

I N D E X E S

A N D

R E F E R E N C E S

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- 141.** *Pestles used by the Chinese to beat small pieces of bamboo shoots into a pulp* (p. 586) - Miniature, author and date unknown, kept at the Paris National Library, photographed by P. Matteo Ricci and published in “La Cina,” F.M. Ricci Editore.
- 142.** *The 'Paper route,' from China to Europe* (p. 587) - Drawing made by the author on the basis of data obtained from various sources (see bibl. in the appendix “The history of papermaking”).
- 143.** *An old paper mill of the fourteenth century on the Amalfi coast (Minori)* (p. 589) - Lithograph by M. Brumat (date unknown), published by N. Milano in 1971 (see bibl.).
- 144.** *A «pistogio» in a lithograph of 1607* (p. 591) - Lithograph, author and date unknown, published by Vittorio Zonca in “Nuovo Theatro di Machine et Edificii,” Editore Pietro Bertelli, Padua, 1607.
- 145.** *Papermaking in the thirteenth century* (p. 592) - Lithograph, author and date unknown, published in 1985 by A. Grimaccia (Editor) in “L'arte della carta a Fabriano” (see bibl.).
- 146.** *Manual papermaking in Fabriano, today, almost like 700 years ago* (p. 593) - Photograph, author and date unknown, published in 1985 by A. Grimaccia (Editor) in “L'arte della carta a Fabriano” (see bibl.).
- 147.** *Outline of the first section of the cylinder machine* (p. 610) - Drawing made by the author in 1993.
- 148.** *Candle Mold - Figs. 1, 2, & 3* (p. 640) - Drawings contained in the US patent no. 22,739 obtained by Antonio Meucci in 1859.
- 149.** *Candle finishing apparatus - Figs. 1, 2, 3, & 4* (p. 643) - Drawings contained in the US patent no. 30,180 obtained by Antonio Meucci in 1860.
- 150.** *Lamp burner - Figs. 1, 2, 3, & 4* (p. 647) - Drawings contained in the US patent no. 36,192 obtained by Antonio Meucci in 1862.

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**ARCHIVES  
CONSULTED AND  
ABBREVIATIONS**

