grandfather Giuseppe) could not be fed only with Amatis' monthly salary of merely 70 lire (equivalent to approximately 620,000 lire or $517 in 1990, as shown in the insert contained hereinafter), although his duty as Custodian at the Piazza del Buon Governo was rather important and, compared to other government jobs, was well paid. Adelaide, Amatis' oldest daughter,

born after Antonio, had already turned twelve and started to earn a little money doing small embroidery works. As for the other children, Luisa, who was only ten, helped her mother around the house, while the boys, Luigi, who was six, Giuseppe, who was four, and Roberto, who was only one, certainly could not be of any help. Therefore, (it was the end of Summer 1823), Amatis started to look for a job for Antonio which, hopefully, would not take too much time off his studies at the Accademia.

The small *Piazza del Buon Governo* - currently *Piazza S. Firenze* - was, and still is, situated right behind the splendid *Piazza della Signoria* (named, at the time of the Lorraines, *Piazza del Granduca*), to which it is linked by means of the short *Via de' Gondi*, which extends from the façade of the adjoining Palazzo Vecchio. The political-administrative center of the Grand Duchy gravitated around this small piazza. In addition to the offices of the Presidency of the Buon Governo, there were, in *Via del Proconsolo*, which branches off from it, the *Ufficio dei Forestieri* (Foreigners' Office) - in the so-called *Palazzo Nonfinito* - where passports were stamped, and the *Amministrazione Generale delle Regie Rendite* (General Administration of Royal Revenues), the central body in charge of collecting duties at the gates of Florence and at the customs barriers (such as the one of Boscolungo, at the Abetone Pass) as well as taxes within the Grand Duchy.

Therefore, Amatis Meucci, who had some two or three *Ajuto Custodi* (Assistant Custodians) working under him, was of key importance for all of the people who had to find their way around the jungle of the *Uffizi* (offices) of the Buon Governo. Obviously, he knew practically all of the senior officials who worked in those offices, and often did small favors to them, which were then somehow returned, either by helping him find a job for someone or by granting him some other concession. In other words, Amatis practically had all of the characteristics of a present-day Ministry usher, the difference being that he stood outside rather than inside. Moreover, a few years after the period considered, in 1827, he was promoted to *Custode di Presidenza*; and was thus given a desk in the lobby of the Secretariat of the President of the Buon Governo and, furthermore, a salary of 84 lire a month (which is equivalent to approximately 745,000 lire or $620 in 1990).

Thus, once Antonio was fifteen, Amatis turned to his superiors hoping that they might find a job for his son at the Buon Governo, so as to be able to meet the expenses of his large family. His request was granted and on 3 October 1823 the Head of the Gatekeepers - that is to say the Head of the garrison on duty at the gates of Florence - received from the

Presidency of the Buon Governo the following communication:

Mr. Gio. Boldrini, Head of the Gatekeepers Most Ill. Sir
3 8ber [October] *1823*
I wish to inform you that in replacement of the two vacant places of Gatekeeper Supernumerary, Luigi Ficini and Antonio Meucci have been appointed, with the duties and conditions connected to the said position. Kindly provide for the necessary notifications.

In this as in other transcriptions - which are necessary for the reader, also because the original versions (in ancient Italian) are hardly readable - we have tried to reproduce the texts as faithfully as possible, including the abbreviations and spelling mistakes, eventually introducing some explanatory notes in parenthesis.

The same communication was sent to H. E. (*His Excellency*) Alessandro Pontenani, General Administrator of the R.R. (*Royal*) Revenues, since, whereas the Presidency of the Buon Governo was in charge of making decisions in that which concerned the hiring, possible penalties or rewards, and firing of all the government staff, the competent service was in charge of executing those decisions.

AT THE GATES OF FLORENCE

The service at the gates of Florence was discharged by *Gatekeepers*, *Assistant Gatekeepers*, *Gatekeepers Supernumerary* (who were sent to one or another gate according to where they were needed), *'Fa-mestieri'* (attendants), *Street Inspectors*, *Deputy Street Inspectors*, etc.…, all subject to a rather strict military discipline, just like today's Guardie di Finanza (Customs Officers) in Italy.

Employment of Antonio Meucci as 'Gatekeeper Supernumerary'

A *Gatekeeper Supernumerary* earned a mere 25 Lire a month (equivalent to approximately 220,000 lire or $183 in 1990) while an *Assistant Gatekeeper* earned around 40 Lire a month (equivalent to some 354,000 lire or $295 in 1990) and a *Gatekeeper* could earn, according to his seniority, as much as 80 Lire a month (equivalent to approximately 700,000 lire or $580 in 1990). Although there was hope that in less than a year Antonio would be promoted to *Assistant Gatekeeper*, Amatis, having found out that a place as Assistant Gatekeeper had become vacant, advised his son to immediately file a request for it. This way, he would at least be put on the waiting list. Indeed, his request was granted seven months later, precisely

on 12 May 1824, following the death of a Giuseppe Sani, who had previously held that position.

Antonio was assigned to the *Porta S. Niccolò* (St. Nicholas Gate), situated on the left bank of the Arno. From their home on Via de' Servi, it was a forty-five-minute walk, going at a brisk pace. Furthermore, the salary was raised to 40 Lire a month, equivalent to approximately 354,000 lire or $295, in 1990. It was not much, but one must bear in mind that Antonio had just turned sixteen. Furthermore, in the same period, Amatis received a bonus from the Buon Governo, hence the family was able to breathe a sigh of relief.

TUSCAN COINS

Prior to the unity of Italy, many States of the peninsula adopted the Carolingian money system, which survived in England up until a few decades ago. Therefore, the Tuscan lira, the official currency of the Grand Duchy of Tuscany, was divided into 20 'soldi' and every 'soldo' into 12 'denari.' Sometimes the 'centesimo di soldo' was also used, for instance in the management of the land registry. The one lira coin weighed 3.929 grams of silver at 917 thousandths (see bibl. Cipolla*). However, in Tuscany, during the period considered in this Section (1820-1835), a great deal of coins circulated, of which we provide only a partial list taken from* Parenti*'s copious tables (see bibl.).*
The following comments on some of the coins listed below may be of interest:

The 'zecchino d'oro' was equivalent to 3.5 grams of gold. Livorno's Giornale di Commercio *of 7 October 1835 put the 'zecchino veneziano' at 14 Tuscan Lire, thus close to the Tuscan 'zecchino d'oro.' Instead, the 'zecchino' (not the gold one) was a fictitious coin, used to determine the sum of compensation for people of a certain rank.*
The 'scudo' also was a fictitious coin, multiple of the lira (seven lire), used in accounting procedures, in which monetary items were expressed in Scudi, Lire, Soldi, and Denari (see Amatis' petition of 1827 and the Police Superintendent's information paper). The same does not apply to the 'scudo romano,' the official currency of the Papal States, which circulated legally also in Tuscany, from 1753 to 1856. In addition to the above-cited coins there also existed: the silver 'mezza dena,' the silver 'mezzo fiorino,' and '1/4 di fiorino,' the silver 'mezza lira,' the silver 'mezzo paolo,' and

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Denomination	Coin	Lire	Soldi	Denari
Ottanta fiorini	gold	133	6	8
Ruspone	gold	40	-	-
Zecchino d'oro	gold	13	6	8
Zecchino	fictitious	7	6	8
Scudo (7 lire)	fictitious	7	-	-
Dena (10 lire)	silver	10	-	-
Scudo romano	silver	6	6	8
Francescone (10 paoli)	silver	6	13	4
Franceschino (5 paoli)	silver	3	6	8
Fiorino	silver	1	13	4
Lira (20 soldi=240 denari)	silver	1	-	
Paolo	silver	-	13	4
Crazia (5 quattrini)	viglione	-	1	8
Soldo (12 denari)	viglione	-	1	-
Quattrino	viglione	-	-	4

finally, the smallest of all silver coins: the 'due crazie' (or 'dieci quattrini'). As for the less valuable coins ('viglione'), in addition to the ones listed, there were also the 'mezzo soldo,' the 'due soldi' and the 'tre quattrini' coins.
As for exchange rates on foreign currencies, exhaustive tables were contained in many newspapers, especially the ones of Livorno and Genoa. From the Giornale di Commercio del Porto-Franco di Livorno *(October 1835), in particular, it can be deduced that the 'scudo di Francia' was worth 6 lire and 15 soldi, while the franc was worth 1.18 lire on average, which is to say approximately 1 lira, 3 soldi and 5 denari.*
As for inflation, on the basis of the graph of wholesale prices registered from 1800 to 1890 (see bibl., Bandettini, *p. 12), it is possible to observe a sharp drop in prices from the end of the Napoleonic era (1815) until 1825, on a ratio of 2:1. From 1825 on, a relative stability can be observed, up until the unification of Italy, with the exception of a sharp 1.5 peak in 1855-60. During this entire period, the Tuscan lira remained practically hooked to the Piedmontese lira with an almost constant ratio of 1.18 vis-à-vis the latter. The tables illustrated in* Il Sole 24 Ore *reveal an inflation ratio, from 1860 to 1990, of approximately 5000. Consequently, it can be deduced that the global ratio, from the period that concerns us (1820-1835) to 1990, is equivalent to 1.5 X 5000 = 7500 for the Italian (or Piedmontese) lira. Therefore, the Tuscan lire of the period that interests us can be considered equivalent to approximately 7500 X 1.18 = 8850 lire (or $ 7.37) in 1990.*

Examples of prices and salaries of the time

In 1811, the annual salary of a (chemistry) professor of the Accademia was of 1200 francs, equivalent to a monthly 1,040,000 lire or $867, in 1990, approximately. The annual salary of a well known lawyer (Carlo Lenzi) working for the Buon Governo, in 1829, amounted to 1680 Tuscan lire (140 lire/month), the equivalent of 1,239,000 lire per month or $1032, in 1990. Antonio Meucci's monthly salary in that same year amounted to 40 Tuscan lire, equivalent to 354,000 lire or $295, in 1990. The price for a newspaper (Il Commercio di Genova)*, in 1865: one issue: 20 ¢ (equivalent to 1770 lire or $1.50, in 1990). The price of a book: between one and ten lire (generally given in French francs), equivalent to approximately 9,000-90,000 lire or $7.50-$75, in 1990. From all this it is possible to deduce that salaries were very low in relation to prices, which, instead, are comparable to today's. This forced people to look for other*

sources of income, or, as was more often the case, to ask for subsidies or extra income in addition to the salary.

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View of Florence from Lungarno Corsini (Painting by Giuseppe Gherardi)

The *Porta S. Niccolò* - situated at the foot of that promontory of the Tuscan hill that serves as pedestal to the majestic and beautiful esplanade of Piazzale Michelangelo - is where the traffic of goods and people coming from Arezzo and from more distant regions like Perugia and Rome, as well as the traffic exiting Florence, flowed together. From the other two gates situated on the left bank of the Arno, the *Porta Romana*, located at the end of the very long Via de' Serragli, and the *Porta S. Frediano*, transited the vehicles coming respectively from Via Cassia, namely from Siena and Rome, and from Via Pisana, namely from Pisa and Livorno. On the opposite bank of the Arno, instead, were the *Porta alla Croce*, placed on the Vallombrosa-Arezzo route, the *Porta S. Gallo*, which barred the important thoroughfare towards Faenza and Bologna, and the *Porta al Prato*, placed at the beginning of the difficult road which led to Prato, Pistoia and the Abetone Pass. Everything has remained practically unchanged since then, except the walls that connected the various gates, which today are almost all in ruins, with the exception of some small sections, which recall the layout of the ancient belt that surrounded the city. There were other gates of access to Florence, in addition to the ones mentioned above, though the transit of goods subject to levies was not allowed through all of them.

At the above-mentioned main gates, carters and passengers of coaches and carriages found themselves before the severe uniforms of the Assistant Gatekeepers, who inspected goods and permits and collected taxes for the R.R. Revenues. In particular, those who arrived from Arezzo at the *Porta S. Niccolò*, raising their eyes above the top of the gate, could see the mouths of the cannons of the imposing Forte Belvedere, situated on the top of the hill at the back, at a distance of less than a mile from the gate itself.

All of Florence's gates were permanently guarded with three working shifts, each of eight full hours, to allow the changing of the guard between one shift and the other. The first shift began at 1:00 AM, the second at 9:00 AM and the third at 5:00 PM.

When the shift assigned him allowed him to (although he was sometimes on duty for two consecutive shifts), Antonio went to the Accademia, also to avoid that *"but he hardly ever attends"* attached to those who did not attend regularly. Back then, there was no such thing as diplomas issued by the Accademia, like today. On the other hand, in a big town of the early nineteenth century - which comprised almost fifty thousand inhabitants - practically everyone knew everything about everyone else (although not with the obsessive meticulousness of the Police). However, when in doubt, the teacher's opinion

on the skills of a student was more than sufficient for any employee. Therefore, the students were doubly bound to the teacher: to receive good education from him and to earn his appreciation and, finally, a good reference in view of finding a job.

Antonio attended the chemistry and mechanics schools very frequently, and regularly dropped in to see Mr. Gori. Prof. Calamandrei was surprised by how quickly Antonio learned especially the methods for the processing of materials, one of the secrets thanks to which Florentine craftwork was unrivaled for its cloths, leatherwork and ceramics. Mr. Gori had also suggested to order a small electroplating machine from Paris, especially because he thought it might be useful for the manufacturing of metal objects. However, the *Deputy Director* was of the opinion that they should wait a few years, since one had started to hear of its applications only as of a few years (after 1820).

When some odd job came up, Antonio did not pull back. He loved his father and knew how much his father loved him. Indeed, how many fathers, in Amatis' conditions, would have sent their son to the Accademia? Moreover, Amatis never conveyed his troubles to any one of the family, nor did he ask them expressly to do something. Between Amatis the father and his son Antonio there was a tacit understanding. Both knew what had to be done and did it, without expecting anything in return.

A short time after Antonio's promotion to Assistant Gatekeeper, and precisely on June 18, 1824, Ferdinand III died and was succeeded by his son Leopold II, who ruled for as many as 35 years, namely, as was said previously, until the unification of Italy.

Approximately one year later, in early April 1825, Florence was in a frenzy preparing the celebration for the forthcoming birth of the child of the *Archduchess Marie Caroline of Saxony*, Leopold II's wife. For three evenings a firework display was to take place in Piazza del Granduca and, as usual, Antonio found an extra job preparing and subsequently lighting the fireworks for the producer, Girolamo Tentini. However, as we learn from a report of the of the *Auditor*, quoted below, as Girolamo Tentini was old and ill, the direction of the works was delegated to Gaetano Baratti, a forty-six year old *umbrella maker and fireman*, and to Gaspero Carloni, a forty-year old *cooper and fireman.* The following were also hired as assistants: Luigi Pagani, aged 60, *employee*; Pasquale Nigi, aged 36, *carpenter*; Giuseppe Franci, aged 35, *plumber*, Vincenzo Andreini, aged 31, *umbrella maker*; and Gaetano Marucelli, aged 25, *Assistant Gatekeeper* (Meucci's

Map of Florence with the indication of some points mentioned in the text ●
Gates: 1- Porta alla Croce
2- Porta S. Niccolò
3- Porta S. Giorgio (Forte Belvedere)
4- Porta Romana
5- Porta S. Frediano
6- Porta al Prato
7- Porta S. Gallo
8- Porta a Pinti.
Other Points
A- Palazzo Pitti
B- The house in Via de' Serragli, where Meucci was born
C- Accademia di Belle Arti, Piazza S. Marco;
D- Casa Pasqui, Via de' Servi
E- Teatro della Pergola;
F- Palazzo Vecchio, Piazza del Granduca;
G- S. Croce Police Precinct

comrade) and *firework amateur*. As one can see, Antonio, at the age of 17, was by far the youngest of the group.

Everything went smoothly for the first two evenings. From the merlons of the tower and terraces of Palazzo Vecchio, and from the row of windows beneath the merlons, all sorts of fire-crackers and rockets were lighted; the display also featured *"ten so-called Funnels or 'Sbruffatori'* [firework launchers], *each containing some 8 to 10 light rockets; those Funnels were to be lit above the merlons, and precisely 6 towards the Meridiana* [Sundial] *and the other 4 towards the Uffizi…"* (The words in italics are those written by the *Auditor Director of the Legal Proceedings* of Florence, who followed the event, in his report dated May 16, 1825).

The same, however, cannot be said of the third evening, which is to say, April 4, 1825: *"… for* (the report of the Auditor continues), *according to the Investigation on the Cause, as soon as the display was begun with the so-called Colombina* [a dove-shaped rocket used to light fireworks], *a great deal of rockets shot off from the merlons of the Palazzo Vecchio at various intervals, and many each time, rapidly and violently slithering down like thunderbolts in every direction, and landing on the various spots where the spectators were standing in the Piazza, in the adjacent streets, and in the Balconies and Windows of the Houses, causing commotion and bewilderment; and these unusual discharges continued, much to the surprise and disgust of the huge Audience, throughout almost half of the Display."* (notice the use of capital letters for most of the nouns, according to the style of the German language). The report of the Auditor featured approximately 50 handwritten pages, containing a detailed description of the wounds and the material damage caused, the testimonials and the outcome of the many interviews, followed by the investigation, which was opened immediately.

Eight people were injured, of which one, a *Vincenzo Lascialfare*, who was standing at the side of the Piazza, was wounded in the face, while the dress of a girl standing close to him caught fire; *Domenico Stampini*, who was also near the square, fainted on account of a rocket that hit in the face; *Isabella Alessandri Gargiotti*, who was watching from a balcony of a house nearby, suffered three facial injuries; *Giovanni Cantini*, who was standing next to the latter, reported slight burns, while a boy, *Carlo Lamberti*, was hit in the chest by a rocket, without consequences, as well as in the arm, which remained bruised; *Carlotta Cinganelli* was wounded in the head, and lost a great deal of blood; *Maria Antonia Sati*, who was standing on a balcony of a house nearby, reported a semi-circular wound on her front; moreover, *Giuseppe Colzi*, who was in the Piazza not far from the Post Office, scraped her skin and reported

slight excoriations on account of a rocket that fell on his feet. Finally, six people endured material damage, the worst of which was reported by *Anna Del Chiaro*, while leaning out of a window of a building overlooking the Piazza, the precious silk scarf she was wearing was burned by a rocket, the damage amounting to 100 lire (equivalent to about 885,000 lire or $737, in 1990).