- AAF — *Archivio della Curia Arcivescovile*, Piazza S. Giovanni 3, Florence, Italy
- ASMN — *Archivi dell'Ospedale di S. Maria Nuova di Firenze, c/o Archivio di Stato di Firenze*, Via della Giovine Italia, Florence, Italy
- ASMF — *Archivio Opera S. Maria del Fiore*, Via della Canonica 1, Florence, Italy
- ASCF — *Archivio Storico del Comune*, Via dell'Oriuolo 33, Florence, Italy
- ASF — *Archivio di Stato di Firenze*, Via della Giovine Italia, Florence, Italy
- ASL — *Archivio di Stato di Lucca*, P. Guidiccioni 8, Lucca, Italy
- AT&TA — *AT&T Bell Laboratories - Archives Records Management Service*, 5 Reinman Road, Warren, NJ, USA
- BCF — *Biblioteca Comunale Centrale*, Via S. Egidio 21, Florence, Italy
- BNF — *Biblioteca Nazionale Centrale*, Piazza dei Cavalleggeri 1, Florence, Italy
- BPL — *Boston Public Library*, Copley Square, Boston, MA, USA
- GMM — *Garibaldi-Meucci Museum*, 420 Tompkins Avenue, Staten Island, NY, USA
- HBN — *Biblioteca Nacional José Martí*, Avenida de la Independencia e/ 20 de Mayo y Aranguren, La Habana, Cuba
- HMPT — *Ministerio de Comunicaciones*, La Habana, Cuba
- ICI — *Italian Cultural Institute*, 686 Park Avenue, New York City, NY, USA
- IMSS — *Istituto e Museo di Storia della Scienza*, Piazza dei Giudici 1, Florence, Italy
- MCRR — *Museo Centrale del Risorgimento*, Vittoriano, Rome, Italy
- MCH — *Museo de la Ciudad de La Habana*, Plaza de Armas, La Habana, Cuba
- MIMS — *Museo Alla Scala di Milano*, Via Filodrammatici 2, Milan, Italy
- MRM — *Museo del Risorgimento*, Via Borgonovo 23, Milan, Italy
- MSIC — *The Museum of Science and Industry*, 57th St. & Lake Shore Drive, Chicago, IL, USA
- MSSF — *Museo di Storia della Scienza*, Piazza dei Giudici 1, Florence, Italy
- MSTF — *Museo Storico Topografico "Firenze com'era"*, Via dell'Oriuolo 24, Florence, Italy
- NARA — *National Archives and Records Administration*, 700 Pennsylvania Avenue NW, Washington, DC, and 8601 Adelphi Road, College Park, MD, USA
- NARA-NY — *National Archives and Records Administration, Northeast Region*, 201 Varick Street, 12th floor, New York, NY, USA<sup>1</sup>
- NARA-W — *National Archives and Records Administration, New England Region*, 380 Trapelo Road, Waltham, MA, USA
- NYHS — *New York Historical Society*, 170 Central Park, New York City, NY, USA
- NYMA — *New York City Department of Records and Information Services - Municipal Archives*, 31 Chalmers Street, Suite 103, New York City, NY, USA
- NYPL — *New York Public Library - Central Research Library*, Fifth Avenue and 42nd Street, New York City, NY, USA
- NYPLA — *New York Public Library - The Annex*, 521 West 43rd Street, New York City, NY, USA
- OSIA — *Order Sons of Italy in America*, 2101 Bellmore Avenue, Bellmore, NY, USA
- RCCA — *Richmond County Clerk - Archives*, 927 Castleton Avenue, Staten Island, NY, USA
- RMMS — *Museo Storico delle Poste e delle Telecomunicazioni*, Viale Europa 190, Rome-Eur, Italy

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<sup>1</sup>At the time when the Author began his research on Antonio Meucci (1990), the Northeast branch of the National Archives and Records Administration was located in Bayonne, NJ (Building 22, Military Ocean Terminal).

- RMPT — *Biblioteca del Ministero delle Poste e delle Telecomunicazioni*, Viale Europa 190, Rome-Eur, Italy
- SCT — *Archives of the "Stato Civile Toscano"* (Tuscan Registry Office) c/o *Archivio di Stato di Firenze*, Via della Giovine Italia, Florence, Italy
- SIFM — *Staten Island Ferry Museum*, 86 Sheraden Avenue, Staten Island, NY, USA
- SIHS — *Staten Island Historical Society*, Richmondtown Restoration, 441 Clarke Avenue, Staten Island, NY, USA
- SIIAS — *Staten Island Institute of Arts and Sciences*, 75 Stuyvesant Place, Staten Island, NY, USA
- TOAS — *Biblioteca dell'Accademia delle Scienze*, Via Maria Vittoria 3, Turin, Italy
- TOCC — *Biblioteca Civica Centrale e Raccolte Storiche*, V. della Cittadella 5, Turin, Italy
- TOIE — *Biblioteca dell'Istituto Universitario di Studi Europei*, V. Sacchi 28 bis, Turin, Italy
- TOMC — *Biblioteca Provinciale dei Padri Cappuccini*, Monte dei Cappuccini, Via G. Giardino, Turin, Italy
- TOMR — *Biblioteca del Museo Nazionale del Risorgimento Italiano*, V. Accademia delle Scienze 5, Turin, Italy
- TON — *Biblioteca Nazionale*, P. Carlo Alberto 3, Turin, Italy
- TONC — *Museo Nazionale del Cinema*, P. S. Giovanni 2, Turin, Italy
- TOPI — *Biblioteca della Facoltà di Ingegneria del Politecnico di Torino*, Corso Massimo D'Azeglio 24, Turin, Italy
- USISR — *United States Information Service - Library - Embassy of the United States of America*, Via Veneto 119, Rome, Italy
- USISM — *United States Information Service - Library - Consulate General of the United States of America*, Via Bigli 11A, Milan, Italy
- USPTO — *US Department of Commerce - Patent and Trademark Office*, 2021 Jefferson Davis Highway, Arlington, VA, USA
- USSI — *National Museum of American History - Smithsonian Institution*, 14th Street & Constitution Avenue, Washington, DC, USA

## GENERAL BIBLIOGRAPHY

### Foreword

The present General Bibliography does not include the references already reported in the specific bibliographies in the inserts or in the appendices of this volume, but only the more general ones.

This bibliography is subdivided into five sections: 1. *Books, performances, audiovisual material and CD-ROMs*; 2. *Articles, Monographs and Manuscripts*; 3. *Patents*; 4. *Legal and trial records (USA)*; 5. *Letters written or received by or concerning Antonio Meucci* (with the exception of the letters pertaining to legal or court proceedings, which are listed under *Legal and trial records*).

In some cases (for instance, the *Letters*) the order followed is chronological rather than alphabetical, for easier consultation.

The *Legal and trial records* are listed in alphabetical order according to the type of document: *Affidavit, Argument, Circular, Deed, Deposition, Incorporation, Letter, Mortgage, Opinion, Petition, Records, Report, Testament*, etc. and, for each type, they are listed in alphabetical order, by family name of the person involved. As said above, the *Letters* listed here are those of a legal nature or related to court proceedings.

For convenience of the reader, in some references, the archive where a copy of the same can be consulted is mentioned. The archive is either indicated in full, or with its abbreviation, as listed in the previous paragraph "Archives consulted and abbreviations."

### Books, performances, audiovisual material and CD-ROMs

Allinger, N. L., et al., *Organic Chemistry*, Worth Publishers Inc., New York, NY (USA) 1976

Baracco, P. E. et al., *Museo Nazionale del Risorgimento Italiano - Guida Illustrata*, Silvestrelli & Cappelletto, Turin, Italy, 1988

Bernardo, S., *The Ethnic Almanac*, Doubleday, Garden City, NY (USA), 1981

Bosi, A., *Cinquant'anni di Vita Italiana in America*, Bagnasco Press, New York, NY (USA), 1921<sup>2</sup>

Bruce, R. V., *Bell - Alexander Graham Bell and the Conquest of Solitude*, Cornell University Press, Ithaca, NY (USA) and London (GB), 1973

Carozzi, E., *Annuario Teatrale Italiano per l'Annata 1887 - Artisti di Canto* [mention of tenor Lorini], Tipografia Nazionale, Milan, Italy, 1887

Colonnetti, G. (ed.), *Grandi Primati Italiani*, Tallone Editore, Turin, Italy, 1961 (Edition for the Centenary of Italian Unification)

Commissione Reale, *Studio Tecnico Amministrativo e Finanziario del Servizio Telefonico in Italia*, Tipografia dell'Unione Editrice, Rome, Italy, 1911 [RMPT]

DeLorme Mapping, *Street Atlas USA v.2.0*, CD-ROM Edition for Macintosh, DeLorme Mapping, Freeport, ME (USA), 1993

Diderot, D., d'Alembert, J. Le Rond, *Il Mestiere ed il Sapere - Tutte le tavole dell'Encyclopédie di Diderot e d'Alembert*, Arnoldo Mondadori Editore, Milan, Italy, 1983.

DiStasi, L. (ed.), *Dream Streets - The Big Book of Italian American Culture*, Harper & Row Publishers, New York, NY (USA), 1989

Favoino Di Giura, G., *Il Vero Inventore del Telefono: Antonio Meucci*, Cocce Press, New York, NY (USA) 1940<sup>3</sup> [SIHS]

<sup>2</sup>An English translation of the chapter regarding Antonio Meucci, done by Jo Inguanti, can be consulted at the «Garibaldi-Meucci Museum» of Staten Island.