The investigation established that - the report of the Auditor continues - *"… as it is a sure and proven fact that each of the three defendants Meucci, Franci and Andreini directly took part in Lighting the Rockets of the Funnels which caused the inconveniences mentioned several times already, and that all ten of these Funnels were lighted by them alone… a second inspection ensues on the basis of which to determine their conduct while executing the job, and if said behavior reveals criminal intent and guilt such as to authorize to proceed by Fiscal Action according to the Liber of Woundings and Offenses, as caused by the action of the foregoing rockets."* It is worth noting that of the other defendants, Assistant Gatekeeper Marucelli was completely freed from blame by Antonio Meucci, whereas the others, who were much older, were exonerated because they were *well-known and respected by the authorities.*

Palazzo Vecchio and Piazza della Signoria, or Piazza del Granduca in a lithograph of 1863

Antonio Meucci's position was aggravated by the *"deposition of the Witness Doctor Antonio Banti, and of the victim Felice Maggiorani; the former recalled having heard during the day, without, however, remembering where or from whom, that on the last evening the rockets would be lighted towards the square; the latter said she had learned from her brother, who, instead, does not agree, that one of the people who lighted the rockets on the aforementioned evening / among whom Meucci seems to be indicated / had invited him to go and see them, saying that something special was in store, to which he replied negatively saying "Today you seem somewhat tipsy to me, surely they cannot go well, I don't want to come."* …

The last two extracts of the report quoted above clearly reveal the police's fear that, instead of a banal accident - which recurred quite frequently in the handling of rockets - it was actually an attack against the stability of the Grand Duchy, in other words that the political riots of a few years before (1820-21), which had shaken Palermo, Avellino, Nola, Alessandria and Turin, could reach Florence. Therefore, the police deemed it opportune to investigate on every single slight symptom of riots or rebellions and possibly to stifle them before they took on worrisome proportions. This explains the fifty pages of the detailed report on the harmful lighting of the rockets in Piazza della Signoria and the doubt raised as to the premeditation on

the part of the three young defendants (the youngest and less experienced of the group) - and of Antonio Meucci in particular - aimed to generate chaos, although the latter possibility was dissembled in the report.

Following the results of the investigation, Antonio Meucci, Giuseppe Franci and Vincenzo Andreini appeared before the Criminal Court, but, fortunately, they were granted benefit of the doubt as to the willfulness of their action. The penalty of Antonio Meucci, however, was remitted on sentence of August l of that year, for, in the meantime, he was accused ad sentenced on another charge, as we shall soon see.

This episode has been described in such great detail because it marked the beginning of a regular surveillance on the part of the police, in whose archives Antonio Meucci was now on record as previous offender, and from whose *attentions*, as we shall see further on, it was impossible for him to release himself, if not by definitively leaving Florence.

IN JAIL

Indeed, the situation got worse a few days after the accidents in Piazza del Granduca, precisely when Antonio resumed service at the Porta S. Niccolò. This time, it was on account of a colleague, Luigi Ficini, who fell into a pit and broke his leg. It was acknowledged that the accident was to be ascribed to Antonio's negligence, for he had forgotten to nail down a door that was in front of the pit. But the Presidency of the Buon Governo took advantage of that situation to harshly punish the young Meucci. Indeed, four days after the accident involving Ficini, the Police Superintendent of the S. Spirito quarter, Domenico Callepi - whose jurisdiction covered the Porta S. Niccolò - received the following notice from the Presidency of the Buon Governo:

"S. Spirito Superintendent
Sent 14 April 1825

I have been informed [by one of the many squealers, which Florence swarmed with, Editor's note] *that the Assistant Gatekeeper Meucci is to be blamed for the accident involving the Gatekeeper Ficini at Porta S. Niccolò on the night of the 10th of this month, as the former, who was on duty before him, forced open the nailed door of the room where the pit into which Ficini fell had been dug, and neglected to warn the latter about the pit, as the Gatekeepers who had changed shifts previously had done.*

I beg you Most Illustrious Sir, to investigate into the matter and at the same time to gather information as to the conduct of

this Meucci on the Job as well as in all other circumstances, and to report back to me on your findings.

signed C"

[*C* was the well-known initial of the much-feared Auditor of the President, Sir Knight *Colmo*]

Obviously, the Police Superintendent of S. Spirito conducted the meticulous investigations requested and, one and a half months later, on May 30, 1825, sent a detailed report to the Presidency. According to the report, Meucci had not informed Ficini that a pit had been dug in the store-room that was used as toilet, and that, when Meucci had used the latter, he had forced the nailed door open, and had then left it half shut. In his report, the Police Superintendent was not too severe with Antonio, but, on the other hand, he could not even display too much indulgence, aware as he was of the fears and susceptibility of the Auditor. The report ended as follows:

"…The deeds on the whole reveal that Meucci is a careless young man, who tends to associate with the soldiers rather than to attend tirelessly to his Duty, and all the Witnesses questioned in the course of the investigation converge on the fact that his attitude is that of a Youth.

I therefore believe that this defendant deserves to be mortified by five days in prison, for I deem such a measure opportune in order for him to become more cautious in his behavior in all circumstances, and I would charge him with all case expenses, save for any definitive statement of …" (and here the report is interrupted at the bottom of the page, for the following one was probably lost).

But Superintendent Callepi must have been rather surprised by the response he received a few days later from the Buon Governo, which set a more severe punishment than the one proposed by him, in consideration of the previous events having taken place in Piazza del Granduca:

"S. Spirito Police Precinct

Sent 4 June, 1825

Independently of the consequences that the Assistant Gatekeeper Antonio Meucci shall suffer from the Case that is being presented before the Criminal Court for the well-known inconveniences caused by the fireworks recently lit at the Piazza del Granduca - and in connection to which he is being investigated - Meucci shall be sentenced for the fact described in your letter dated May 30th to eight days in prison, three of which on bread and water, and he will have to pay for the expenses of

the deeds and for the damages caused to the offended party, as they will be ascertained.

And returning the papers to you I send you my regards C"

Eight days in jail, three of which on bread and water, for not having nailed the toilet door shut again, and for having forgotten to warn his comrade Ficini, appear to us, today, much too severe a punishment. But it was not so in those days, especially if one thinks of how prisoners rotted away in the prisons of the *Sant'Uffizio* (*Holy Office*) a few decades back (and, more often than not, for non-existent offenses). Probably, the charges for the careless lighting of the rockets in the Piazza del Granduca justified the more severe penalty with respect to the one proposed by the S. Spirito Police Superintendent, which only envisaged five days in jail. Finally, it is worth noting that a fine, unlike what one might think today, distressed much more than a sentence to detention. Indeed, for poor people, jail was not necessarily worse than their day to day life, a life made of hardships and physical fatigue. But as for money, it was nowhere to be found, especially when one did not have - which was often the case - goods to sell or to pawn.

The formal procedure when one was to go to jail was the following: the convict was invited to show up spontaneously at the Police Precinct at a certain hour, generally five o'clock in the evening. If (as very seldom occurred) he did not turn up, the *bailiffs*, unarmed attendants of the same precinct, were sent out to search for him and, in addition, he would have to pay a fine of fifty Lire (the equivalent of 443,000 lire or $368, in 1990).

Amatis took his son Antonio to Police Superintendent Callepi that evening of 4 June, holding back the tears and rage. Antonio was dazed and incredulous: he had lost track of what was happening to him, for the first time in his life, at the age of only seventeen. He did, however, feel the shame, for what his teachers would say, Gori and Calamandrei in particular, and for the humiliation of the glares and caustic teasing of the sons of the wealthy - and never investigated - bourgeois, his school mates at the Accademia.

Callepi put his arms around Amatis and Antonio in a friendly way, and was surprised to notice that they were almost the same height. How that boy whom he knew ever since he was a child had grown - he thought to himself… Then, turning towards Amatis, he said: *"Why are you worried Amato* (Most of his friends called him *Amato* instead of *Amatis*)*? Is it because your boy will eat at the expense of the Grand Duke for a few days?"*

Antonio Meucci's first sentence to detention (4 June 1825)

"Sure!," Amatis replied, *"And what about the three days on bread and water? And what about the mark of a previous offender?"*

But Callepi had an answer for this too. He said that the Buon Governo only wanted to scare the people, thereby forcing them to always fill their duties, but that, after all, it did not intend to act cruelly more than was necessary. *"Amato,"* he said, *"You know all there is to know about how to write to those at the top… So write them a nice plea, pathetic and deferential, but especially full of your Tonino's good intentions, and you'll see that they'll reduce the sentence… Go on, run on home to write, and I'll take care of your boy…"*

Antonio heard the bolt slide through the eyelets of the lock, on the other side of the sturdy wooden door of his cell, onto which a small peep-hole was open. A few minutes before, on the stairs that led from the offices of the precinct down to the cellar where the prison was, he had run into another youth, who was on his way out. *"Thank goodness it's June!…"* - he yelled to Antonio, turning around as he rapidly went up the stairs. He muttered a few other words which Antonio did not catch, confused and excited as he was. From the cell he heard Callepi call someone by the name of Angiolo (an attendant who did a little bit of everything at the precinct, including the warder): *"Hey, Agnolo…,"* he yelled out loud, making sure Antonio could hear, *"Tonight give Tonino a big slice of that onion pie that your wife baked and a nice glass of Chianti since he is almost eighteen years old. Tomorrow, though, he gets the meal of the Buon Governo, understand? And fill up his pitcher with water… because it's empty…"*

Thank goodness for that someone who makes you smile in sad circumstances. But the walls of that cell did not smile at all. Besides the obscenities that covered them - but Antonio was used to that because of the soldiers he worked with and the motley crowd of carters and horsemen who stopped at the so-called *'outer gate'* of the Porta S. Niccolò - one could read the not exactly flattering personal remarks on the Grand Duke (and Grand Duchess), political invectives against the tyrants (including the clergy), and pressing appeals to rid the country of foreign rule and unify Italy.

Antonio thought that if he had not been sent to jail, he would have never learned about the existence of this other world, concealed from the *faithful subjects*. He also asked himself how it was possible that in schools they taught youths to be hard workers, frugal, honest and obedient when those who held the power did exactly the opposite. But he remembered what grandfather Giuseppe told him, when he was admitted to the Accademia: *"Remember Antonio, that in the schools of the poor people they teach everything one needs to*

know in order to serve the rich and in the schools of the rich they teach everything one needs to know to command the poor. So if they tell you that something is bad, it means that it's bad for those who rule, not for you!."

The arrival of Angiolo with the onion pizza, wine and water distracted him from his thoughts. Keeping his eyes low, Angiolo set everything down on the coarse wood table which was set, with a bench, in the middle of the cell, and left as he had come, without uttering a single word, and limping considerably. Antonio learned to recognize him during the following days, by the syncopated pace of his gait.

One of the cells of the 'Royal Prisons'

The cell, set up for two convicts, was temporarily occupied by Antonio alone, which he did not mind at all: indeed, he could have ended up with some selfish crook who would have rendered that experience even more painful. He sat on the bench by the table, devoured the onion pizza and drank the wine all in one breath, without even noticing that it was watered down considerably. Then, exhausted, he laid down on one of the two cots of the cell after having picked up off the floor a smelly blanket full of holes, with which he covered himself as best he could. At last, he fell into a deep sleep. Before falling asleep, he caught a glimpse of the moon beams which, penetrating from the elevated window of the cell, closed only by two crossed bars, bid him the cold salute of the night, sketching on the floor an unsolved puzzle …

That same night Amatis wrote a plea to the Buon Governo and the following day he brought it to a copyist to have it rewritten in nice handwriting, after which he took it to Callepi. The plea, abounding in capital letters in the most moving points, read as follows:

"Memorandum

To the Most Illustrious Sir Knight President of the Buon Governo

Amatis Meucci, one of the Custodians of the Department of the Buon Governo, a very humble servant of your Most Illustrious Excellency, respectfully states, being a Father, the most sacred name which forces him to these indispensable and due obligations for the deliverance of a Son.

The voices of an unhappy Father and of a disconsolate Mother, the Current situation of a very honest family be heard and assisted by Him who shares the same natural Impulses of a Father's love.

The Son of the undersigned who is in Prison has not committed crimes such as to taint the honor of his Family, nor is he Guilty of any other offense if not lack of consideration and carelessness to be attributed to his youth, and which did not al-

low him to reflect on the damages which he has involuntarily caused; Such circumstances torment the Heart of a Father, who Humbly Implores The Goodness, The Clemency and The Mercy of your Most Illustrious Excellency, to ascribe to his Youth and lack of experience what the Son is Guilty of,

and therefore Begs you to be so kind as to reduce the right Punishment to comfort an Afflicted Mother and to Forgive him the involuntary rather than deliberate shortcomings and to condescend to allow him to return to his duty as Gatekeeper, the Suspension of which increases day after day the new troubles that fall upon this Innocent and Unfortunate Family.

Which is all."

Callepi forwarded the plea to the Presidency of the Buon Governo, accompanied by a letter comprised of two densely-written pages, in which he confirmed Amatis' words, and ended as follows:

"…as can be deduced also from the statements of the witnesses heard, who spoke of him as a careless and absent-minded young… it is my opinion that, accepting the petition forwarded by his father, the sentence of detention pronounced for his son should be reduced by three days.

And with all due respect and regard it is with honor that I place myself at the service of your Most Illustrious Excellency

From the S. Spirito Precinct, 9 June 1825

Most devout and obliged

D. Callepi Police Superintendent"

On the same day Callepi received from the Presidency the concise reply he had hoped for:

"S. Spirito

Police Superintendent

Sent 9 June 1825

In consideration of the special circumstances observed by you as of today you may reduce by three days the sentence of detention ordered against the Assistant Gatekeeper Antonio Meucci.

I am C"

Superintendent Callepi let Antonio out that same night, at five o'clock, as usual. The following day he forwarded a plea from Ficini to the Presidency to obtain a grant of three zecchini, specifying, in the note enclosed, that it would be useless to file Antonio Meucci for the damages, since his family was not in the condition to pay, for it was so poor. He ended the note recommending that "… *the Sovereign*

Munificence award him [Ficini] *the grant requested."* After a few weeks Callepi was notified by the State Secretary Franzesi that *"His Imperial and Royal Highness, on rescript of this day, has awarded Luigi Ficini, Assistant Gatekeeper at the Gates of Florence, an extraordinary Grant of four zecchini on the Cash box of the R. Deposit for one time only"* (the conventional polite remarks and conclusions follow). Callepi rushed to break the good news to Amatis, who had shuddered at the thought of having to pay for the damages.

Anyway, there were some who requested three zecchini and got four, and there were some who were to serve five days in prison and actually were sentenced to eight (which, with great hardships, were brought back to five…). After all, Luigi Ficini was an Assistant Gatekeeper just like Antonio Meucci, actually, they were hired on the same day, as the reader might recall, but evidently Ficini had luck on his side.

Antonio resumed service at the Porta S. Niccolò the morning after he got out of jail, on 19 June 1825, withstanding the contemptuous glare of the elderly Gatekeeper Gaetano Del Nibbio, who had drafted the report on Ficini's accident, and who had made matters worse by stressing that he had recommended Meucci to inform the colleagues working on the following shift about the danger of the famous pit. To avoid giving further trouble to his father, Antonio preferred to put up with the torment inflicted upon him by Del Nibbio and his worthy companion, the Gatekeeper Gaetano Donati, without rebelling. Moreover, superiors as well as comrades made fun of him because he attended the Accademia. *"That's right,"* they said amongst themselves, making sure that Antonio could hear, *"the young man is a scientist, he can't afford to do manual labor, the pen is heavy enough for him …"* And, lastly, Antonio had to back up Del Nibbio and Donati in their pretenses to give trouble to the carters intentionally, in order to send them into the office, where the two fellows knew how to grill them, squeezing conspicuous tips out of them, obviously to the detriment of the Royal Revenues.

Notwithstanding, eight months later, and precisely on 9 February 1826, the two drafted another report addressed to the General Administrator of the R.R. Revenues, H. E. Alessandro Pontenani, in which they accused Antonio Meucci of having *"stolen the Copper Pail destined to be used by the Ministry of Service at Porta S. Niccolò."* Fortunately, the investigation which the Buon Governo ordered the S. Spirito Police Superintendent to carry out established that Meucci *"took the pail from its usual place to use it, without putting it back where it belonged,"* thus proving that Del Nibbio had unjustly accused Antonio of having stolen it. Thank goodness that Callepi was a gentleman.

More than three years passed without anything serious happening, with the exception of the lecture Amatis got from the Police Inspector, around September 1827. This occurred on account of the fact that a woman by the name of Anna Renzi - whom Amatis had helped find a job working for a family, the Cialdis - according to her employers, had, for no reason at all, started to rail against them, their neighbors and their friends. According to the accusation, Renzi relied on Amatis' protection. The matter was solved by the Inspector, who *"without involving any Police Superintendent, and after having personally reprimanded the Custodian Amatis Meucci, insinuating he be more respectful of his duties as Husband and Father, was able to send Renzi away from Florence."* Once again, therefore, a poor girl had to pay, probably guilty of having reacted against unacceptable behaviors on the part of some friends of her employers, and whom Amatis had helped and stood up for, only to feel suspected of having an affair with her, by that "*insinuating to be more respectful of his duties as Husband…."*

In the archives of the Presidency of the Buon Governo, as regards Amatis, there is a petition for a grant requested in the year 1826, which confirms the financial troubles endured by Antonio's father. The financial situation got worse in the following years, Amatis fell ill and was forced to incur many debts, as is revealed by a subsequent petition, dated 5 January 1828, which we transcribe in full:

"His Imperial and Royal Highness,

Amatis Meucci, Custodian at the Secretariat of the Buon Governo, very Humble Servant and Subject of your Imperial and Royal Highness, has the honor to state that, having to provide for a very large family comprised of a Wife, six Children and his sick eighty-six year old Father, as the monthly Salary of twelve Scudi a month was not sufficient to meet the considerable expenses required by such a large family, aggravated by the onset of various illnesses, has been forced to incur various Debts in order to purchase food. And having been molested by His Creditors, while he is not in the condition to satisfy them he has turned to a Respectable Man who is willing to provide him with a sum of money to pay off the creditors, provided he has a guarantee such as to ensure that the loan will be paid back to him; in order to do so the undersigned should pay him two scudi out of his own monthly salary until the debt is extinguished. But since such an obligation is not valid without the Royal approval of your Royal and Imperial Highness, according to your rescript dated

7 June 1786, the undersigned humbly prostrated before the Royal Throne,

Begs Your Imperial and Royal Highness to authorize the Cashier of the Royal Public Treasury to hold from his monthly salary two Scudi to be delivered to the Person who will be appointed by the same; By your grace."

Amatis' petition was forwarded on 18 March 1828 from the Police Superintendent of S. Croce, whose jurisdiction comprised Via de' Servi, where Amatis lived at the time, with the following note attached:

"Aud. Knight President of the Buon Governo
(recd. 24 March)

Amatis Meucci, one of the Custodians of this Superior Department of the Buon Governo, not having any allowance other than the Monthly Salary of 84 lire with which to provide for Himself and his family, which is comprised of his Wife, Father, who is over 80, and five small children, all of whom he must support, whereas his oldest son, an Assistant Gatekeeper, is barely able to support himself, has thus, over the course of several years, had to incur various debts amounting to one hundred Scudi in order to purchase clothing, Food and Medicines, for himself and his family, and to pay the rent, since it is evident that his personal income did not allow him to meet these indispensable expenses, and since he has not been able to pay his debts, some Creditors have filed an appeal against him to this Court in order to force him to pay up.

Luigi Arcangioli, a tailor by profession, who receives good allowances, is the subject who shall advance to Meucci the said Sum of one hundred Scudi with a Five percent interest, and will be glad to receive the modest monthly sum of two Scudi to be held from Meucci's Salary, which is paid by the Cashier of the Royal Public Treasury, until the payment of said loan and interests is extinguished.