<sup>3</sup>In September 1923, a monograph was published by the same author on the occasion of the inauguration of the monument to Antonio Meucci. As is stated in the foreword of the above-

- Figuier, L., *Le nuove conquiste della scienza*, Sonzogno Editore, Milan, Italy, 1884
- Figuier, L., *Les Grandes Inventions Anciennes et Modernes*, Librairie de L. Hachette, Paris, France, 1870
- Grolier Electronic Publishing, *The New Grolier Electronic Encyclopedia*, CD-ROM Edition for Macintosh, Grolier Electronic Publishing Inc. Danbury, CT (USA), 1991
- Hay, R., Beckett K. A. et al., *Il Grande Libro dei Fiori e delle Piante*, Selezione dal Reader's Digest, Milan, Italy, 1980
- Haynes, Williams, *American Chemical Industry*, Van Nostrand, New York, 1954 [Vol. 1 pp. 48-50 on stearic candle manufacture]
- Hecker, M., *Ethnic America 1970 -1977*, Oceana Publications, Dobbs Ferry, NY (USA), 1979 [USISR]
- Klinckowstroem, C. (von), *Historia de la Técnica. Dal descubrimiento del fuego...*, Editorial Labor S.A., Barcelona, Spain, 1965 (see pp. 267-273 and p. 306) [HBN]
- Merriam-Webster, *Webster's Ninth New Collegiate Dictionary*, CD-ROM Edition for Macintosh, Merriam-Webster Inc., Springfield, MA (USA) & Highlighted Data Inc., 1992
- Moncada, F., *Antonio Meucci L'Inventore del telefono*, Unpublished typescript of 215 pages, without illustrations, dated by the author 15 April 1933<sup>4</sup> [SIHS]
- Museo Egizio di Torino, *Civiltà degli Egizi*, Electa S.p.A. Milan, Italy, 1987
- Nese, M., Nicotra, F., *Antonio Meucci, 1808 - 1889*, Italy Italy Magazine Publisher, Rome, Italy, and New York, NY (USA), 1989
- Perucca, E., Filippi, F., *Dizionario d'Ingegneria*, UTET - Unione Tipografico-Editrice Torinese, Turin, Italy, 1977
- Respighi, L., *Il Telefono e la Priorità di A. Meucci*, Edizioni Italiane, Rome, Italy, 1939 [RMCNR]
- Respighi, L., *Per la priorità di Antonio Meucci nell'invenzione del telefono*, Published by CNR, Rome, Italy, 1930 [SIHS]
- Santoro D., Rallo, J. A., *Antonio Meucci and the Telephone* in "Italians - Past and Present", pp. 40-47, Staten Island Italian Historical Society, 1950 [SIHS]
- Santoro, D., *Antonio Meucci - The Inventor of The Telephone*, 27 pages manuscript, in English, dated by the author 10 December 1935 [SIHS] [BPL]
- Scarpaci, V., *Italian Americans - History*, Baker & Taylor Co. New York, NY (USA), 1983 [USISR]
- Schiavo, G. E., *Antonio Meucci, Inventor of the Telephone*, The Vigo Press, New York, NY (USA), 1958 [GMM]
- Schiavo, G. E., *Four Centuries of Italian-American History*, The Vigo Press, New York, NY (USA), 1954
- Software Toolworks, *Time Table of History*, CD-ROM Edition for Macintosh, The Software Toolworks, 60 Leveroni Court, Novato, CA (USA), 1991
- Swan, C. H., *The Narrative History of the Litigation on the Bell Patents, 1878-1896*, Boston, MA (USA), 1903 [ATTA]
- World Almanac, *The World Almanac and Books of Facts 1993*, Pharos Books, New York, NY (USA), 1993

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mentioned book, the latter was written on the basis of this monograph, of which only few copies were published.

<sup>4</sup>The author died on 20 November 1933 in Catania, before he could hand over this typescript to the Italian CNR (National Research Council) for publication. On 16 March 1935, his brother Salvatore gave a copy of this typescript to Daniel Santoro, who, after his death, left it to the «Staten Island Historical Society», where it is still kept..

## Articles, Monographs and Manuscripts

- (Editorial), *Ricciotti Garibaldi Fascista* (with photograph), *Corriere d’America*, New York, NY (USA), Saturday 28 July 1923, p. 1
- (Editorial), *Un breve cenno sui sodalizi italiani nella bella isola all’ingresso di New York*, *Corriere d’America*, New York, NY (USA), 25 April 1940 [SIHS]
- (Editorial), *Un Ami de Garibaldi*, *Courier des États Unis*, New York, NY (USA), 19 October 1889
- (Editorial), *Terrific Explosion, at the Battery, of The Staten Island Boat “Westfield”*, *Frank Leslie’s Illustrated Newspaper - Supplement*, New York, NY (USA), 12 August 1871, pp. 373-376
- (Editorial), *The Ferryboat Explosion* [a few days after the Westfield’s explosion], *Frank Leslie’s Illustrated Newspaper*, New York, NY (USA), 19 August 1871, pp. 381-382
- (Editorial), *An Appalling Disaster* [about Westfield explosion], *Harper’s Weekly*, New York, NY (USA), Saturday, 12 August 1871 [GMM]
- (Editorial), *Grappling For the Dead* [a few days after the Westfield’s explosion], *Harper’s Weekly*, New York, NY (USA), Saturday, 19 August 1871, pp. 765-766
- (Editorial), (*Letters of A. Meucci and E. Bendelari from the USA on the invention of the telephone*), *Il Commercio di Genova*, Year V, No. 96, 1 December 1865
- (Editorial), *Staten Island Italian Historical Society* [about Meucci celebration], *Il Progresso Italo-Americano*, New York, NY (USA), 23 April 1939
- (Editorial), *Verrazano shares his day with Jefferson & Meucci*, *Italian-American Review*, 13 April 1976, p. 1 [GMM]
- (Editorial), *Arts [Forte piano à cordes de verre]*, *Journal de Paris*, No. 322, Vendredi 18 Novembre 1785, de la Lune le 17, p. 1326
- (Editorial), *Avviso* [about reward for retrieving L’Eco d’Italia, years 1853-1862], *L’Eco d’Italia*, New York, NY (USA), 16 through 26 September 1885 [NYPL]
- (Editorial), *\$100 di Ricompensa* [about \$100 reward, for retrieving L’Eco d’Italia, years 1859-1862], *L’Eco d’Italia*, New York, NY (USA), 27 September through 29 October 1885 [NYPL]
- (Editorial), *Il Vero Inventore del Telefono* [Meucci’s letter, reminding his publication on L’Eco d’Italia of 1860], *L’Eco d’Italia*, New York, NY (USA), 6 March 1880 [NYPL]
- (Editorial), *La Casa di Garibaldi in pericolo* [about Bachmann-Meucci litigation, story about Samanos], *L’Eco d’Italia*, New York, NY (USA), 10 November 1880 [NYPL]
- (Editorial), *La Cosmopolita Nuova York* [census], *L’Eco d’Italia*, New York, NY (USA), 15-16 January 1882 [NYPL]
- (Editorial), *La vita a Nuova York* [lifestyle in New York], *L’Eco d’Italia*, New York, NY (USA), 15-16 January 1882 [NYPL]
- (Editorial), *Nuove Scoperte Italiane* [on Manzetti], *L’Eco d’Italia*, New York, NY (USA), 19 August 1865 [NYPL]
- (Editorial), *Nuove scoperte italiane* [Meucci’s letter on Manzetti], *L’Eco d’Italia*, New York, NY (USA), 21 October 1865 [NYPL]
- (Editorial), *Un pò di Storia della Colonia Italiana di New York - I*, *L’Eco d’Italia*, New York, NY (USA), 8-9 January 1882 [NYPL]
- (Editorial), *Un pò di Storia della Colonia Italiana di New York - II*, *L’Eco d’Italia*, New York, NY (USA), 15-16 January 1882 [NYPL]
- (Editorial), *Un pò di storia della Colonia Italiana di New York - III. La Guardia Italiana*, *L’Eco d’Italia*, New York, NY (USA), 22-23 January 1882 [NYPL]
- (Editorial), *Un pò di Storia della Colonia Italiana di New York - IV*, *L’Eco d’Italia*, New York, NY (USA), 29-30 January 1882 [NYPL]