This is my reply to your official of 30th January and with great esteem and respect, I return to you the Papers sent me.

Your most Humble Devout and Obedient Servant
F. A. Cecchini Police Superintendent"

Less than a year later, precisely on January 15, 1829, as the Presidency of the Buon Governo requested information, following yet another petition from Amatis requesting another grant, the S. Croce Police Superintendent, Cecchini, replied as follows:

"Amatis Meucci, aged 52, married with six children, Custodian at the Presidency of the Buon Governo, lives on Via de' Servi. He has an infirm eighty-nine year old father whom he

must support in part. He has a son who works as Assistant Gatekeeper and earns forty Lire a month who provides a meager contribution to the family. He has other two children who have been ill for a long time, and he himself has suffered from a bilious ailment which has required great expenses. This large family lives on Meucci's monthly salary of eighty-four Lire. For twenty-eight years he has served the State in various offices and in the Military Service, including the fifteen years he has been on the aforementioned job. He finds himself in a truly critical situation, and his morality and conduct are absolutely flawless. Which is all

F.A. Cecchini"

In addition to the key importance of the information contained in the three foregoing documents in connection to the composition and the severe conditions of the family and to the specific indication of Amatis' and Antonio's salaries, it is worth noting that Amatis is judged by Police Superintendent Cecchini to be a man *of absolutely flawless morality and conduct*.

Antonio was now twenty. He had completed his studies at the Accademia's *Conservatorio d'Arti e Mestieri*, in the schools of chemistry and mechanics. Before leaving the Accademia, out of curiosity more than out of interest, he wanted to try out the piano school of the Music Class, and he discovered that that instrument, more than any other, had the power to stir deep emotions in him and to stimulate his creativity. One day, after one o'clock, when the students were all gone, he asked professor Artemio Follini if he could stay behind and practice a *sonata* by Clementi which the professor had performed and explained that morning. Once he was alone, however, all he did was listen for a long time to the various chords he would play, with the *forte* pedal. He savored the marvelous sweetness of the F minor, the bursting expectation of the seventh intervals, the placid conclusion of the C major, the cutting wounds of the fifths and the *suspense* of the diminished sevenths.

Little by little, he learned to play some easy pieces fairly well. But professor Follini was definitely against amateurism. *"You either practice four hours a day,"* he said, *"in which case you should have started several years ago, or you stop altogether."*

On the other hand, Antonio was going through that stage in life in which the beauty of women seems to be much more appealing than the *Music Class*. He had requested to be transferred, as of the beginning of 1826, to the Porta S. Gallo, which was closer to his house, but especially so as to avoid

having to put up with Gatekeeper Del Nibbio; from then on he no longer had any sort of trouble with anyone, least of all with the police. Serene and vigorous, and proud of the thick black mustache that he had grown, he had won more than one heart.

Porta S. Gallo, in Florence, today

When he was off duty, or the lunch breaks, together with some of his colleagues customs officers, he would go to the nearby *Porta a Pinti* (today's piazza Donatello), walking alongside the walls for a good half mile from Porta S. Gallo, to have lunch at the *Trattoria del Chiù*, which was run by Antonio Socè, or at the tobacconist-grocery store of Luigi Paoletti. Rumor had it that the profits of the two stores were boosted considerably by the attraction exercised over the customers by Antonio Socè's wife Luisa and by his daughter Augusta, and, as for the other place, by Luigi Paoletti's easy wife, Teresa, the tobacconist. The latter was particularly infatuated with the young Meucci, although he did not reciprocate, if not with some occasional rendezvous.

On the contrary, Antonio hung around Chiù's trattoria because he was enraptured by Socè's daughter, Augusta, who openly returned his feelings and who had more than once turned down other customers, both old and young; among them, the middle-aged and sturdy Gatekeeper Gaetano Del Nibbio, who, in the meantime and much to our Antonio's dismay, had also been transferred to the Porta S. Gallo. According to the report quoted below, Teresa Paoletti, who was very jealous of this affair between Antonio and Augusta Socè, *"seeing that she had been abandoned for another woman, even threatened to slap him out in the street, and near the Porta, where he was on duty and to take back from him some gifts she had given him including a small gold watch."*

Gaetano Del Nibbio did not waste such a great opportunity to harm Antonio Meucci once again. While on duty, he molested him with ferocious insults to the point that Antonio, hurt in his pride (but also exhausted by the two consecutive shifts), walked out on him and left. It was just what Del Nibbio was waiting for: he took paper, pen and ink and wrote a full report, blaming the Assistant Gatekeeper of having left his post while still on duty. The following day, 2 May 1829, the Police Superintendent of S. Croce, Antonio Cecchini, first of all put Meucci in jail, in compliance with the law, and then investigated into the matter and reported back to the Presidency of the Buon Governo as follows:

"Most Illustrious Pron. Colmo,

On the morning of May 1st of this year the Assistant Gatekeeper Antonio Meucci, appointed for service at Porta S. Gallo, where he had been on duty since the previous evening,

took leave around 6 o'clock and did not return for the rest of the day.

The Gatekeeper Gaetano Del Nibbio, assigned to service there, provided an account of this transgression in a report presented to this Superior Department of the Buon Governo, and Meucci himself admitted it in another Report, which he presented to Your Most Illustrious Excellence, in which it is said that he acted as he did as a consequence of Del Nibbio's bad and insulting behavior towards him. But during the Proceedings this was clearly denied by the very witnesses nominated by this Defendant. Indeed they guaranteed that, on account of the absence of the latter, many Carts had chaotically crowded under the Outer Gate, and that Del Nibbio, as soon as he saw Meucci approaching, reproached him politely, telling him that that was not his duty and giving him fair warning, and he invited him to carry out his work as required. Meucci responded to this warning with arrogance and unseemly terms, and then left his duty conceitedly.

Some verifications on Meucci's conduct, especially on duty, were already pending against him in this Court, and those deeds revealed that Meucci indulged with Donna Teresa the Wife of Tobacconist and Grocer Luigi Paoletti, outside Porta a Pinti which gave rise to public gossip; furthermore, the above-mentioned deeds also revealed that various inconveniences occurred as a consequence of the fact that Meucci frequented the Bottega Socè[3] *and of the jealousy of Donna Paoletti, who, seeing that she had been abandoned for another Woman, even threatened to slap him out in the street, and near the Porta, where he was on duty and to take back from him some gifts she had given him including a small gold watch; it also seems that, in order to cultivate the Friendship of said Women, Meucci often left his post for hours, and that he was beaten by Antonio Socè and one of his sons who warned him to stay away from their house.*

Meucci admits he had an Affair with Teresa Paoletti, a married woman, and that he visited the Socè family, not because he was interested in the restaurant-keeper's wife, but because he wished to become involved with one of their daughters, and that a couple of years before he had been beaten by Socè's son, for the latter was jealous of a certain

[3]It also is situated outside of *Porta a Pinti* (Pinti Gate), as is specifically indicated in a subsequent plea presented by Antonio Meucci dated November 1829. In said plea he specifies that the name is *Sociè* ad that the trattoria was called *Trattoria del Chiù.* Porta a Pinti no longer exists today, but there is via Borgo Pinti (Borgo Pinti street) which leads to piazzale Donatello (Donatello Square), which is adjacent to Porta S. Gallo (S. Gallo Gate) alongside the circle of gates.

Spouse that he was mixed up with and he asserts that he was never offended by the restaurant-keeper Socè on account of having been caught, as was suspected, flirting with his wife.

Various Gatekeepers who were briefly questioned stated that, owing to these affairs, and especially the one with [Luisa] *Socè, Meucci often abandoned duty and deaf to the warnings he was given, he persisted in his misconduct. They also declared that he was a Careless youth and an Urchin, who, in addition to these absences from the Porta, was absolutely useless when he was present, for, instead of attending his duty he fooled around with the Fa-Servizi* [attendants] *of the Porta, or simply idled. Clear evidence of this is the fact that he whimsically left Porta S. Gallo on the above-mentioned morning of May 1st, without anybody having given him a reason to do so, although He asserts that he had been molested by Del Nibbio. And even if this were true, he would nevertheless have no excuse, for while on duty He was to suppress all private feelings.*

Summarizing what I have had the honor to submit to the attention of Your Most Illustrious Excellence, it seems to me that the offenses committed by this Young Gatekeeper are very serious and represent a dangerous example, these offenses consisting of misconduct accompanied by public rumors and scandalous disputes, dissipation and carelessness on the job, and frequent and long absences from Duty; and in my opinion, he should be sentenced to one Month of detention, starting as of his arrest, his salary should be suspended for an equal period of time, and at the time of his rehabilitation he must be given a good and severe lesson, to make him seriously understand that at his very first, however slight, shortcoming or negligence on the job, he will be immediately and definitively removed from his Office and deprived of his salary, in addition to serving the sanctions he will have incurred.

To all that, I believe it necessary to add the warning according to which he is not to meet the above-mentioned Women, Donna Socè and Donna Paoletti, under penalty of Arrest and Detention for one Month. And since there is no evidence to back up Meucci's statements against the Gatekeeper Del Nibbio, I should think there is no need to resort to any sanction as far as he is concerned.

And full of the greatest esteem and respect I have the honor of undersigning

of Your Most Illustrious Excellence
from the Royal S. Croce Police Precinct
8 May 1829

Most Devoted, Most Obedient Servant
F.A. Cecchini

Sir Auditor Knight President

of the Buon Governo"

The reply of the Presidency of the Buon Governo to the above report arrived after one week; it took up the suggestion to imprison Meucci for one month ad acquitted Del Nibbio for *lack of evidence*, as one would say today. Indeed, this was the note sent to the S. Croce Police Precinct by *Mr. C.*:

"S. Croce Police Precinct
Sent on 14 May 1829
Although the facts connected to the affair which you, Most Illustrious Sir, have informed me of in your letter dated May 8th are so serious that the Assistant Gatekeeper Antonio Meucci would deserve to be definitively removed from his office, nevertheless, as a last chance, I approve that the matter be solved by sentencing Meucci to jail for one month as of the day of his arrest and by suspending his salary for an equal period of time; he will have to pay for the expenses and no longer have anything to do with Donna Luisa Socè and Donna Teresa Paoletti.
You will also severely warn him that at his slightest shortcoming on duty, and should he breach the aforesaid order, he will be irrevocably removed from his office.
As far as Gatekeeper Del Nibbio is concerned, I agree that, according to the results of the deeds, no measure should be taken against him.
I return the deeds to you and undersign C"

Antonio Cecchini certainly was not such an understanding Police Superintendent as Callepi. Furthermore, since the matter involved a royal employee - what's more, belonging to a military structure - who abandoned duty, he could not follow the usual procedure of inviting the defendant to show up at the Police Precinct. Therefore, the morning after he received Del Nibbio's report, that is to say May 2, he sent the bailiffs off to arrest Antonio Meucci, when the latter was on duty at the Porta S. Gallo. When the bailiffs arrived there they found Meucci inspecting a large carriage; one of the two bailiffs, a Vincenzo Bertini, turned to him and with a stentorian voice, making sure everybody could hear, said to him: *"Come on, handsome, at S. Croce we'll teach you to fool around and molest our women… and then we'll throw you on the left bank of the Arno, in the gutter where filthy dogs like you scratch themselves!"*

But Antonio Meucci was no longer the scared seventeen-year-old who had been sent to jail four years before. Now he was a tall and strong young man who commanded respect, also on account of that light in his eyes that came from the certainty of his proven virility. Showing his fists he replied to Bertini:

"Why don't you take that idiot of your father there, so his balls dry and he can stop polluting the streets with filthy worms like yourself!" Then, breaking loose from the two bailiffs, he headed off with them towards the Lungarno della Zecca, where the S. Croce Police Precinct was located.

The death of Ferdinand III of Lorraine and the rise to power of his very young son, Leopold II, had given vent to the feelings of rebellion of the Grand Duchy's ill-treated lower classes, feelings that were starting to spread and manifest themselves more openly than in the past. Rather alarmed, the ruling dynasty and its executive body, the *Buon Governo Toscano*, decided, in turn, to crack down on the people in order to discourage any revolutionary intent.

In the public places, as well as in private homes - and not only in Florence's most popular districts - discontent was no longer concealed for the fear of squealers as in the past. Evidence of this is given by a very confidential report written by the new Police Superintendent of S. Spirito, Niccolò Tassinari, to the Presidency of the Buon Governo, dated 25 June 1829, which spoke of events that took place at the beginning of the month, that is to say, at the time when our Antonio was in jail. The report begins with the allegations of a few Gatekeepers, who, having been reported for accepting a tip, tried to win the favor of the Police Superintendent by revealing to him confidential information - which, as is well known, the higher authorities coveted - regarding underground conspiracies against the Grand Duchy, which they had overheard at the Porta S. Niccolò as well as elsewhere. On the other hand, it was especially at the gates of Florence that one came into contact with foreigners, who brought the latest news on what was happening in the rest of Italy. Tassinari's report reads as follows:

Strictly Confidential

Most Illustrious Sir Pron. Colmo

A note, addressed to this Police Precinct by the Gatekeeper Pietro Toscanelli, when on the 10th of this month he was invited to appear before it in order to reveal the contents of the Resolution of this Superior Department dated the 5th of this month which presented the deeds pending against him and Assistant Gatekeeper Sestigiani under the accusation of having accepted a tip on March 24th of this year at which time they were on duty together at the Porta S. Niccolò, has revealed the highly confidential information contained herein; I have the honor to attach this note to the present one and submit them to you, Most Illustrious Sir, for you to use them as you deem best according to your distinguished wisdom.

The information regards some treacherous and insulting conversations having taken place on various occasions against the ruling Monarch among some individuals employed as Gatekeepers, and several Customs Officers, determined by no known causes other than the perversity and insubordinate nature that characterizes them.

In this regard Gatekeeper Carlo Cappelli reports that, on June 2nd 1829, while on duty at the Porta della Croce, he heard handyman Antonio Pini, who, together with the Deputy Street Inspector Federigo Ciotti and Gesualdo Marmorelli Volantino, was sitting in his room, telling them that his Father, a Bailiff, had been sent to the jail of the S. Croce Police Precinct and that it was unfair and barbarous on the part of the President of the Buon Governo, and that he overheard someone saying to Marmorelli, in this regard, that the President is a Tyrant and a filthy bastard; and to Ciotti that he is the cause of widespread turmoil.

That on May 31st of this year, while on duty at the Porta Romana with Assistant Gatekeeper Gaetano Del Nibbio, this latter, though not invited to, spoke about the imprisonment of Gatekeeper Serafini and referred to our laws as being barbarous and tyrannical, and that under the government of the previous President such injustices were not perpetrated and he was well convinced that Serafini had been unjustly sentenced to jail.

That a year before, when a certain Maresma was appointed a vacant post of Gatekeeper, which the Assistant Gatekeeper Gaetano Maruscelli had hoped to obtain upon his return from the audience with the Grand Duke before whom he had appeared precisely to submit his request, he overheard someone expressing, in rather foul terms, how the latter was even more of a bigwig than his August deceased Progenitor [Ferdinand III]*; expressions which, in February last, were pronounced in the same terms, in his presence, by Assistant Gatekeeper Giovanni Masini, who also appeared before the Royal Throne to claim his alleged rights over the post of Gatekeeper assigned to Signori.*

Leopold II of Lorraine, the last Grand Duke of Florence

That an Amatis Meucci, in speaking with said Cappelli twenty days before [June 5th]*, informed him that his son had been put in jail, saying that it was an act of injustice, and that also at the Presidency everyone was unhappy and confused, no longer knowing what to do, and that he was more than happy that he had gotten out of there.*

Lastly, he stated that he knew that many Gatekeepers often gathered in the home of Signori, who boasted friendships and protection, by of which he had even promised a post of Gatekeeper to a former military man, a Lorenzo Marcani, although he was not aware of the reason why they met there.

Gatekeeper Pietro Toscanelli testifies on the statements pronounced by Marmorelli and by Pini, of which he was informed by Cappelli himself and states, together with Sestigiani, Chiarugi and Davicano, that he heard the foregoing Maruscelli, as well as Masini in the course of many different conversations, casting the aforementioned aspersions on the Grand Duke, hence, although this part of Cappelli's story can be verified, since the statements of the witnesses are quite accurate and detailed, there is nevertheless a possibility that such testimonies are spiteful, since it is now certain that among the members of the Gatekeepers' staff two rival Factions have existed for a long time, and the first one includes the witnesses in the present case, therefore we cannot be altogether certain that the deductions are true, as, what is more, they are not backed up by any evidence either as regards the statements allegedly pronounced by Meucci and by Volantini and Pini to Marmorelli, as the Vice Street Inspector Ciotti, who states he was present at the foregoing, contested the statements, or in that which concerns Signori's alleged protection, of which only Toscanelli speaks, and it was not possible to track down Marcani, to whom Signori supposedly promised a post as Gatekeeper, and the Police was not able to discover anything about the meetings that reportedly took place in the home of Signori.

Map showing how the Grand Duchy of Tuscany was immune from the riots for the unification of Italy

As regards the declared injustices and barbarities inflicted by the President of the Buon Governo, Gatekeepers Toscanelli, Sestigiani and Chiarugi state that they overheard several different individuals employed as Gatekeepers pronounce similar expressions under various circumstances, so that the testimonial of Cappelli, the gentleman reporting, is not entirely isolated.

Overall this case deals with bold, immoderate expressions against the government, and of extremely vicious statements against the current Monarch, so, these being extremely delicate by nature, I deemed it fair to first investigate further on the matter and summon the witnesses once again, and then submit the related papers to the attention of Your Illustrious Excellency, awaiting for your very wise decisions, which I shall abide by with perfect esteem and distinct regard."

However, one must not take as gospel all of the information contained in the report. For instance, the accusations against Del Nibbio could very well have been made up by the informer, in order to take revenge for hardships he might have had to put up with, just like many other colleagues of his, including Antonio Meucci. Indeed, as can be deduced on the basis of the various documents already mentioned, Del Nibbio was much too interested in holding on to his job - from which

he gained considerable profits in addition to his salary - to make remarks against the Government, being fully aware that the city crawled with squealers.

Besides, the signs of growing discontent and the offensive comments against the Authorities were not only reliable, but even toned down. Indeed, the new Grand Duke was subjected to insults much worse than the ones referred to in the mentioned report. Moreover, the nickname of 'bigwig,' meaning 'fool,' hardly fit Leopold II (who deserved it much less than his deceased *august progenitor*). The mordacity of Tuscans towards the Grand Duke was expressed with various epithets, such as 'Canapino' (or 'Canapone,' meaning man with flowing white hair) and 'recchione' (faggot), thus attributing to him, at once, the exotic trait of his whitish hair and a virility defect (what is more, groundless).

Whereas the political atmosphere remained relatively stable within the Grand Duchy of Tuscany, elsewhere the second wave of revolutionary riots for the unification of Italy were in the making, of which there was plenty of talk at the outer gates of Florence. The first wave, which dates back to 1820-21, had ended with wakes of political exodus to England, Switzerland and the United States of America, the only countries that did not conceal their support for Italian defenders of Independence. The second wave exploded in 1831, but that one did not involve the Grand Duchy of Tuscany either. On the contrary, Leopold II could actually afford to give shelter and assistance to many scientists and scholars, banished from Modena and Parma, after the 1831 riots, as well as to King Carlo Alberto himself, who easily managed to meet with Massimo D'Azeglio, a renowned liberal, in Florence. And this occurred while in the other cities revolts took place, repression rose, and death sentences abounded. The Lorraines took on a more rigid attitude only after the third wave of riots, that of 1848-49 and, even more so, after the subsequent ones, which took place throughout the entire decade of the 1850s, up until the unification of Italy. Instead, up until 1848 approximately, the Lorraines were rather tolerant, and it is worth mentioning that they had the merit of not allowing any death sentence to be pronounced within the Grand Duchy.

The report of Police Superintendent Tassinari also mentioned Amatis Meucci who had complained to one of the informer Gatekeepers, Carlo Cappelli, about the unfair sentence to detention that his son Antonio was serving. Amatis also said that he was happy that he no longer worked for the Presidency of the Buon Governo. Indeed, with Royal Decree dated 25 February 1829, Amatis had been transferred - with the same salary - from the post as *Custodian at the Presidency of the Buon Governo* to that of *First-Class Custodian in the Criminal*

Court Department, because now there were doubts as to his absolute reliability. This, indeed, was the judgment expressed on him in the transfer proposal written by the Auditor: *"While I cannot accuse Amatis Meucci of having been disloyal during Service, I have no confidence whatsoever in his personality for he is a Gossip, and is anxious to be informed on matters, which is not acceptable in an important Secretariat such as that of the Buon Governo, and finally, this office cannot be held by a man who has children whose conduct is condemnable, and are under police surveillance, and still on trial, as is currently the case of his First born son, tried at the Police Precinct of S. Croce in connection to a doubly scandalous affair."* Incidentally, there is no information in the State Archives of Florence regarding charges passed or against any of Antonio's brothers or sisters, hence the sentence contained in the report *"children whose conduct is condemnable, and are under Police surveillance"* was to be understood in the singular. Furthermore, the foregoing negative judgment on Amatis could have been a mere pretext in order to help a certain Vittorio Cortigiani, who was admired by the Auditor, and, vice-versa, was praised in the report and was transferred from the Criminal Court to the Presidency of the Buon Governo, in replacement of Amatis. Three months later, on 29 May 1829 (thus, fifteen days after Antonio had gone to jail), Amatis was transferred once again and sent to cover the office of *Audience Bailiff in the Supreme Court*, we don't know with what salary, since the Royal Decree states as follows: *"with the salary, burdens and obligations pertaining to said office, thus he will no longer receive any other allowance which has been granted him thus far."* Therefore, we can deduce that it was not a promotion, but quite the contrary, with suppression of *other allowances*, yet another step to lay him aside.

The cell of the Santa Croce Prison, where Antonio Meucci was locked up, was almost identical to the one of the Santo Spirito Police Precinct, only it was much more damp. And, what is worse, the same window up above, closed by the usual two large crossed iron bars, which looked out on the paving on the Lungarno della Zecca, allowed only very dim light into the cell. The vicinity of the Arno did the rest, in terms of humidity. *"Thank goodness it's June!…"* These words, which he had heard four years ago pronounced by the young man who was leaving the Santo Spirito prison, echoed in his mind now, but they did not comfort him in the least, also because it was obvious that the month of June brought him bad luck. Moreover, it was still May. Instead, the young man who shared the cell with Antonio, who was approximately his age and lay apparently indifferent on one of the two cots in the cell, represented a true

revelation, and his encounter contributed to opening a new course in the life of Antonio.

"Hey, what is your name?," - Antonio asked him, reaching out his hand in a friendly way. The other one, instead, acted shy and awkward. *"Who, me?… Lamberto Del Rosso… and you?"*

"Antonio Meucci… I've been given one month because I walked out on the Chief Gatekeeper who insulted me for no reason at Porta S. Gallo… Instead he reported that I went with women… Sometimes I did, just like everybody else… what about you?"

"As far as I'm concerned, the situation is more complicated. Furthermore… I don't know whether I can trust you…"

Antonio burst out in laughter. *"Oh, Lamberto!… Do I look like a squealer to you?… And do you think I would spend one month in jail just to hear you sing?"*

"Lower your voice, Antonio, because even the walls have ears here…" And he pointed to the small window overlooking the street, then bringing his finger before his nose. He instinctively looked around him and, drawing closer, whispered into Antonio's ear: *"Carboneria!…"* (political secret society of the Carbonari).

Antonio had heard about it. However, people said that it was a business for snobs, which began as an anti-French movement and then became the focus of the struggle to free the country from foreign rule. *"Oh!,"* he answered *"Aristocratic republicans against aristocratic supporters of the monarchy… Thank you but I don't care for that sort of thing. I'm just a poor devil!…" "No, no,"* Lamberto readily specified, *"It is not an aristocratic sect. Now there's people like Giuseppe Mazzini who intend to involve the people in the most important operations for liberation… You know… "* and he stopped to listen behind the cell door, for he thought he had heard footsteps. *"Hmmm… I was saying…"* - and he lowered his voice again *"… at the Teatro della Pergola there is a group who keeps in contact with Genoa, … ready to support Mazzini's actions when the time comes… In Pisa there is another group, at the University. But, mind you Antonio…"* and he rolled his eyes, giving him a knowing look. Antonio felt affection for that youth. Yes, he was his same age, but he seemed so innocent… How could he actually be a 'Carbonaro?' Anyhow, he felt he needed to reassure him as one would with a child: *"Don't worry, Lamberto…"* he said, *"we're on the same boat, aren't we? Now go to sleep, and sorry if I disturbed you…"*

That month in the jail of Santa Croce was longer and harder than Antonio had actually expected. The food was scarce and

poor. Humidity rotted one's bones and debilitated one's muscles. Lamberto Del Rosso left after only ten days since, fortunately for him, no evidence was found against him, notwithstanding the exhausting - and useless - interrogations at the Teatro della Pergola and in the S. Ambrogio district, where the young man lived.

When Antonio was released, on the night of 1 June 1829 (this time *it was June*), he was unrecognizable. Amatis, who went to fetch him, had to support him up to Piazza alla Croce, where they sat down to rest on one of the many benches on the left side of the magnificent Piazza, among masses of pigeons who flew and landed close to the passers-by with confidence. Once Antonio recovered a little, they took Via de' Pepi, from here they turned left up the long Via Sant'Egidio, at the end of which, after a few meters, on the right, they reached Casa Pasqui, their beautiful house. It took them more than an hour. When they reached their home, Mamma Domenica grew pale when she saw the shape Tonino was in, whereas grandfather Giuseppe, although ill, together with Adelaide, Gigia, Gigi and Beppe, gathered around him, comforting him with loving words, and insulting the '*canapone.'*

There was no time to rest. There was no time to recover. There was no time to think. There was no time to speak. Antonio went straight to bed after dinner because the following day *at nine o'clock sharp* he was to resume service at the Porta S. Gallo, with the damned Gatekeepers Del Nibbio and Donati and all the rest, for those damned *forty lire a month* which, moreover, during the month of detention, had been suspended.

Amatis was, as one would say, beside himself. He, who had almost adored the Lorraines, and who had always behaved as a loyal servant of the State, had started to hate them for some years now, and he didn't care to hide his feelings. Antonio dragged himself to work for approximately one month and a half, moving everyone who saw him to compassion for the bad shape he was in. Then it became necessary to call a doctor. Amatis asked the old family physician, Dr. Amintore Frassani, to visit his son and, if possible, to write a statement for him on the basis of which to obtain a leave from work, *"keeping his salary, don't forget…"* he added. Frassani took one look and that was all he needed to understand what illness had struck Antonio. Nonetheless he made him undress and lie down on the examination table, and analyzed every centimeter of his skin; he felt the soft spots and the bony areas, to get a clear idea of the extent to which the infection had spread. Then he made him dress again and invited him to sit in front of the desk. *"Tonino,"* he said, as he took a piece of paper for a prescription *"some young lady has made you a nice present…*

and you cannot hide it, because there is the fiscal examination…"

Doctor Targioni Zoppetti, fiscal doctor, knew how to unmask the fake illnesses of the so-called wise guys, but he also knew how to assist, when possible, those who were truly ill, helping them keep their job and their salary. Also in this regard the Lorraines were ahead of their time.

He visited Antonio thoroughly, and then dismissed him without uttering a word. When he ended all of the morning's visits, he wrote out all of the reports for the Auditor. The one concerning Meucci read as follows:

"10 September 1829

I, the undersigned Fiscal Doctor, have visited, as ordered by the Most Illustrious Knight Auditor President of the Buon Governo, the Assistant Gatekeeper Antonio Meucci with the aim to determine what illness he is affected by and whether it is necessary for him to make leave from work in order to follow a regular cure such as to restore him to perfect health.

The accurate examination performed on Meucci has allowed me to determine that he is affected by syphilis in the early stage, which manifests itself with exostoses, one of which is quite visible on the right parietal bone with swelling and inflammation of the adjacent soft parts. Furthermore, I have verified that he has a very weak pulse. Thus, I deem it necessary for him to be submitted to a regular cure in order to defeat the incipient ailment, which, if neglected, could entail severe consequences, especially in view of the fact that the Winter season is approaching.

Hence, I believe that, in order for him to follow the said cure, he needs to make leave from work for one month, which will allow him to recover fully, if he accurately follows the treatment prescribed by his doctor.

This is all that I can say on the basis of my expertise and conscience. Yours faithfully,

Doctor Antonio Targioni Zoppetti."

In the margin of Doctor Targioni Zoppetti's letter, the following note, written in the unmistakable and extremely small handwriting of the omnipotent Auditor Colmo can be read:

"The Chief of Gatekeepers has received the order to dismiss Meucci from service for one month, seeing to it that he immediately begin the cure.

September 16, 1829"

Dr. Frassati cured Tonino very well, but his diet was inadequate. Who knows how long it would have taken to heal him

on pasta and chick-peas beans and a few glasses of wine. What he needed was meat and fruit, just what poor people could not afford, if not on special holidays, twice or three times a year. Nonetheless, on October 20, Antonio appeared before the same Doctor Targioni Zoppetti for the fiscal visit at the end of his cure. As usual, the latter was very accurate, and, as usual, he dismissed him without saying a word. In the afternoon he wrote his report for the Auditor, in which he stated that Meucci's conditions had greatly improved, but that *"he still suffered from a sore throat and, also owing to residues of the other ailments, it is necessary for him to continue the treatment for another month in order to fully recover from the illness which afflicts him, and to be able to regularly perform his duty, no longer requiring further temporary leaves."*

Also the second leave for illness was granted. During these two months of leave for illness, a place as *Custodian of the Archives of the Grand Ducal Tithes* had become vacant, which also Antonio could aspire to. There were, however, twelve other candidates, on whom the police inspector provided detailed information. It was favorable for all of them, except for that pertaining to three people; the worst and longest report was the one on Antonio Meucci, which we translate here:

"30 September 1829

... … ...

[Candidate] *No. 5.— Antonio, son of Giovanni* [mistake, read: Amatis] *Meucci, aged 21, currently living with his Father on Via dei Servi. The Father of Antonio is Audience Bailiff at the Supreme Court, and he supports other five children.*

This Youth has been working for six years in this department as Assistant Gatekeeper, with a monthly Salary of forty lire, which does not allow him to provide for himself and is thus supported in part by his father.

The moral of this young man is questionable, given that he engages in Affairs with married Women, and has a bent for gluttony, neglecting his duties on the job in favor of his bad habits. Hence he is considered as a misbehaving, insubordinate, bold and daring young man.

He was implicated in the ordinary Trial against the Firemen on the occasion of the 4 April 1825 celebrations for the birth of the Royal Archduchess Augusta Ferdinanda, in connection to the offenses suffered by various spectators, and with a sentence issued on August 1st of this year it was declared that, were he to make further trouble, he would be sent to jail.

Owing to shortcomings during service, he was mortified with one month in Jail with an economic Decree of the Police

Precinct of Santa Croce, which he served from May 2nd to June 1st 1829…

Giovanni Chiarini [Police Inspector]"

The cloister of Florence's Accademia di Belle Arti (Academy of Fine Arts)

Thus, Antonio Meucci had been branded for life. On every good opportunity that came up, his past experiences with the police regularly surfaced, as information was always requested from the police before any decision regarding competitive examinations, promotions, grants, or other matters were taken. Instead, new accusations were added, like in Chiarini's report, where he is reproached for the vice of gluttony - namely, unrestrained eating and drinking - evidently referring to the hours on duty, since in his home there was not enough food for the entire family.

Back at the Porta alla Croce, someone (the reader can imagine who) was already thinking of how to welcome Antonio back to work, after the two months of leave of absence for his illness. Furthermore, to make sure that Antonio observed the injunction according to which he was to *"no longer associate with Donna Luisa Socè and Donna Teresa Paoletti,"* the Police Superintendent of Santa Croce had alerted some informers - of which there were always plenty in Florence - who were to notify him at once, were Meucci to be seen in the whereabouts of one of the two famous stores outside Porta a Pinti.

Instead, Antonio, naive as he was, was found there on October 30 of that year, at four o'clock in the afternoon, while he was still on leave of absence, which was to lapse fifteen days later. It is likely that Antonio had gone to the Trattoria del Chiù to find out whom he was to thank for the *"nice gift"* received, as Doctor Frassani put it. He certainly did not go there to contract another infection. The fact is that after only ten minutes that Antonio was talking to mother and daughter Socè, the notorious police agent Vincenzo Bertini appeared, breathless, at the doorstep of the shop, accompanied by two witnesses, whom he had picked up on the spot, Flavio Guelfi and Pellegrino Bonini. His pig eyes open wide, this time, however, keeping at a safe distance, Bertini allowed the two witnesses to ascertain the fact and then left, after having taken down the names of the people present, without saying one word either to Antonio or to the two women.

Antonio turned pale, both on account of his weakness, and, especially, for the warning contained in the famous *'resolution'* dated May 14, according to which he would be sentenced to one month in jail and would be dismissed from his job should he breach the *'injunction'* to no longer *'associate with'* Donna Socè or Donna Paoletti. Indeed, when he arrived at Porta San Gallo to resume service the following

day, the Gatekeeper Doni gave him the order to immediately go to the Santa Croce Police Precinct. This time, Antonio did not obey. *"What else can happen to me anyway?,"* he thought to himself, *"I'm through now, both in terms of my health and of my work this is the pure and simple truth!"* When he returned home, however, he consulted his father and together they decided that it would nevertheless be opportune to forward a plea to the Buon Governo. The text is transcribed here under, together with the notes of the Auditor in the margin:

"*Second Division - November 5* [Note of the Presidency]"

"Most illustrious Sir Knight President of the Buon Governo
Antonio Meucci from Florence, one of the Assistant Gatekeepers at the Gates of this city, very Humble Servant of Your Most Illustrious Excellence, with Reverence submits the following to Your attention.

On October 30 of this year, he was taken by surprise by Police Agent Bertini in the shop of Antonio Socè, known as The Trattoria del Chiù, notwithstanding the fact that he had received an injunction from the Santa Croce Police Precinct which expressly forbid him to associate with the Socè family.

As the undersigned was notified by Gatekeeper Doni that he was to appear immediately before Chancellor Corsi at the Santa Croce Police Department fearing that he might be put in jail as prescribed by said injunction, he failed to comply with Doni's notification.

Being perfectly aware of having unfortunately breached the Superior Orders in many ways, and feeling the burden of his past experiences, from now on he intends to follow a moderate and irreproachable conduct; nevertheless, he:

Full heartily begs Your Most Illustrious Excellence to condescend to grant him a generous pardon for his past offenses, and he will not fail to give unwavering proof that he has mended his ways. By your Grace."

[Note in the margin of the Presidency] "*The Superior has stated that it is first of all necessary for him to give himself up to the police.*
5 November 1829"

On the morning of November 7, Antonio appeared before the Santa Croce Police Superintendent, who was no longer Antonio Cecchini. The latter, indeed, had been replaced for some months now by Niccolò Tassinari, whom we have already come across at Santo Spirito in June of that year. Tassinari did everything he could not to make matters worse for that young

man who was in such a bad shape, realizing that the Gatekeepers of the Porta alla Croce had played a dirty trick on him, but he also had to avoid vexing the Auditor of the Buon Governo. In his report, dated November 12, 1829, although he defined Meucci as *"an ill-tempered subject and insolent disdainer of the superior decisions,"* he nevertheless added that, on the basis of his verifications, the following could be stated:

"... that the justifications presented by Meucci in his own defense are actually legitimate, and, consequently, although they cannot erase altogether the mistake committed by the Defendant, they are nevertheless sufficient to mitigate the gravity of the matter, and it is for this reason that I am of the compliant opinion, on account of the marked contempt displayed towards the orders of the Court, that he should be sentenced to one month in jail as of the day he enters the latter; furthermore, he should also pay all expenses connected to the Proceedings, and when he is to resume service, moreover, I am of the opinion that, with a serious warning, he should once again be reminded of the breached Injunction and notified that, should he fail to comply once again, he will be arrested and sentenced to two months in jail and, without further notifications, he will be definitively dismissed from his office."

In other words, Tassinari put off Antonio's dismissal from service to his next misdeed, suggesting they turn a blind eye that time. But *Sir Knight Auditor President of the Buon Governo* deemed that, in order to prove that the orders of the Court were no laughing matter, the only way to avoid dismissing him from his job was to sentence him to another month in jail, also suspending his salary, and sent the following order to Tassinari:

"Santa Croce Police Precinct
Sent on the 14th inst., 1829
With reference to the matter illustrated in your letter dated 12th inst., regarding the breaching of the Injunction according to which the Assistant Gatekeeper Antonio Meucci was not to approach Donna Luisa Socè, and his marked insubordination to the orders of the Court, You Most Illustrious Sir, will sentence him to two months in jail, suspending him from service and suspending his salary as well, thus renewing the mentioned Injunction with the warning indicated in your letter.
I return the related deeds to You C"

Tassinari himself, on Christmas of that year, 1829, requested and obtained a hearing from *Mr. "C"* for "*confidential communications."* Sitting restlessly on his chair, and without trying to move him to pity, for he would have obtained the opposite effect, he explained to the latter that the image of the Buon Governo would certainly be damaged by the possible death in prison of the emaciated Meucci, on whose deplorable health conditions as many as two certificates signed by the fiscal doctor existed in the archives. Furthermore - knowing how sensitive *Mr. "C"* was to this matter - he also mentioned possible disorders, as well as, on the contrary, the possibility of arousing feelings of admiration on the part of the people should Antonio be - generously - released from prison in advance, now that Christmas was round the bend. *Mr. "C"* replied that he would think it over, but that, in any event, it was necessary for the prisoner to forward a plea, so that it wouldn't appear that the Buon Governo was spontaneously moved to compassion for the prisoner.