- (Editorial), *Un pò di Storia della Colonia Italiana di New York - V*, L'Eco d'Italia, New York, NY (USA), 5-6 February 1882 [NYPL]
- (Editorial), *Un pò di Storia della Colonia Italiana di New York - VI*, L'Eco d'Italia, New York, NY (USA), 12-13 February 1882 [NYPL]
- (Editorial), *Un pò di Storia della Colonia Italiana di New York - VII*, L'Eco d'Italia, New York, NY (USA), 19-20 February 1882 [NYPL]
- (Editorial), *Tra il Serio e il Faceto - Il monumento ad Antonio Meucci*, La Follia di New York, New York, NY (USA), 11 February 1923
- (Editorial), *The Death of William H. Vanderbilt* [with biography], Scientific American, New York, NY (USA), 19 December 1885, p. 389
- (Editorial), *The Telephone Claimed by Meucci* [Philadelphia Exhibition], Scientific American, New York, NY (USA), Suppl. No. 464, 22 November 1884, p. 7407
- (Editorial), *Annual Tribute Paid to Antonio Meucci*, The Boston Globe, Boston, MA (USA), 23 April 1936
- (Editorial), *Meucci's Claims to the Telephone*, The Electrical World, New York, NY (USA), 28 November 1885, pp. 219-220
- (Editorial), *Large Fire and Accidents* [on Paraffine Candle Co. and William E. Rider], The Richmond County Gazette, Staten Island, NY (USA), 24 October 1860 [SIIAS]
- (Editorial), [about girls employed at N.Y. Paraffine Candle, Stapleton], The Richmond County Gazette, Staten Island, NY (USA), 21 October 1863 [SIIAS]
- (Editorial), [The New York Paraffine Candle Co. in operation after disastrous fire], The Richmond County Gazette, Staten Island, NY (USA), 12 December 1860 [SIIAS]
- (Editorial), *A. Meucci & Co. Manufacturers of Chinese Candles* [Advertisement], The Staten Islander, Staten Island, NY (USA), 19 February 1853 [SIIAS]
- Catania, B., *Alla ricerca della verità su Antonio Meucci e sulla invenzione del telefono*, L'Elettrotecnica, Milan, Italy, Vol. LXXVII, No. 10, October 1990, pp. 49 - 55,
- Catania, B., *L'ingiustizia corre sul filo. Sulle orme di Antonio Meucci - Un viaggio nel XIX secolo*, Achab, Il Corriere dell'Avventura, Rome, Italy, Year II, No. 2, February 1991, pp. 35-38,
- Catania, B., *Sulle tracce di Antonio Meucci - Appunti di viaggio*, L'Elettrotecnica, Milan, Italy, Vol. LXXIX, No. 10, October 1992, pp. 973 - 984,
- Catania, B., *Presentazione del libro "Antonio Meucci - L'Inventore e il suo Tempo"* (Vol. 2), Palazzo Vecchio - Salone dei Gigli, Florence, Italy, 16 May 1996
- Catania, B., *Un documento inedito rivaluta l'opera di Antonio Meucci*, AEI - Automazione, Energia, Informazione, Milan, Italy, Vol. 82, NO. 2, February 1995, pp. 32-40
- Catania, B., *La labor precursora de Antonio Meucci sobre el teléfono desde La Habana hasta Clifton*, Revista Bimestre Cubana, La Habana, Cuba, Vol. LXXIX, Época III, No. 4, enero-junio 1996, pp. 49-63
- Catania, B., *Antonio Meucci Revisited*, Antenna, Newsletter of the Mercurians, in the Society for the History of Technology, Denver, CO (USA) Vol. 9, No. 1, November 1996, pp. 4-5
- Franzonello, A., *The President Message* [about Italian immigration in the USA], Italian Club of Staten Island, Vol. 1, No. 3, 7 April 1952 [SIHS]
- Garibaldi-Meucci Museum, *Museum's Illustration Leaflet*, Order Sons of Italy in America, Staten Island, NY, USA, 1988 [GMM]
- Guglielmotti, Emilio (Gen.), *Antonio Meucci: una rivendicazione*, Rivista Coloniale, Rome, Italy, January-February 1921, pp. 69-71 [RMPT]