Thus it was, and Antonio was released from prison on December 24, on Christmas eve, one minute after Tassinari received the usual concise order from *Mr. "C,"* in which fifteen of the sixty days to be spent in jail were pardoned:

"Police Supt. of Santa Croce
Sent 24 Xber [December] *1829*
With reference to the Assistant Gatekeeper Antonio Meucci, who has almost finished serving his prison sentence, You, Most Illustrious Sir, may order that he be immediately released from jail, after having reiterated the order and the warning i i [idem idem] *contained in my resolution dated 14th of the past month."*

That Christmas in the Meucci home was one of the saddest of the twenty-one Christmases passed since Antonio was born. Indeed, almost two months before, precisely on 3 November 1829, Grandfather Giuseppe had died, as he was about to turn ninety, just when Antonio was far away from home because he was wanted by the police. In turn, Grandfather Giuseppe, whose mind was lucid till the end, had suffered so much - and quietly - for the never ending misfortunes that fell upon his beloved nephew, that he welcomed death almost with relief.

Amatis tried to cheer up that table of hungry mouths (one less, however, with respect to the previous Christmas) and of eyes clouded by sadness and almost dulled by resignation. *"It could have been worse,"* he said, *"if they insisted on dismissing him from his job… By the way, Antonio, tomorrow morning remember that you must write a plea for the remission of the fifteen days' salary since they have remitted your*

detention ... those damned traitors ... Eat!... you have to build up strength... Go on!... You'll see, this terrible streak of bad luck will end... Gigia!... Help your mother, don't just stand there, hurry up!… And you, Beppe, don't act as if it's your brother's funeral, after all, he isn't dead …"

On 12 January 1830, the remission of the fifteen days' salary arrived and Antonio went to pick up the corresponding twenty lire at the *Palazzo Nonfinito,* seat of the General Administration of the Royal Revenues, where they didn't fail to remind him of the famous *Injunction.* But Antonio had said all he had to say to those damned women, and nobody, absolutely nobody, would ever see him again at Porta a Pinti, if not to spit there.

Unfortunately for him, however, another catastrophe was on the way.

In the early month of June, which Antonio Meucci now considered his sworn enemy, events took a turn for the worse. To avoid moving the reader to compassion once again, we shall briefly summarize the sequence of dates and events of the episode, on the basis of the documents contained in the archives of the Presidency of the Buon Governo (see the complete list in the appendix *List of Documents and Transcriptions*):

1830, June 9 - Antonio Meucci is accused of having arrived at the Porta alla Croce, where he was on duty, three quarters of an hour late, for the second time in one month. He is sentenced to two days in jail and threatened to be dismissed from service should he commit another violation.

1830, July 7 - Antonio Meucci is accused of having arrived late to work at the same Gate for the third time. He is suspended from service and deprived of his salary for fifteen days, and the threat of dismissal in case of another violation is reiterated.

1830, July 10 - Amatis Meucci - now employed as *Usher of the Auditor of the Supreme Magistrate* - is sentenced summarily to immediate detention for six days, on account of his insulting behavior displayed on that morning, at nine o'clock, in the office of the Gatekeepers, where he defended his son, who had been unjustly punished.

1830, not dated (presumably July 12) - Amatis Meucci writes to the President of the Buon Governo from jail, saying that, on July 10, he had merely complained to the Inspector of Gatekeepers Zuchetti about the unjust punishment inflicted upon his son Antonio, who had arrived late to work by only a few minutes, and not three quarters of an hour, as he had been accused. He states that only for those few moderate words, on that same day, at four o'clock, he was put in jail and was now serving a sentence of six days of detention inflicted upon him.

1830, July 13 - The Police Superintendent of Santo Spirito receives the order to summon Antonio Meucci, to notify him that his request of resignation from service is accepted. (No request of resignation signed by Antonio Meucci was ever found in the State Archives of Florence).

1830, July 13 - The Police Superintendent of Santo Spirito receives the order to forbid Amatis Meucci - once he has served his sentence - "*to go anywhere near the Department or its Offices without having been invited to do so, and under severe threats of punishment.*"

Antonio Meucci's "resignation" from the office of Assistant Gatekeeper

1830, July 14 - Supernumerary Arcangelo Tosoni is appointed Assistant Gatekeeper in replacement of Antonio Meucci, who is said to have resigned.

1830, July 15 - In consideration of the special circumstances presented by Amatis Meucci, he is released from prison one day early.

1830, August 4 - The *former* Assistant Gatekeeper Antonio Meucci is granted the fifteen days salary which had been suspended according to the resolution dated July 7, although he lost his job, as of July 13.

The entire course of events illustrated - from 3 October 1823, when Antonio Meucci began working at the Buon Governo, to 13 July 1830, the date on which he resigned (probably forced to do so) - may seem unbelievable to a citizen of our days, at least in the so-called Western world, especially if one considers that they struck a young man aged between fifteen and twenty-two. It seems to us that the eventuality that Antonio Meucci may have been forced to resort to extreme expedients, on account of such events, is quite understandable. In fact, according to some researchers, Antonio Meucci had expressed the intention to commit suicide, and he had written (six) farewell letter to his closest friends. However, no evidence was found by the Author of this book to back up such statements. Others still - again, without providing any sort of evidence - state that he was seen behind the barricades of the 1831 revolutionary riots, without specifying in which city (not in Tuscany, that is for sure). Once more, we haven't found any evidence to prove such allegations.

The most plausible hypothesis - which, to a great extent, is supported by several letters that are kept at the National Library of Florence and by the testimonial of Antonio Meucci himself during the Bell/Globe trial, which will be mentioned further on - is that he worked as Assistant technical supervisor in various theaters in Florence. It is quite likely that this work was, especially in the beginning, quite occasional. It is impossible to find registrations of contracts, for the latter were drawn up only with singers, orchestra conductors and famous

actors, certainly not with a technical supervisor, who was merely one among the hundreds of workers employed during each performance, almost always hired and paid, from time to time, directly by the *impresario*.

For this reason also, that is to say, in order to rely on a stable salary, Antonio Meucci tried twice, once in February 1832, and a second time on June 15, 1833, to be re-employed as Assistant Gatekeeper. According to the note *"2/18 June/Pontenani/Re-admitted"* written in the margin of the second plea - which was forwarded on the occasion of the general amnesty granted by the Monarch - it appears that the Buon Governo had decided to re-employ him. In this plea, Meucci stated that he had *"rashly and heedlessly requested to be dismissed from his office"* in a moment of desperation, thus denying that he had been directly forced to do so. Furthermore, he said that he had not had a job *"in almost four years,"* and that he was *"aged twenty-six, unemployed and fully supported by his poor Father, who surely could not continue to provide for him."* This would therefore rule out the hypothesis that, up until the date of the plea (15 June 1833), he had a stable job at the Teatro della Pergola or elsewhere.

Antonio Meucci's plea to be re-employed as Assistant Gatekeeper

On the other hand, at the State Archives of Florence there is no evidence of the fact that he was actually re-employed as Assistant Gatekeeper.

Finally, the statement of some authors according to whom, following the foregoing re-employment, Antonio Meucci was assigned duty at the Boscolungo customs barrier, is in contradiction with the fact that the following registration, which appeared in the *Almanacco Toscano del Periodo Lorenese* (the Tuscan Almanac of the Lorrainese Period), under the entry *Dogane di Frontiera Boscolungo* (*Border Customs - Boscolungo*) appears for the first time in 1830 and is repeated identically every year up until 1841:

CUSTOMS OFFICER
Mr. Antonio Meucci
who also supervises the Customs Posts of
Cutigliano, Popiglio and Vizzaneta
ASSISTANT
Mr. Giovanni Calamia

Now, on the basis of the aforementioned dates of the re-employment requests (1832 and 1833), as well as of the date of Meucci's departure from Florence (1835), one must deduce that the customs officer of Boscolungo was a man who had the same name as our Antonio, which was not unusual at all in Florence, as has already been pointed out several times. Indeed, in the Archives of the Presidency of the Buon

Governo, some twelve records have been traced regarding different Meuccis, with various first names, including a Meucci Frà Fedele (a monk), filed for *"Non-compliance with his Office,"* followed by a *"Revocation of Exile,"* which can be of interest to the reader only to get an idea of the already mentioned obsessive supervision of the Police over every single action of every single subject of the Grand Duchy. In the years 1833-34-35, an Antonio Meucci was traced who was married to Adelaide Galli, with three children and a nurse, and who lived in the Santissima Annunziata quarter, on Via San Sebastiano, house no. 6298. Evidently, it is another namesake. Yet a third namesake was found in Cartagena (a port of Western Colombia) in 1830. He was the *Italian painter Antonio Meucci* who, on that occasion, made a portrait and three engravings for the famous commander *Simón Bolívar*, as is mentioned in a book by *Márquez*, which was published in Havana in 1989 (see bibliography). But "our" Antonio Meucci lived then in Florence.

Finally, it is worth highlighting that, in a letter written in the last year of his life by Antonio Meucci to his friend Professor Carlo Paladini, residing in Lucca, he speaks of *"the Italy for which in '33 and '34, I served many months in prison with Guerrazzi,"* referring to Francesco Domenico Guerrazzi, a well-known writer and active patriot in Florence. From this letter - which one must absolutely believe, since it has been repeatedly proven (and acknowledged even by his opponents) that Meucci never lied on any detail of his life, however slight - one can deduce that, although Antonio didn't take part in the 1831 riots, he was nonetheless put in jail for conspiracy in the years 1833 and 1834.

Hereinafter, we will try to reconstruct the events which occurred after July 1830, on the basis of the scanty reliable information that we were able to gather, also due to the fact that some sections of the Florence's State Archives of the years from 1830 to 1840 were destroyed by the 1966 flood.

It is worth noting that on 31 January 1832, Adelaide (Antonio's sister) married Barbadoro Pasquale, a hairdresser by profession, aged thirty-three, resident of the San Giovanni della Fortezza quarter. It is likely that she went to live with her husband. In the wedding certificate, it is stated that Adelaide Meucci was a tailor by profession. Antonio, Luisa, Luigi and Giuseppe continued to live with Amatis. Indeed, in some letters written from America to his brother Giuseppe, Antonio will say: *"Send my love to Gigi and to Gigia."*

THE THEATER

In August, Florence is like a furnace. And thank goodness for that, since only this way is it possible to dry one's bones, given that, conversely, during the Wintertime it is like a freezer. Perhaps, it is a way to shape the Florentines … Antonio, who was no longer working for the Buon Governo, wandered through the narrow cobblestone streets of the town center, in search of any job, even if not up to the standards of the education received at the Accademia.

He had set his mind on the theater, both because he had already worked there occasionally, ever since he was a boy, as assistant to the property men, and also because, given that it would occupy him mainly in the evening, it would have allowed him to take up other activities during the daytime. Finally, according to what his cell companion Lamberto had told him, he hoped to find there a working environment which was definitely more open or, at any rate, less oppressive than serving under the Royal Revenues. Indeed, the world of entertainment has always been the source of new ideas, expressed way before their time, and with that almost shameless unscrupulousness, fueled by the permission, tacitly granted by the rulers, to be criticized and even ridiculed in theatrical make-believe. On the other hand, as every wise ruler knows perfectly well, it is better that the people give vent to their feelings at the theater rather than in the squares. In August, however, most theaters were closed, at least the most important ones, such as the prestigious *Teatro della Pergola*. Therefore, Antonio made an attempt, disregarding its bad reputation, with the more popular *Teatro Giglio* (formerly *Teatro della Quarconia*), situated at the intersection between Via de' Cerchi and Via de' Cimatori, in the Santa Croce district, a few blocks away from Piazza del Granduca.

Indeed, the very old building of the Quarconia, which in the Middle Ages had belonged to the illustrious Cerchi family, ever since the mid-seventeenth century had been used as a reformatory and juvenile prison. As a matter of fact, the name *Quarquonia* (later changed to *Quarconia*) stemmed from the two Latin words *'quare'* and *'quoniam,'* used by the magistrate who questioned the youths prior to making his decision as to their punishment. In 1786, the prison was transferred to Via delle Casine, and in its place a "small and bare" theater was set up which was named *"Sala della Vecchia Quarconia"* (Hall of the Old Quarconia), recalling its previous usage. Although in 1789 the Buon Governo had ordered for it to be demolished, the owners were able to save it as a public theater, free of charge, and subsequently, for a long period of time, it was used as a public gaming-room, in particular for the game of pool.

"Passing from one owner to the other, from one restoration to the other," states the valuable publication 'A Teatro con i Lorena' (At the Theater with the Lorraines), by Zambelli and Tei, *"the 'Vecchia Quarconia' spent a good part of the nineteenth century in the commendable, however vain, attempt to shake off that picturesque - though hardly gratifying - reputation as 'the Pergola of boors and sluts,' which actually characterized it for the entire century (and the following one as well, when the theater, prior to becoming a cinema house, featured worthless variety shows)."*

The façade of Florence's Teatro della Pergola
In the foreground the three entrance doors; the box office is in the background

As of 1826, when the theater was reorganized and re-baptized Teatro Giglio (Theater of the Lily), to redeem its deplorable tradition, and the price of the ticket was raised to "two crazie" (approximately 740 lire or $0.62, in 1990) for popular seats (which could be afforded by the lower class of the area), it could hardly be considered pure as a lily, to the extent that the members of the Commission had to ask the theater manager to take drastic measures in terms of decency, so that, among other things, *"ill-dressed people or people wearing shirts not be allowed to enter, and that it be prohibited to eat food even in the boxes; that vendors not be allowed to scream in order to advertise the sale of sweets and drinks, and that the actors and crowd artists not be allowed to dress so poorly as to cause the audience to laugh and murmur and to set the benches in the balconies farther apart in order to prevent relevant indecencies."*

Antonio found a job at the Quarconia for a few 'paoli' a night, and only on the evenings when plays were featured. Up until the end of the Summer, there was hardly any work at the Alfieri theater and at the Goldoni theater either; nevertheless, it was possible to glean a few *'paoli'* a night there too. The work consisted basically in helping to produce what are known today as "special effects," namely various lights and sounds, such as lightning, thunder, rain, wind, and so on. Every theater had its own system. For instance, at the Goldoni lightning was produced with Greek pitch and rain with tinsel wires. To simulate the passing from night to day, sheets of glass with one side colored blue were placed in front of the candles that lit the scenes, and they were turned very slowly. But the Teatro della Pergola featured effects that were much more spectacular.

The custodian of the Teatro della Pergola, Dante Margheri, had advised Antonio to come back towards the end of October of that year, 1833, to speak with the manager, Alessandro Lanari, who was traveling through Italy and Europe in search of talented actors to engage for the next season, which would begin in December. Margheri also told him that the current chief stagehand, Artemio Canovetti, was looking for someone just like him, in other words someone who had attended the Ac-

cademia, because he was tired of the bunglers who passed themselves off as expert property men, without having any notion of mechanics whatsoever.

The Teatro della Pergola's great hall for the audience

Canovetti had a good reason for being so demanding. The Teatro della Pergola was a prodigy of technology, under all aspects. The theater, which was built by order of the Medici in 1656 by the great architect Ferdinando Tacca, represented a milestone in the history of theater architecture worldwide. Incidentally, it is worth highlighting that the San Carlo Theater in Naples was built in 1737, Milan's La Scala - Piermarini's masterpiece - between 1776 and 1778 and Venice's La Fenice in 1792.

As is accurately described by its current manager, Alfonso Spadoni, the hall of the Teatro della Pergola, which originally contained 900 seats, "*is a true marvel, featuring the innovation of boxes properly aligned in superimposed orders (with the Pergola, the theater 'Italian style' comes into existence: the date is truly historic, and the idea triumphed for over two centuries) … The proscenium … is extremely vast and the spaces where the sets are arranged are organized in a remarkable way. Its cubic capacity is even greater than that of the entire hall: it is over 25 meters deep from the forestage down, which allows to produce spectacular effects in terms of distance, with remote starlit skies; at the sides (still today a weak point of many stages, both old and new) there is enough space to allow the 'dolly' exit of large 'reinforced' sets; the stage is almost 20 meters high; a huge maneuver trellis-work (almost 500 square meters) allows the 'soffittisti' (stagehands working above the stage) - provided they are not afraid of heights - to set up an incredible number of 'pulleys,' 'reels' and 'counterweights.' The sets and curtains can vanish instantly, even rising 'straight,' which is to say, without being folded back; and as they rise, others can immediately come down to replace them, so that in one performance alone between 50 and 60 rapid changes of sets can be performed. The vast understage makes it possible to open as many 'trap doors' as one likes, to create the magic effects of actors and objects appearing and vanishing.*"

The cost of the theater was estimated at 136,000 Tuscan Lire (equivalent to many billions Lire or million dollars, in 1990, since this sum refers to the year 1650 approximately); according to Spadoni, the construction costs were borne by Cardinal Giovan Carlo dei Medici, also in the attempt to make up for the image of the Casa Medici which was in decline at the time. But the spectacular sets of the *Hypermestra*, conceived and directed by Tacca himself in 1658, when the stage was furnished with majestic structures (which even made it possible to raise the entire floor, including actors and sets),

cost another 110,000 Lire, almost as much as the construction works. As one can see, so-called *'Colossals'* are not a phenomenon of our times.

For the first time, furthermore, the theater was conceived as a factory, which is to say, a structure comprising apartments for set designers and stagehands and featuring an unimaginable number of equipped spaces: *"large 'prop rooms' for the set-up, reordering, and prompt supply of props and costumes; many dressing rooms for solo performers and large rooms for orchestra and band players as well as spacious areas for the masses; rehearsal room for singing, rehearsal room for dancers (featuring a sloping floor, like the stage); and even apartments for foreign artists."* The architect Tacca devoted particular attention to soundproofing the hall in order to protect it from the noises coming from the street, produced especially by coaches (and also to protect it from the smell of the horses), erecting it well within the complex building, to the extent that *"not even the insolent racket of our days is able to come through."*

The lighting system of the hall and of the stage is also very interesting. Lighting was provided by means of candles, situated in superimposed crowns (chandelier) along an adequate number of columns in the hall. Their light was dimmed or oriented and intensified by means of a multitude of rotating mirrors - which could also serve as screens - which were operated simultaneously by adequate linkages. Subsequently, in 1837, when Antonio had already left Florence, gas lighting was introduced, many years before other well-known theaters.

The method used in the seventeenth century to simulate lightning on the stage was simple and effective: from an opening in the backdrop an attendant held out in front of a powerful chandelier two dovetailed wood rods, each with a saw-tooth shaped side; hence, with a swift gesture, he would separate them, letting the zig-zagging light through, and then closed them abruptly (repeating this gesture various times, if necessary), while other attendants produced the crashing sound of lightning with special tools. Later on, when the first electrostatic devices appeared, the Teatro della Pergola purchased a very powerful machine, able to produce strong electrical discharges, namely, as Benjamin Franklin proved in 1760, veritable artificial lightning (including the sound effects). As one can see, the Teatro della Pergola adopted all recent technological findings to improve and update stage effects, so much so that for many years theater technicians from Europe as well as the rest of the world looked to it for inspiration.

Two views of the Teatro della Pergola's proscenium, seen from the inside

Alessandro Lanari was, without the shadow of a doubt, the greatest impresario of his time. Born in the Marche region, he began his career as stage manager at the Teatro Giglio of Lucca in 1821, at the age of thirty-one. Two years later, he had already taken on a leading role at the Pergola in Florence, where he spent the rest of his life, until he died in 1862. Not only was he an expert at finding (and enchanting) talented actors, but he was also a shrewd manager and able diplomat, especially when it came to dealing with the higher authorities. In the Archives of the Accademia degli Immobili (the Real Estate Academy) - founder and owner of the Teatro della Pergola up until 1942, when the theater was handed over to the ETI (Ente Teatrale Italiano, Italian Theater Institution) - at least three large files of papers were found which documented the ability with which Lanari managed to have taxes reduced by the Grand Duchy or to lease the theater at better conditions.

Naturally, he also tended to pay the staff as little as possible, with the exception of singers, orchestra conductors and famous actors, who set their own price, on account of the very high demand worldwide, especially for the Opera.

When Antonio Meucci, accompanied by the Pergola's chief stagehand, Artemio Canovetti, was able to approach the great Lanari, he was almost paralyzed by the magnetism which emanated from that man, who was just over forty at the time. Fortunately, Antonio didn't need to utter one word, because it was Lanari who said everything, in a flash, so quickly that when he finished speaking, it seemed that Antonio Meucci's *thank you* came out behind time. But for Lanari it was normal to take a person and completely upset his life, it didn't matter whether he would make it incredibly better or incredibly worse than it was before. Immediately sensing the value of Antonio Meucci, having read in the eyes of the genius Canovetti the interest he had in that youth, and having subsequently scrutinized the young Meucci from the corner of his eye, as fast as a machine gun he sentenced how his life was to change, without too many words: *"You begin tonight, two hours from now, as stagehand and technical supervisor, assisting the second stagehand Mr. Corsi: both of you work under Mr. Canovetti. Your salary is forty Lire a week but only for the season. I will find you another job for the summer. You can lodge for free in one of the apartments for the stagehands: Canovetti will show you. That is the closet for your equipment. If you do a good job you can become second stagehand after one year. You will follow my company on its tours in various cities: we have contracts in Rome, Livorno, Ancona, Foligno and Naples. Good luck!"*

This scene took place on the large scaffolding of the proscenium, which was invaded by teams of workers busy touching up the last details in view of the opening performance

of the season. Lanari vanished down the narrow and winding corridor, which, through a tiny door on the right side of the proscenium, led to the offices of the management and to the box office. Only Canovetti, visibly satisfied for his pet, stayed where he stood, to testify that it wasn't a dream or theatrical make-believe, on account of the site where the characters had performed.

Antonio was overwhelmed. All of a sudden he had a well-paid job which would put an end to his misery. All of a sudden, because of the respect with which Lanari had spoken to him, using the polite form, he no longer felt like a careless youth, but like an important man. All of a sudden… he was happy.

Canovetti shook him out of that temporary catalepsy, but in a polite and understanding way. *"Mr. Meucci* - he said - *tonight we won't be needing you. Come tomorrow morning… is ten o'clock all right with you? Bring your things with you so you can settle down here… go on… go on… and… congratulations!"*

"Mr. Meucci"… he had called him "*Mr*. Meucci!" And who of all people? The great Canovetti himself. Antonio headed down the same narrow corridor in the wake of Lanari, as if he were about to cross the tunnel that was to take him from dream to reality, from an impossibly beautiful dream towards the harsh everyday reality.

The staff and the artists of the Teatro della Pergola entered and exited through a very tiny box office, situated to the right of the three doors of the main entrance, which are easy to recognize, for they are crowned by a lovely wrought iron and glass cantilever roof, so light as to appear more like a lacework than a structure.

Antonio could not avoid the small crowd of people, their overcoats damp with rain, who thronged the box office to purchase tickets. Making his way towards the exit, he could overhear a few biting comments on this or that singer and remarks on certain parts of the body of a well-known soprano. Outside it drizzled. It was already evening.

Antonio Meucci's work room at the Teatro della Pergola (the little door on the right)

Antonio tried to figure out what had happened: it was daytime when he had gone inside, and he remembered the sun was out. It was an uncertain and dull sun. Now the elegant oil street lamps, which looked like many tiny glass houses, inhabited by those warm and yellow flames, winked at him from above, with friendly complicity. The images of their wrought iron framework were reflected, magnified and blurred, on the large juxtaposed stones of the narrow Via della Pergola, which the rain made shiny, but not enough to prevent them from blurring the outlines … thus, it was evening, but an evening that did not seem to belong to that day …

ALESSANDRO LANARI

Alessandro Lanari was born in San Marcello di Jesi in 1790. He began his career as theater manager in Tuscany, at the Teatro Giglio of Lucca, in 1821. Already in 1823, together with Lorenzo Panzieri and Nicola Tacchinardi, he was part of a triumvirate of theater managers responsible for the Teatro della Pergola. The Grand Duke granted to the three of them an annual contribution of 1500 zecchini (approximately 100 million Lire or $83,000, in 1990). When the dance school was set up within the theater, in 1827, the Grand Duke increased said contribution by another 1500 zecchini. In 1830 Lanari became the sole manager of the Pergola, after one year of successful performances at the Fenice, with Bellini's 'I Capuleti e i Montecchi.' In the years which followed 1830, while working at the Pergola, he continued to collaborate with La Scala (featuring 'Norma' and 'Beatrice di Tenda' by Bellini) and with the Cannobiana (featuring 'L'Elisir d'Amore' by Donizetti) in Milan. Thanks to him, in 1832 a heating system based on stoves was activated at the Teatro della Pergola. For 25 years (and more precisely during the periods: 1823-1828; 1830-1835; 1839-1848; 1860-1862) Lanari ran the Teatro della Pergola and turned it into the temple of the great nineteenth century melodrama.

Antonio Meucci, according to Lucchesini, worked at the Teatro della Pergola from 1829 to 1833 (the current director of the Teatro della Pergola, instead, claims that he worked there from 1833 to 1835), under Alessandro Lanari, defined by Lucchesini himself "very clever in the choice of his co-workers." Meucci was in charge of props and lighting. In 1835, when Lanari left the Pergola, the latter tried to facilitate the engagement of Meucci and other artists by Don Francisco Marty y Torrens. Indeed, Lucchesini says: "Meucci, patriot and republican, always surveilled by the political police, was forced to leave Florence and to go to Cuba, where he worked at the Tacón, thanks to an authoritative recommendation of the omnipotent Lanari…" During the years in which he was not in Florence, Lanari directed La Scala and La Cannobiana in Milan, the San Carlo and the Fondo in Naples, the Fenice in Venice. While in Florence, he also collaborated with the Cocomero, the Alfieri and the popular Teatro della Quarconia.
Jarro, who ordered his memoirs in 1892, attributes to him the following sentence: "After God, I am the foremost manager," which he apparently immediately modified as follows: "Rather, I can say that I am the true God of theater managers."

On the other hand, Lanari was able to commission works to authors like Bellini, Donizetti, Verdi, Pacini and Mercadante, and to engage the most illustrious names of the Italian bel canto.

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He felt the sudden need to run… he had to run to snap out of it, run to his father, to his mother, to his brothers, to his sister… he had to hug them all, rather, he had to hug the entire world, he had to tell them that their misery was over, that now *Mr. Antonio Meucci* was ready to begin a new life, a happier one.

Unfortunately, we aren't absolutely sure that the last events referred to actually occurred in 1833. We hypothesized that it was November, for the theater season was about to begin. The indications provided by various researchers vary between 1831 (according to Capelvenere) and 1833 (according to Spadoni). We have adopted Spadoni's version, both because it seems consistent with the date and content of Antonio's plea dated June 1833, which has already been mentioned, and also because it matches the content of some letters which we will touch upon hereinafter. Some researchers traced registrations of border crossings in Senigallia (Ancona), on July 4, 1833, and in Rome, on October 9 of the same year, hence, it can be deduced that (unless these crossings regard namesakes), already in July of that year, Meucci had begun to travel on tour with Lanari's company. This hypothesis would confirm the fact that Meucci was never re-employed at the Buon Governo, also, perhaps, because Meucci himself renounced, having found in the meantime a safe and promising job working for Lanari. One thing is sure, in July 1834, Meucci became assistant technical supervisor as well as Lanari's confidential assistant, as is proven by four letters, all dated July 1834, exchanged between the two, when Lanari was not in Florence. These letters are still kept at the Biblioteca Nazionale (National Library) of Florence.

However, regardless of the specific date of employment, there is no doubt that the job at the Teatro della Pergola was a highly professional experience for Antonio Meucci. Indeed, a theater, as seen from behind the scenes, is like a great high-technology factory: mechanics, chemistry, optics, electricity and, in general, all of physics, in addition to the visual arts, play their part. Therefore, precisely in the theater, Antonio was able to apply - and perfect to a great extent - the technical education he was given at the Accademia and, thus, to discover his true talent for engineering.

Furthermore, with the Lanari enterprise, Meucci had the opportunity to travel throughout Italy, working as technical supervisor in the theatrical productions, and in particular in the Opera performances, which, at the time, were in great demand in Italy as well as abroad. This also allowed him to acquire, even more so than at the gates of Florence, a specific awareness of the feelings that dwelled in the hearts of the people, whom he had the opportunity to meet in the various

cities visited, feelings that were paving the way for the 1848 independence riots.

It is also likely that Antonio Meucci met the famous tenor *Lorenzo Salvi* - who was to become a great friend of his - for the first time on one of the aforementioned tours. Indeed, according to Salvi's biography, which is contained in full in section 3, the latter performed at Rome's Teatro Valle in the 1833 Fall-Winter season, in the first performance of the *'Furioso'* by Donizetti - precisely in the period in which a crossing of the border towards Rome was registered in the name of Antonio Meucci (October 9 of the same year). Nevertheless, it is also likely that Salvi performed at the Teatro della Pergola as well, and thus they could also have met for the first time in Florence.

It is certain that Antonio Meucci and Lorenzo Salvi became friends immediately. They were almost the same age (Salvi was a few years younger) and they had many things in common: first of all (notwithstanding their different financial condition) their great generosity, which came close to lavishness. Both gave little importance to material possessions - whether it be money or material goods - whereas they devoted much attention to relations with people. It was one of the secrets of their success with women. But an attractive appearance was also necessary for this purpose, and both of them had it, although Lorenzo had blonde curly hair, whereas Antonio was dark, or, actually, ebony, but he had gray-blue eyes, which made a nice contrast with his hair. But we will have several opportunities to come back to this nice friendship between two men coming from such different backgrounds, who shared not only the love for the theater, but also the love for a free and united Italy.

The tiny work room assigned to Meucci at the Teatro della Pergola was (and still is) located in a cramped position, in the far right corner, at the end of the enormous area of the proscenium where the sets are kept. It is accessed by a small wood ladder leading to a platform from which a long and broad spiral staircase begins, also made of wood, which leads to the very high ceiling. There is a small window inside which overlooks an interior court, and a little iron door, painted red. This is where Antonio set up his first, tiny laboratory. Nothing has changed today, after almost one hundred and sixty years. Otello Margheri, who was custodian of the Teatro della Pergola from 1927 to 1976, when he died, recounts that that small room was Meucci's. He, in turn, had learned it from his grandfather, and the latter from his predecessor, and so on, from custodian to custodian. The custodian of the Teatro della Pergola (as, I believe, those of other theaters as well), unlike the rest of the staff, did not work under any of the theater

impresarios who succeeded one another in the management of the latter, but under the owners, the ‘Accademici degli Immobili’ (Members of the Real Estate Academy). He was practically hired for life, he lived with his family inside the theater and, according to tradition, the job was handed down from father to son. Many anecdotes about great actors and musicians who worked at the theater survived through the Custodians and oral tradition, which was also handed down from father to son, and maybe they are more reliable than many written stories, which often ended up transforming into legend even the simplest of events.

I felt a great emotion - and surprise - when I saw the mouth of a tube telephone, built by Meucci and still operating, used to communicate from the stage to the maneuver trellis-work, set up at a height of approximately eighteen meters. The acoustic tube of the telephone was set inside the wall and seemed identical to the one used on ships to communicate from the bridge to the engine room. On the other hand, everything reminded of a ship in that big cube behind the proscenium, where the sets were prepared, and which was full of ropes and sets that rose and came down like sails, of all sorts of machines, and, during the most important performances, of a high number of people (up to hundred and fifty).

The mouthpiece of Antonio Meucci’s acoustic telephone at the Teatro della Pergola

Spadoni, a pleasant and cultured man of the theater, originating from Reggio Emilia (a city which boasts great theatrical traditions), informed me that it wasn’t absolutely indispensable to convey orders in silence during performances, and that, on the contrary, behind the proscenium, orders were, and still are, ‘quietly hollered,’ amidst the coming and going of crowd artists, and personnel, without the audience ever noticing, especially during opera performances, in which the powerful voices of the singers and of the choir, and the sounds of the orchestra, cover up by far every voice or sound generated behind the scenes. Furthermore, when it was necessary to avoid conveying orders by voice, one merely had to pull on the ropes, according to a conventional code, to inform the ‘soffittisti’ when the sets were to be changed. But one thing is doing one’s best, and another thing is working easily and with confidence: for this reason Meucci’s innovation was welcomed by the theater staff and particularly by the ‘soffittisti.’

THE ACOUSTIC TELEPHONE

The word “telephone”

Not everyone knows that the word “telephone” was coined and used extensively during the first half of the nineteenth century to indicate a system whereby to transmit words or music in an entirely acoustic way, that is to say, without using electricity. Precisely, the word “telephone” was used in 1845 by navy captain John Taylor to indicate a compressed air horn designed by him which emitted conventional sounds during navigation in foggy weather. An improved version of the Taylor system, realized in 1850 by the French Sudre for the French navy, was called by the English “new telephone.” In point of fact, it could actually be considered an ‘acoustic telegraph,’ for it featured the emission of three sounds (trumpet, drums and cannon), suitably combined. Perhaps for this reason also, Antonio Meucci rightfully adopted, for his first electric telephone realized in the United States, the denomination “telectrophone,” thus highlighting its use of electricity.

It is obvious that the understanding of acoustic phenomena - physical and physiological - as well as the experience built up with the first acoustic telephones were of key importance to the subsequent progress which was to lead to the modern telephone, namely the electric one.

The other basic techniques, in addition to the acoustic one, such as electrochemistry, electrostatics, magnetism and electromagnetism and even optics (think of Bell’s optical telephone or “photophone”), were all exploited on the telegraph first and then on the telephone; thus one can rightly say that the telegraph was, to all extents and purposes, the father of the telephone. A ‘father’ that, to say the truth, stunted, with its undoubted success, the development of its ‘offspring’ in its first decades of life, in the United States of America and in Europe as well.

Trumpets, megaphones and acoustic pipes

Many textbooks refer to important inventions of various types of acoustic trumpets (ear trumpets or speaking trumpets, according to whether they were used for the ear or the mouth), realized primarily in the second half of the seventeenth century. These were devices that provided acoustic gain (in terms of air pressure), similar to what radio antennas do with electromagnetic waves today. In fact, the pavilion of the ear fulfills the same function, namely to concentrate and guide sounds towards the eardrum.

However, it is worth noting that pipes and acoustic trumpets existed ever since ancient times. The simple gesture of placing the hollow

of the hand in front of the mouth or next to the ear has the purpose to provide acoustic gain. Sophisticated acoustic gadgets were used by priests in ancient Egypt, Greece (remember the Delphian oracle) and Rome. Also famous is the huge spiral-shaped acoustic horn of Alexander the Great (300 BC). Still today, in the military as well as civilian fields, strictly (or prevalently) acoustic devices are used, such as the acoustic tube used on ships to convey orders to the engine-room (which is known as the "engine telephone"), sound locators, the purpose of which is to detect the presence of enemy craft, and highly directional acoustic trumpets (generally connected to a very sensitive microphone) used to spy on conversations at a distance. At the Teatro della Pergola in Florence an acoustic tube telephone is on exhibit, similar to the one used on ships, which is attributed to Antonio Meucci. It was realized when Meucci worked as technical supervisor (around 1833) to give orders to the workers in charge of changing the sets, without being heard by the audience.

Guided acoustic transmission

The invention of the first system of guided acoustic communication by wire was attributed to the English physicist Robert Hooke, who, between 1665 and 1667, proved that it was possible to convey words by means of a taut steel wire (or even bent at an angle several times) with, at each end, a thin membrane set on the bottom of an acoustic trumpet, the opening of which was placed alternately at the mouth and at the ear of the two people communicating. Many authors assert that such a system was already in use in China, some fifty years before Hooke's demonstration. In English, it was named "string telephone" or "lovers' telephone," for, unlike communications in the open, it guaranteed privacy to the conversation. Many readers might have used it as kids, employing rope instead of steel wire and two conventional cans with holes on the bottom where to fasten the string by means of a simple knot. In 1788 the Austrian Wunsch designed a string telephone similar to Hooke's, using, however, a series of small wood bars glued at the top one after the other, instead of the steel wire, and he was thus able to transmit words over a distance of more than 500 meters.

Another famous inventor who experimented with an acoustic telephone in 1821 was Charles Wheatstone (the same who patented many years later a compass needle telegraph). He too used as means of transmission wood bars, as well as glass and

metal bars, not very long (a few meters maximum), one end placed on a tuning fork or a musical instrument with a sound box, like a piano, and the other end placed on a sound box situated in another room. He called this system the "enchanted lyre" as well as "telephone." When a demonstration of it was given before Queen Victoria in 1855, the press defined it "Telephone concert."
Also in this case, it is worth reminding that sound transmission by means of solid bodies was known ever since ancient times. Pliny, for instance, refers that a slight touch at the end of a rod can be heard distinctly by placing one's ear at its other end (but who, among the readers, has not tried to place their ear against the surface of a conventional kitchen table to hear the amplified ticking of a clock or the knocking of cutlery and glasses?).
All experimenters mentioned above evidenced the fact that sound travels faster through the aforementioned solid bodies with respect to air.
A new version of the acoustic telephone, featuring guided transmission through a tube - rather than through bars of various materials - was presented at the 1851 London Exhibition. In it a gutta-percha tube was used as means of transmission. The inventor of this system, F. Whishaw, stated that he himself had discovered that gutta-percha has the property to convey sound waves particularly well, given its remarkable stiffness and lightness. This allowed him to transmit words at an acceptable quality level over a distance of up to 1.2 km. As regards gutta-percha, the author recalls that, as a child, in his father's telegraph office, he could hear from the other room the ticking of the telegraph's pen point, thanks to the acoustic radiation of the gutta-percha peg (also called 'Morse sounder') which was attached to the pen point and thus facilitated ear reception.