- Lamb, R., *Spinti da un Grande Ideale* [Mazzini, Garibaldi and Cavour], Ulisse 2000, Rome, Italy, July 1993, pp. 84-93
- Mirti, G., *Antonio Meucci: Storia curiosa di un oroscopo*, Linguaggio Astrale, Turin, Italy, A. XX, N. 79, Summer 1990, p. 176. See also, of the same author: *Antonio Meucci: La Historia Curiosa de un Horóscopo*, Revista Astrológica Mercurio-3 (Spain), No. 26, 1 quarter 1991 pp. 24-27
- Moncada, F., *Antonio Meucci Inventor of the Telephone*, Atlantica, Vol. XIII, No. 5, August 1932, pp. 201-204. Italian translation of the same on pp. 232-234
- Moncada, F., *Meucci's Telephone*, in "Dream Streets", Harper & Row Publishers, New York, NY (USA), (1935)?, pp. 104-105 [GMM]
- Monti, A., *Un inventore amico di Garibaldi*, Le Vie d'Italia, Milan, Italy, December 1936, pp. 771-776
- Morris, I. K., *Antonio Meucci*, Richmond County Standard, Staten Island, NY (USA), Saturday, 3 January 1885
- Nicolucci, C., Monegato, A. et al., *Alga Carta - Carta ottenuta con l'impiego esclusivo di alghe in esubero nella Laguna di Venezia*, Industria e Ambiente, June 1993
- Order Sons of Italy in America, *Serata Culturale Italiana* [Garibaldi's and Meucci's biographies], Order Sons of Italy in America and American Lodge #2245, 1988 [GMM]
- Parodi, Peter Ambrose, [*My reminiscences of Antonio Meucci ...*], 20-page manuscript, received by the Garibaldi-Meucci Museum on 16 July 1996 from Mr. Bruce Petillo, whose mother was the niece of the author. The manuscript is not dated, though it must have been written after 1917 [GMM]
- Parodi, Prof. Paolo, *My Reminiscences of Antonio Meucci*, Zarathustra, New York, NY (USA), 15 March 1926<sup>5</sup>
- Pickernell, F. A., *Notes on Telephone Batteries*, The Electrical Engineer, New York, NY (USA), October 1888, p. 482-483
- Reycraft, J., [Untitled paper mentions Marezek], Unknown Newspaper, dated 6 March 1952 [SIHS]
- Santoro, D., *Says Antonio Meucci Started First Brewery on Staten Island*, Staten Island Advance, Staten Island, NY (USA), 5 March 1935
- Secchi de Casali, G. F., *Trent'otto anni d'America - XX*, L'Eco d'Italia, New York, NY (USA), 25-26 February 1883
- Secchi de Casali, G. F., *Trent'otto anni d'America - XXI*, L'Eco d'Italia, New York, NY (USA), 4-5 March 1883
- Secchi de Casali, G. F., *Trent'otto anni d'America - XXVIII*, L'Eco d'Italia, New York, NY (USA), 22-23 April 1883
- Secchi de Casali, G. F., *Trent'otto anni d'America - XXXI*, L'Eco d'Italia, New York, NY (USA), 13-14 May 1883
- Secchi de Casali, G. F., *Trent'otto anni d'America - LXXXV*, L'Eco d'Italia, New York, NY (USA), 23 March 1884
- Steinmeyer, H. G., *The Great Bi-centennial Celebration of 1883* [Richmond County's foundation], The Staten Island Historian, Staten Island, NY (USA), January-March 1969
- Tomasi, S. M., *The Unification of Italy: Meucci's Views from New York* [Meucci's letter to Italian Prime Minister Ricasoli], La Parola del Popolo (USA), Year 68, V. 26, September-October 1976 (USA Bicentennial - The Italian Contribution.) pp. 179-182 [GMM]
- Ulysséa, R., *Anita Garibaldi* [in Portuguese], Conferência proferida no Centro Cultural Antônio Guimarães Cabral de Laguna, 4 August 1949
- Unknown Author, *Biographical notes on D. Santoro*, Staten Island Italian Historical Society, Staten Island, NY (USA), (1946)? [SIHS]