The lovers' telephone in a lithograph of early nineteenth century

Talking machines

The history of the acoustic telephone ends (as it were) with the various inventions of mechanical talking machines, which were intended to generate a sort of artificial voice by operating various levers or buttons. It was believed that, among other things, if such levers were operated by mechanical remote control, it would be possible to convey vocal messages at a distance.
The Imperial Academy of St. Petersburg in Russia launched a challenge in 1779, announcing a contest for the construction of a machine able to pronounce the five vowels of the alphabet, giving, at the same time, a satisfactory explanation of the physiology of speech. The contest was won by Prof. Katzenstein, who applied a series of tubes to the bellows

of an organ, obtaining good quality production of the five vowels.
He was later followed by the Hungarian Baron Von Kempelen (1791), who tried to imitate consonants as well, Willis (1829), who perfected the production of vowels, Reale (1843), who was even able to make his machine pronounce some words, and, lastly, Faber (1846), who is said to have reached the utterly best results.
Beyond the modest contribution provided by these machines, what is interesting is the attempt made to simulate the human phonatory apparatus by means of bellows, which generated an air flux similar to the one produced by the human lungs, and of a leather sound box, adjusted manually, which reproduced (though in an elementary way) the oral and nasal cavities.
Only in 1937 (Dudley) was a realistic model of the human phonatory apparatus identified. Such a model was later used (New York World's Fair, 1939) by the Bell Laboratories for a demonstration of the mechanical production of speech, denominated VODER (Voice Operation Demonstrator). Such a machine was operated by a skilled expert who was to press some of the 14 buttons on the keyboard, as well as operate a bar connected to her wrist and a pedal, in the combinations that corresponded to each sound.
Notwithstanding the many inventions mentioned above, the first exhaustive theoretical study on acoustic physics and physiology, and in particular of speech and of music, appeared only in 1863, when the telegraph was already of age, and it was presented by the genius H. L. F. Von Helmholtz. His work entitled "Die Lehre von den Tonempfindungen" (Theory on the Feelings of Sounds) inspired many illustrious precursors of the modern telephone, including A. G. Bell. The latter tells that he was able to read Helmholtz's work only in 1870, thanks to its French translation which appeared in 1868, five years after it was published in German. The English version was published in 1875. Some years later, precisely between 1877 and 1878, John William Strutt Rayleigh, better known as Lord Rayleigh, published what, up to the present day, has been considered as the 'Bible of acoustics,' namely "The Theory of Sound."

Reconstruction by Charles Wheatstone of Von Kempelen's talking machine (ca. 1870)

Chronology

1649 - Invention of an ear trumpet by A. Kircher
1667 - Invention of the string telephone, featuring a steel string, by the English physicist Robert Hooke
1668 - Demonstration at the Royal Society of an ear trumpet, referred by S. Pepys
1670 - Invention of the speaking trumpet, or 'Stentoro-Phonic Tube' by S. Morland

1779 - Katzenstein's talking machine (only vowels), which won the St. Petersburg contest
1788 - Realization of an acoustic telephone with wood bars (500-m range) by Wunsch
1791 - Talking machine with bellows by Von Kempelen (vowels and consonants)
1821 - Demonstration of an acoustic telephone with a pine wood conductor by Charles Wheatstone
1829 - Talking machine perfected by Willis, for the pronunciation of vowels only
1843 - Reale's talking machine, capable of pronouncing some words
1846 - Talking machine by Faber, with the best performance known
1850 - Acoustic telegraph by Sudre, featuring three sounds (trumpet, drum, cannon)
1851 - Demonstration at the London Exhibition of a gutta-percha acoustic telephone by F. Whishaw (1.2 km range)
1855 - 'Telephone Concert' by Charles Wheatstone before Queen Victoria
1863 - First exhaustive study on the physics and physiology of sounds by H. L. F. von Helmholtz
1877-78 - Publication of "The Theory of Sound" by Lord Rayleigh
1937 - Model of the human phonatory apparatus by H. W. Dudley

1939 - Demonstration of the VODER at the New York World Fair (Bell Laboratories)

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ESTHER

On Saturday 6 October 1810, at the Battistero di San Giovanni, baptism was administered to *Maria Matilde Ester, daughter of Gaetano, son of Vincenzo Mochi and of Assunta, daughter of Giuseppe Papini, spouses of the Sant'Ambrogio quarter*. She was born on 5 October at seven o'clock in the morning. The family simply called her *Ester* (*Esther*, in English). In Florence there was a certain tendency to give newborns exotic names (that is to say, names that do not appear in the Catholic calendar), but never as the first name, although today, in Catholic calendars, there is a *Saint Esther of Babylon*, celebrated on 24 May. The first name of baptism, Maria, was very common, and practically ended up never being used in everyday life, so as not to generate confusion. Indeed, Antonio's mother, Maria Domenica, was simply known as *Domenica* or *Menica*.

Esther Mochi was therefore two and a half years younger than Antonio Meucci, her future husband. She had an older sister, Flora Maria Teresa, born on 14 July 1808 - who was thus the same age as Antonio - whom some researchers have mixed up with Esther, mislead by the Weddings Register, in which Esther was indicated as being the same age as Antonio. Moreover, the inaccurate approximation of age indicated in various registrations (naturally, with the exception of baptisms and municipal censuses) is something that Florentine archivists are well familiar with.

The Mochis lived in the Sant'Ambrogio quarter when Esther was born. When Esther and Antonio met, however, the Mochis belonged to the Santa Maria Novella quarter and Esther's father, Gaetano, had already passed away. Like Amatis's family (and all poor families) they moved continually, consequently today it is very difficult to trace back their various residences. For rich families, though, this didn't apply, given that they lived for generations in the same building, which even carried the name of the family, as is testified by the famous *palazzi* of Florence and of other cities.

At the age of ten Esther was sent to work as an apprentice for the tailor of the quarter or, as one used to say, at a *bottega* (workshop). After five or six years, she mastered the trade so well as to be considered qualified - and was thus hired - by the prestigious tailor shop of the Teatro della Pergola, which was run by *Isabella Lanari*, the sister of the already mentioned and famous theater impresario. Unlike her brother, it is said that Isabella was very sweet, in addition to being an expert in the trade. For instance, she let her most skilled tailors - that is to say the costumers - sometimes assist the most demanding

actresses in trying out their costumes, which often earned them gifts in money and even valuable jewels, especially on the part of the 'prime donne,' who owned a vast assortment of them, which was regularly replenished by their wealthy admirers.

Registration of Esther's baptism (Archives of Sta. Maria del Fiore)

The Theater's tailor workshop was located some distance away from the prop rooms of the proscenium, especially in view of protecting cloths and costumes from the machines' dust and grease. In 1920, the *Sartoria Teatrale Cerretelli* (the Cerretelli Theater Tailor Shop) was opened - which is famous throughout the world today - next to the Teatro della Pergola, but with a separate entrance (although, after that date, the old tailor shop was maintained within the theater).

Just before the performances, however, it was inevitable that the costumers ran on the stage after the actresses and actors for the last finishing touches, requested especially by the 'prime donne,' on the verge of a nervous breakdown owing to some slight defect in the costume, which would have spoiled their look, as one would say today … Furthermore, the machine operators were also involved in the same hasty rush for last minute interventions on the scenery apparatus.

What struck Esther, on one of those occasions, was that, while everyone was screaming and bustling, *Mr. Meucci* (she heard someone call him that) remained calm and polite in his manners, which was very unusual in that environment. She also discovered that he was admired for his ability to invent new devices and machines, and that he was appreciated by everyone. Thus, and also because she had sensed a certain shyness in him, she decided to take the first step to get to know him better. She also hoped that by doing so, she could more easily get rid of the fops who, after having filled up at the theater's *buvette* (cocktail lounge) at the end of the performances, molested the young tailors and crowd artists, hoping for a pleasant and cheap dessert.

The opening night of an opera was a very special event. The doors of the theater would open and the street would be inundated by thunderous coaches, the strong smell of leather and horses, and an *élite* crowd of elegant ladies and gentlemen, lovers of good theater, would have adorned the immense and luxurious entrance hall of the Pergola, leaving behind trails of refined perfumes. The lights of the many grand chandeliers of the theater would have exalted their beauty, rewarding the long and meticulous care of hairdressers, maids, tailors and perfumers, who had created those dreamland characters, who, in turn, were about to meet with other such characters, in another dream in which everything became possible, even what natural inhibitions would hardly allow in real life. It was - and is - the magic of the theater.

Still today, for the population of workers who toil busily behind the scenes, the moment in which the curtain rises practically passes unnoticed. Indeed, as in the rest of the performance, at that moment property men, 'soffittisti,' costumers, manual laborers etc. are as busy as they were before the performance began. When, instead, the curtain is dropped, at that point one sees - and hears - the difference. After the roaring applause and the unanimous requests for encores have died down, for a certain period of time they turn into the multiform scuttering of steps and the assorted chatting of groups who swarm towards the exit, surely in search of prolonging their emotions outside of the theater. And the hall, almost by magic, immediately appears empty, making the red velvet of the seats and of the box tapestries and the gold of the stucco-work on the columns and on the balconies seem as if they would vanish as soon as the wavy light of the candles, having come to the end of their journey towards the base of the chandeliers, was extinguished.

Esther had stayed behind on purpose in order to carry her plan through. She approached Antonio. *"Mr. Meucci,"* she said with all the innocence she could summon, *"I'm afraid to walk home alone at this hour and … I don't trust anyone … here … where do you live?."* She knew perfectly well that Mr. Meucci lived there, in the theater, but she pretended not to know, so as to justify her implicit request to be escorted home. Antonio was guileless and did not know how to tell lies, not even white lies or lies for a good purpose. It wasn't a virtue: it was just his nature. *"Who, me? …,"* he answered, somewhat surprised, *"I … live just upstairs … but it would be nice to go for a walk before going to sleep … now … I'm not tired at all, I am still … somewhat tense … you know, because of something that may go wrong, do you understand? … Where do you live?"* As he spoke, he realized that his voice cracked for the emotion. Esther was not only an attractive woman (she was twenty-four years old, although she looked younger), but she also dressed in very good taste, a taste that she had constantly improved through her practice in tailoring and by coming in contact with great artists. And, honestly, Antonio didn't expect to be noticed by her, among that glamorous multitude of the theatrical environment, in which a technical supervisor was practically … nobody. Nor could he have imagined that that splendid woman was to become his companion, for almost fifty years of his life.

Antonio didn't dare, although he wished to, put his arm around Esther's waist, as they walked towards the exit through the usual narrow corridor that led to the theater's box office. The lighting of Via della Pergola was fortunately dim - as it still is today - an accomplice to lovers, also in the absence of

the moon. And this, notwithstanding the order - as referred by the Fossombroni from Arezzo in 1781 - *that public lighting at street corners should be equivalent to that of the moon…*

Heading towards Santa Maria Novella, close to where Esther lived, it was impossible to avoid walking through more than one dark alley. In this case the moon, and even more so some providential patrol of grand ducal gendarmes, or also some coaches passing by, could make the walk less uneasy. However, the company of a sturdy young man, a former customs officer, like Antonio Meucci, was much better.

As they walked, it was almost always Esther who spoke; Antonio, although very happy about the situation, merely answered Esther's many questions on his work and everyday life. Antonio also found out that Esther's father, Gaetano, had died a few months before and felt even greater tenderness for that sweet and (apparently) defenseless girl. Now they were almost there. Walking in front of the church of Santa Maria Novella, a true masterpiece, Esther pointed at it with her finger, saying: *"You see, Mr. Meucci, if ever someone will want me as his bride, he will take me to the altar in this church …"* She was like a little girl, with her finger raised. The sprinkles of the elegant fountain at the center of the piazza, which turned silver under the light of that full April moon, set the musical background to her words. Antonio and Esther lingered a while, as if intent on the water games. They delicately held hands, and remained there speechless, for a long time, before saying goodnight. Antonio didn't even hear the clock of the bell tower strike two. Now the clock of love had begun to tick in his heart, a pure love, which would make him forget the unfortunate events of the Osteria del Chiù.

Antonio Meucci and Esther Mochi married on 7 August 1834, in the church of Santa Maria Novella. In the Weddings Register, which is kept at the archives of the Archiepiscopal Curia of Florence, one reads:

A.A.F., S. Maria Novella - Weddings, F. 1813-1872 a c. 125 r

7 August 1834

Antonio son of Amato Meucci and of Domenica Pepi celibate of the San Giuseppe quarter, wishing to become united in marriage with Miss Esther, daughter of the deceased Gaetano Mochi and of Assunta Papini, young lady of this parish [namely Sta. Maria Novella], *and having been dispensed of the three conciliar notices* [the banns] *by the Most Illustrious and Most Reverend Monsignor Attilio Fiascaini, General Vicar, in the absence of canonical impediments, have*

been united in matrimony by the Most Reverend Father Tommaso Pacini, Curate, on the evening of the aforementioned date in the presence of Pietro, son of the deceased Domenico Peruzzi of the San Remigio quarter and of Leopoldo, son of the deceased Pietro Bucci, of the Santo Stefano quarter. The addresses are in file N. 14.

Bro. Tom. Pacini, Curate

Square and Church of Sta. Maria Novella

Thus the wedding was celebrated in the evening, and they were dispensed from the banns. This dispensation was usually granted in particularly urgent cases or under other special circumstances, such as the bride's pregnancy, which was sometimes declared even if non-existent, with the purpose to keep - in the absence of banns - the wedding secret. However, it is worth highlighting that absolutely secret weddings (for instance the ones against the will of the parents) were celebrated early in the morning and not in the evening. It is also possible that the two youths simply wished to get married soon, so much so that they didn't want to wait one month, which is required for the banns, in view of their imminent departure for Havana, as we shall see later on.

In the Weddings Register, Antonio is indicated as belonging to the parish of San Giuseppe, where, indeed, his father's family resided, precisely on Via delle Mete (today it no longer exists; it was probably a crossroad of Via dell'Agnolo). However, in the Religious Census (*Stato d'Anime*) of that parish relative to the year 1834, Antonio does not appear with the family. Indeed, in it one literally reads:

Weddings register and registration of the wedding of Antonio and Esther

Religious Census (3 June 1834) ==Via delle Mete (No. 7426)==				
Family No.	Name		soul No.	Age
207	*Meucci*	*Amatis*	*670*	*52*
		Pepi Mª Domenica Wife	*671*	*45*
		Luisa children	*672*	*19*
		Luigi	*673*	*17*
		Giuseppe	*674*	*15*

Thus, they were all there, *Gigia, Gigi, Beppe*, but not Antonio. A possible reason for this could be that Antonio was living at the Pergola, as we have hypothesized so far. But the Teatro della Pergola was a part of the SS. Annunziata quarter, and in the religious censuses of that parish, Antonio Meucci does not appear as a resident. Another hypothesis is that Antonio had given the address of his father's family, wishing to avoid having to reveal his true residence, at a time in which he

was constantly surveilled by the police, for political reasons. Indeed, he had served many months in jail, in 1833 and in 1834, with the famous conspirator and patriot Francesco Domenico Guerrazzi, as we have already mentioned.

DON ALESSANDRO AND DON FRANCISCO

The relationship between Antonio Meucci and Alessandro Lanari, in less than one year, had become much closer than one between a manager and his employee. Indeed, on his frequent absences from Florence, Lanari entrusted Antonio with various special tasks and the latter reported back to him on how the latter proceeded, even by letter (see the transcriptions in the appendix). In his letters, Antonio Meucci referred to him as Don Alessandro, as can be seen in a note sent on 5 July 1834, which ends with the following sentence: *"Rest assured of my loyalty and secrecy,"* clear evidence of the relationship based on trust which existed between the two. The reply, which arrived from Naples with protocol number 1236 (indeed, Lanari wrote letter after letter to countless theater celebrities), reads as follows:

ALESSANDRO LANARI
Theater Contractor

N. 1236
To Mr. *Antonio Meucci.* *Naples, 10 July 1834*

It is thus understood that you will proceed according to my instructions. As regards the matter involving Battistini, find out all there is to know, where he has put the stuff which he has completed, and give precise information to Carlotta and to my sister, since they have been entrusted by myself as regards the rest. Be conscientious and you will not regret it. Good-bye.

Although the letter reveals a commanding tone, one notices the friendly use of the familiar form (*tu*, in Italian), the invitation *'to find out all there is to know'* and the promise that *'you will not regret it.'* On the other hand, it is also worth observing that if such a particular relationship did not exist between the two, Lanari would have turned to Canovetti or to his sister, rather than directly to Antonio Meucci.

Lanari was able to keep the promise he had made to Antonio to give him a hand, when a friend of his, *Don Francisco Marty y Torrens*, also a theater impresario and also in search of talented artists, came to Europe and made a stop in Florence. We might add that Lanari was about to leave the Pergola, therefore he had nothing to lose by handing over the staff of that theater to Don Francisco.

At the time, the Italian Opera had perhaps reached the apex of its success throughout the world, and many foreign theater managers came to Italy to engage our theatrical companies. Don Francisco had just arrived from Havana - the capital of the Island of Cuba - where, ever since 1 June 1834, the bold *Don Miguel Tacón* had taken over as General Captain (that is to say, Governor). One of the very first things the General Captain did was to ask the Spanish Minister of the Interior to grant the authorization to build a large theater, which was later named after him: *Gran Teatro de Tacón.* Don Francisco, *Tacón*'s right hand, was placed in charge of building as well as running the new theater, thus becoming its owner and manager at the same time. However, while the approval for the construction of the theater was following the regular bureaucratic course, Don Francisco was already busy engaging singers, dancers, choir singers, solo and orchestra musicians, as well as technical experts, workers, tailors and even crowd artists, attendants and secretaries, with the aim to create a sort of civic company for this new theater, given that, according to *Tacón*'s intentions, it would have to compete with the best Italian and European theaters of the time.

Don Francisco, a true Catalan, in addition to being shrewd and endowed with a great flair for business, was also far-sighted. Since he was also the manager of the existing *Teatro Principal* - which was the most important theater in Havana at the time - he thought that he could put together a company in Italy, which would make its debut and perform for a couple of seasons at the *Principal*, and would subsequently be used to give prestige to the new *Gran Teatro de Tacón* when it was completed. He succeeded in engaging as many as eighty-one people, for all sorts of roles and at all levels, who were willing to follow him to Havana on a five-year contract. Among them were Antonio Meucci and his wife Esther, to whom Don Francisco offered very attractive conditions: Esther would be hired as *head of the theater's tailor shop*, and Antonio would work as *engineer, stagehand and set designer*. Furthermore, once the construction was completed, they could live in one of the apartments which were to be built in the annexes of the new theater, similar to the ones existing at the Teatro della Pergola.

On the other hand, things were getting worse for Antonio in Florence on account of his previous experiences with the police and of his political ideas, therefore Don Francisco's offer came at a good time and was therefore welcomed by Mr. and Mrs. Meucci, who had just gotten married and were very young for the jobs they had been offered. One practical problem could be that, since Antonio had outstanding suits in the tribunal, at the time of his departure for Cuba, he could not

get a passport, and he would therefore have to leave the Grand Duchy more or less undercover.

An English brig similar to the one on which Antonio and Esther Meucci traveled to Cuba

It was possible to emigrate without presenting a passport by joining one of the traveling companies of comedians or theater performers (very similar to the well-known *Thespis' Carts*), for which a collective passport in the name of the manager was issued, indicating the number of actors without specifying their identity. Many similar laws, which allowed such companies to transit across the borders, were in force in almost all Italian states at the time, the only exception being Piedmont and the Lombardy-Venetia Region, where laws were more restrictive. There was also an agreement between the Grand Duchy of Tuscany and the Papal States for rather informal mutual passes, to and from the free port of Livorno, since this was the main port used by the Papal States, on concession of the Grand Duchy. During the carnival period, controls were even more lenient in all the states of the Italian Peninsula.

However, Don Francisco came up with a better solution. At the anchorage of the port of Livorno, he leased a brig flying the Sardinian flag which had unloaded goods coming from America and was looking for leases for the trip back. The brig, named *Coccodrillo* (*Crocodile*, in English), was patented for the transport of goods, but could be easily adapted to occasionally transport passengers. For that ship the Captain was not obliged to present a list of passengers to the Livorno Port Authority since, formally, it wasn't supposed to have any. On the other hand, Don Francisco also loaded a great deal of material which was to be used for the scenery equipment of the theater under construction. These included a turning platform which was built in Florence (invented, so it seems, by Della Porta, who drew inspiration from a project by Leonardo da Vinci). As one can easily deduce, the weight of this material was by far greater than that of the passengers and their luggage.

In addition to a suitable number of cabins with bunk-beds, Don Francisco also had a dozen luxury cabins set up for the most prestigious artists engaged. At any rate, he had already planned to have them disassembled and to recover the most valuable material at Havana. *El Catalán* was a shrewd man ...

The issue of the "*Giornale di Commercio del Porto-Franco di Livorno*" dated 7 October 1835, thus announces the departure of Don Francisco's company from Livorno:

on the 5th,
for HAVANA, Sardinian Brig Coccodrillo,
Captain Bartolommeo Lombardo with various goods

As one can see, the 81 passengers are not mentioned. On the contrary, the Havana's newspaper "*El Noticioso y Lucero*", dated 17 December 1835, thus announces (with two small typing mistakes) the arrival of Don Francisco's company:

PORT OF HAVANA
YESTERDAY'S ARRIVALS

From Livorno in 72 days Sardinian brig Coccodrill, Capt. Lombardo, 275 tons, in ballast, to Messrs. Mariátegui K. & Co. - 81 passengers, members of the Italian Opoera Company for this town.

As one can see, the dates match exactly, since, departing from Livorno on 5 October, it takes exactly 72 days to reach Havana on 16 December, as indicated in the Havana's newspaper. As regards the *goods* transported, the newspaper of Livorno speaks of *various goods*, whereas the newspaper of Havana, indicates that the brig was in ballast (*en lastre*, in Spanish), namely that, in terms of goods, it was traveling without a cargo, but specifies the number of passengers - 81 - stating that they belonged to the Italian opera company destined *to this city*, that is to say Havana, and this was a truly significant event. It is worth highlighting that, at the time, the tonnage (275 tons) indicated the weight of the cargo that could be transported. Therefore, the load of the 81 passengers and their luggage, added to that of the above-mentioned material (which can be estimated at around 30 tons on the whole) was absolutely negligible, that is to say, practically, it was as if the brig traveled without a cargo, i.e. *in ballast*.

Departure from Livorno and arrival in Havana of the brig "Il Coccodrillo", from "Giornale di Commercio del porto-franco di Livorno" of 7 October 1835 and "El Noticioso y Lucero" of 17 December 1835 (see detail below on the right)

On leaving Florence, neither Esther nor Antonio could have possibly imagined that they would never return and that, unfortunately, both of them were to die on foreign land. On the contrary, for all the other members of the large group, it was one of the usual tours - maybe a longer one this time, given the distance of their destination - and at the end of the five years envisaged in the contract with Don Francisco they would have returned home with a considerable sum of money in their pockets.

Instead, Esther and Antonio, given the nature and the level of their jobs, could envisage a longer stay, if their contracts were renewed once or perhaps more times: maybe ten … maybe fifteen years. But then, their hearts told them (and this time they lied) that they too would return, rich and happy, to Florence, finally united to the rest of Italy.

TOWARDS CUBA

The brig Coccodrillo hoisted the huge sails on its two hardy masts and, on Captain Lombardo's sharp order, the moorings were cast off and the maneuver to move off from the pier began. Many relatives of the departing people waved goodbye with their handkerchiefs and screamed the usual loving, if useless, recommendations. There was none to wave Esther and Antonio goodbye; the ceremony, if it can be defined as such, had already taken place in Florence, in an atmosphere that was hardly as cheerful and carefree.

It was still dark at three-thirty in the morning, when some thirty artists, engaged by Don Francisco and residing in Florence, were to gather at Piazza Santa Maria Novella to meet the coaches that were to take them to Livorno. At that hour the air still had a peculiar flavor. It tasted like freshly-baked bread and warm ricotta cheese, just wrapped in straw ... Probably because those were the provisions that many of the departing people had received from the loving hands of mothers and sisters, or from the wives who stayed behind to take care of the children. Hardly anyone had taken much luggage along: one or two practical leather suitcases each, with the typical spring lock. But in the back of the coaches there were also luxurious trunks covered with a piece of cloth and tied to the chassis with sturdy ropes. Who knows whom they belonged to...

Antonio and Esther had said goodbye to their relatives in their homes, concealing the pain of this departure behind casual words impertinent to the occasion. For a moment they stopped by the fountain which had been the silent witness of their first rendezvous, perhaps to draw some courage from it, perhaps to leave with her one last message which it might repeat to their city with its perpetual murmur.

Once the coaches departed from Santa Maria Novella, they crossed the Carraia bridge and headed towards the Porta di San Frediano, leaving Florence in the direction of the Via Pisana. As they passed by that gate, Antonio could not help thinking back to his experiences as Assistant Gatekeeper. Good and bad experiences. Now that he was leaving Florence, they all seemed beautiful to him, as beautiful as his Florence. Throughout the entire trip no one felt like speaking, anyhow they would have had to scream to be heard on top of the hammering of the horses' hooves and the unceasing pounding of the wheels on the road. After seven hours, interrupted by three short stops at the stations in order to change the horses, they came within sight of the Port of Livorno, where the postillion had no trouble identifying and reaching the pier where the *Coccodrillo* was moored.

Those who work in the theater don't get much excited about traveling. They are used to it, as was especially true of the members of the much sought-after *Italian Opera*. The *Coccodrillo* was now sailing in the open sea, its sails full of wind. The low buildings of the Livorno Port, which were swallowed by the Eastern horizon, where that October night was sweetly falling, were, in the eyes of those special passengers, almost like the well-painted sets of a theater; and the parapets of the *Coccodrillo* were like the balconies of an order of stands from which to enjoy the performance. The Pergola featured even more exciting set changes. But, but … that strong sea-scent carried by the wind … was a bit too special. Nevertheless, it was possible to imitate that as well, provided it was included in the special effects repertory. One might ask *Mr. Meucci* …

But *Mr. Meucci* was engaged in a conversation with the Captain, *Bartolommeo*[4] Lombardo. Antonio had noticed ten cannons, five on each side, and he found out from the Captain that they were kept to defend the ship, especially when it sailed the Atlantic routes, which were still infested by pirates; however, it would not be necessary to use them, since the route was protected by the *Armada*, the Spanish Navy. Moreover, the word 'brig' derived from the fact that it was a combat ship frequently used by pirates (namely by *brigands*) on account of the great speed it could develop thanks to its exceptional set of sails. The *Coccodrillo* was twenty-four meters long, it weighted 150 tons and could hold ten cannons and a crew of 100 men. On its route from Livorno to Havana it sailed at an average speed of 3.5 knots (one knot is equivalent to one nautical mile per hour), that is to say, about 84 nautical miles a day. This means that, on the Atlantic route beat by the trade winds, speeds of up to 6-7 knots were reached and even exceeded. However, because it sailed at such *high* speeds, a large crew of skilled men was required, to the extent that they said that in a brig one worked as much as in two normal sailing ships.

After a while, they began to talk about steam navigation. Captain Lombardo said that, although the first Atlantic crossing with a steamer (with the engine used only in support to the sails) had occurred sixteen years before, in 1819, the first fully steam-driven transatlantic was the *Curaçao*, built in 1827, that is to say only seven years before their departure from Livorno. However, the Navies of the various nations were still reluctant to using steam on the ocean-routes, as the safety problems of the high-power steam generators had yet to be

[4]Nowadays he would be called *Bartolomeo.*

solved. Indeed, even on relatively short routes, much too often did it occur that the boilers exploded, killing or wounding passengers. However, Lombardo was confident that within a few years all problems would be overcome, given the obvious advantages in terms of speed offered by steamers, which allowed to reduce the time of navigation by two to three times with respect to sailing ships. Indeed, he had recently learned that a frigate of the American Navy (which, according to him, was the most advanced Navy in the world, in that which concerned steam navigation) had beaten the record of navigation from Havana to New York, which it had accomplished in eleven days instead of the usual thirty to thirty-five days.

City and port of Livorno in a lithograph of 1835 (Note a brig in the foreground and a steamer in the background)

"Instead," Antonio facetiously commented, *"in order to cross the Atlantic it would take us as much time as it took Christopher Columbus three hundred and fifty years ago …"*

"Well," the Captain answered with a smile, *"perhaps a little less, especially if we refer to Columbus's first trip, which required seventy days to go from Palos to San Salvador. It would take us approximately the same time, but to go from Livorno (which accounts for 1500 miles more with respect to Palos) to Havana (which accounts for 500 miles more with respect to San Salvador). Therefore, our trip would be of 6000 miles whereas Columbus's was of 4000. This means that we would only be 50% faster than Columbus ... It isn't much, but … it's something."* He remained silent for a minute, awaiting Antonio's inevitable question, and then, anticipating him, he added: *"Thanks to the clock! … In Columbus's days, the sand-glass was still used, which a ship-boy had to turn over every time it ran out, that is to say every thirty minutes. But it was only used to regulate life on board: every eight times the sand-glass was turned (that is to say every four hours) the guard duty changed, in the same way as the Romans used the hourglass to interrupt excessively loquacious lawyers. We, instead, with two precision watches, can accurately measure longitude and we never lose our way; therefore we save time."*

Precision watch of 1830

"And what about latitude?" Antonio asked. *"Well ... that's easy. You just measure the length of the shadow cast by a pole on the deck at mid-day, just like Columbus did. Going back to longitude ... Did you know that the French on the route towards the Indies lost almost forty-five days with respect to the English only because they had worse watches? Thus, they lost … the Indies!"*

After one day of navigation they had doubled *Cape Corse*. Throughout all of the following day the passengers could admire - from the larboard - the thick and verdant vegetation of the Northern coast of Corsica.

Antonio took advantage of that very long trip to organize the notes that he had taken at the Accademia, as well as the ones that he had taken in the course of his work as Assistant Property-man at the Pergola under the expert guidance of Canovetti, which were equally precious. His eyes casually fell on a package tied crosswise with a red ribbon which his brother Beppe had given him prior to his departure, recommending him to open it only once the ship was in the open sea. Beppe had just started to work as an apprentice in an attorney's office and had immediately displayed great intelligence and will power. One may say that the two brothers had very similar personalities and got along almost perfectly, in addition to being tied by the natural bond of affection. Antonio opened the package with emotion. The emotion rose when he saw the content: four nice notebooks, immaculate, with just the heading 'Antonio Meucci' on the cover, which had evidently been affixed by an expert copyist of the office where Beppe worked. Antonio thought his brother was trying to tell him something with that gift, full of blank sheets of paper, something like: *"You have your entire life before you, fill it with beautiful things and keep it unmarred …"*

The students of today - and perhaps of yesterday as well - might not understand that in the previous century only very few children belonging to noble families could actually own school books (or other books). The only way that most people could learn was by taking notes while the teachers lectured and consulting the texts which existed in the libraries. On the other hand, your Author himself had to write notes from dozens of books which were kept at the Polytechnic of Milan, since, at that time, he didn't have the economic means to purchase them. If it is true that a good Muslim must copy the Koran in writing three times to be able to say that he knows it, it can be deduced that the material act of writing notes actually helps to better absorb teachings, which I am quite convinced of.

Leaving Corsica behind, they sailed in the open sea for five days, slipping into that particular state of mind of being *"alone, among the sky and sea,"* which sailors are so familiar with, and which, instead, is a pleasant surprise to men who have lived on land, in the country as well as in towns.

Antonio couldn't help but notice how the most famous male artists of the company were courted by many admirers - especially the less famous and most attractive women - since the more famous ones were, in turn, busy warding off their unworthy admirers, to save themselves for some *wealthy* gentleman from Havana. The man leaning against the starboard parapet of the brig, who seemed relaxed by the variegated blues of the azure dome, set on the open sea, but who at the same time took this opportunity to make inhalations of iodine

(judging by how he inhaled with his nose as much air as his lungs could hold), must have been the famous singer *Attilio Valtellina.* Antonio approached him to say hello politely, and thus he learned from him that Minorca had been sighted, the first of the Balearic Islands which were about to appear before their eyes.

Throughout the entire trip Esther was busy sewing, even more so than when she was at the Pergola. Indeed, almost all of the singers engaged - even the ones who were not on the same level as the leading Lady, *Balbina Steffenone* - would ask her to mend their dresses and costumes, submitting themselves to never-ending fittings, assisted by the long duration of the trip. Even the men kept her busy! Indeed, the famous alto, *Ignazio Marini*, and the great baritone, *Cesare Badiali*, were in the company, and everyone just happened to have something in their wardrobe that needed mending. The situation became all the more dramatic when the Captain informed exactly what weather awaited them in Havana: a Winter very much like a *mild* Italian Summer! The trunks were turned inside out by their owners, and other dresses, lighter ones, flew out from where they had been accurately folded, thus increasing the number of clothes that needed to be touched up. Some ladies went so far as to show up in Esther's cabin holding a piece of fabric to make a brand new dress! However, one might add that money was no object to those special customers; on the contrary, they were very generous with tips and gifts, which they gave her in addition to the sum invoiced.

Antonio would have wanted for his young wife not to get so tired and to enjoy those beautiful landscapes of the Balearic Islands, since they would have been in sight at the starboard of the sailing ship for more than two days. However, Esther was seen on deck very rarely and only for a few minutes, when she went up to catch a breath of fresh air. On those rare occasions, Antonio looked at her as the wind blew through her hair and highlighted her breasts as her shirt blew in the wind, and he considered himself a lucky man for having married a woman who was so beautiful, so talented and … who could manage so well amongst all those sophisticated individuals.

Portrait of soprano Balbina Steffenone

Now the *Coccodrillo* was heading South-West, hoping to reach the Strait of Gibraltar in a week's time. Then, after another week ad a half, it would moor at *Gomera*, in the *Canary Islands*, following the route opened by *Christopher Columbus*, which was taken by many sailing ships heading for Central and South America. Even if it were true that *Columbus* had repeatedly landed at *Gomera* also to meet the beautiful *Beatrice de Bobadilla*, that stop nevertheless represented one last opportunity - before making the great leap towards the other side of

the Atlantic - to fill up with drinking water, fresh vegetables, bananas and wood for the kitchen, at very good prices.

The Canary Islands were, and still are, owned by the Spanish, unlike the Azores, the Island of Madeira, and the Cape Verde Islands which were, and still are, owned by the Portuguese. Although it didn't make much of a difference whether one stopped at one or another of the above-mentioned islands, it was the custom to remain, so to say, under the same flag for the entire route.

As soon as they left that last stop in the Canary Islands, the favorable thrust of the trade winds - the great allies of Christopher Columbus and of all sail navigators who succeeded him on the Atlantic routes for the West - began to be felt. These winds blow constantly from North-East to South-West, thus reducing considerably the duration of the Atlantic crossing. Therefore, from the Canaries, situated at approximately 28° latitude North, up to Havana, situated at approximately 23° latitude North, one was to sail constantly before the wind, throughout the entire six weeks of navigation required to cross the Atlantic and to come within sight of the bank of the *Bahama Islands* which, in a certain sense, were the antechamber of the queen of the Americas: *La Habana.*

Notwithstanding the precautions and recommendations of Captain Lombardo in case of possible storms during the crossing, the weather was rather favorable, except on two or three occasions in which the sturdy brig was invested by a South-West wind at approximately 30 knots, with the sea at *force six*, owing to which they had to readily strike sails and … dance for some forty minutes. *Nando*, the nice boatswain of the Coccodrillo - a true Neapolitan - seeing that many of the passengers were terrified, their white hands clutching the hand rails, put on a mini show, swaying on his legs - which were spread out enough to keep his balance - and with his hands on his hips like *Pulcinella. "Come on,"* he said to the passengers, laughing, *"let yourselves swiiiiiiing!!!!…"*

Another interesting and, to a certain extent, entertaining experience for Antonio was that of the *log chip*. None of the passengers had noticed this simple device until the *Coccodrillo* reached the open sea, plowing the waves with unfurled sails, thrust by the trade winds. It was *Bertu*, the Assistant helmsman, who raised Antonio's curiosity with a sentence the latter had heard him say to the Captain after he had rushed from the stern to the upper deck, visibly excited: *"Captain,"* he said with the typical Genoese accent, *"we are sailing at six and a half knots… let's hope that the sail that has been repaired holds out … or … perhaps it would be better to slow down."* Captain Lombardo did not lose his composure *"We'll see at the next measurement, Bertu … don't worry!"* And then,

turning to Antonio, who had drawn near: *"We could even beat sailing ships with an auxiliary steam engine that sail at seven knots! …"* Antonio had noticed that a panting ship-boy holding a very tiny sand-glass was standing behind Bertu, and he grew even more curious. *"What do you need the sand-glass for, Captain Lombardo?,"* he asked with his usual deference. *"We need it to measure the speed of the ship with the log chip … if you are interested, we measure it astern every hour; so, in one hour you can go and see … it's really very simple … you'll understand it by yourself … "*

Lombardo was right, as usual: it was a very simple procedure. Every hour the assistant helmsman went astern ad lowered into the sea a small rectangular-shaped wood raft - called *log* - to which a rope was attached, and placed it exactly in the wake of the ship. *Bertu* deemed it necessary to specify that it was not a *rope* but a *line*, undertaking complicated explanations on the differences between the *line* ad the *marline*, the *strand*, the *table*, the *marling*, the *hawser*, the *half tow rope* and the *tow rope.* At any rate, one could easily see that the log tended to float in the same point of the sea whereas the sailing ship moved away from it. As soon as the log touched the surface of the water, *Bertu* let the *line* run through his fingers so as not to hold back the log, and, at the same time, the ship-boy set off the hourglass. Since the hourglass lasted half a minute ad the line had knots approximately every fifteen meters (precisely sixteen yards, corresponding to the 120th part of a nautical mile), the number of knots that ran through Bertu's fingers in that half a minute gave an indication of the speed of the ship directly in nautical miles per hour, or *knots.* Thus, at last Antonio understood why the speed of a ship was measured in knots: they were the knots of the … line! He later learned from Captain Lombardo that the distance between the knots of the line was reduced to 14.62 meters, in order to take into account the error caused by the mobility of the log.

They crossed the reef of the *Bahamas* at the *Mariguana Passage*, in order to prevent the ship from running aground on a shoal ad also to reach at once the coast of the Island of Cuba, protected by the Spanish Navy and by the forts on the coast. For days and days Bertu continued to sound the depth so as to allow the *Coccodrillo* to sail along the sounding line, that is to say following a route where the sea was at least as deep as the whole sounding line, namely one hundred meters. The trade winds ceased to blow and the renowned *calm of the Antilles* set in. From the *Mariguana Passage* they sailed another week, to cover, at the average speed of four knots (a little less than one hundred miles a day), all of the six hundred miles of the island's Northern coast before coming within sight of the longed-for destination.