<sup>5</sup>This booklet could have been printed after Peter Ambrose Parodi's manuscript.

Unknown Author, *Castle Garden* [old prints and portrait of Jenny Lind], The Staten Island Historian, (1945)? [SIHS]

### Patents<sup>6</sup>

Meucci, A., *Manufacture of Candles*, US Patent No. 22,739, filed 15 November 1858; granted 25 January 1859 [USPTO]

Meucci, A., *Galvanic Battery*, US Caveat No. ... .., filed 9 April 1859

Meucci, A., *Candle Apparatus*, US Caveat No. ... .., filed 6 June 1860

Meucci, A., *Dry Galvanic Battery*, US Application No. ... .., filed 6 June 1860 - Rejected

Meucci, A., *Apparatus for moulding candles*, US Patent No. 30,180, filed (see caveat of 6 June 1860); granted 25 September 1860 [USPTO]

Meucci, A., *Improvement in Kerosene-Lamps*, US Patent No. 36,192, filed 7 May 1862; granted 12 August 1862 [USPTO]

Meucci, A., *Improvement in Treating Petroleum and other Oils to Produce a Vehicle for Paints and Varnishes*, US Patent No. 36,419, filed 16 June 1862; granted 9 September 1862 [USPTO]

Meucci, A., *Improvements in Preparing Hydrocarbon Liquids to serve as Vehicles for Paints*, US Patent No. 38,714, filed 3 April 1863; granted 26 May 1863 [USPTO]

Meucci, A., *Improved Process for Removing the Mineral, Gummy, and Resinous Substances from Vegetable Material*, US Patent No. 44,735, filed 12 September 1864; granted 18 October 1864 [USPTO]

Meucci, A., *Improved Mode of Making Wicks*, US Patent No. 46,607, filed 17 January 1865; granted 28 February 1865 [USPTO]

Meucci, A., *Improved Process for Removing Mineral, Gummy, and Resinous Substances from Vegetable Fiber*, US Patent No. 47,068, filed 21 February 1865; granted 28 March 1865 [USPTO]

Meucci, A., *Improved Process for Removing Mineral, Gummy, and Resinous Substances from Vegetable Fiber*, GB Patent No. 758/1865 [1868?], filed ... ..; granted ... ..

Meucci, A., [*Improved Process for Removing Mineral, Gummy, and Resinous Substances from Vegetable Fiber*], Italian Patent No. ... , filed 3 November 1869<sup>8</sup>

Meucci, A., *Improved Process for Making Paper-Pulp from Wood*, US Patent No. 53,165, filed 3 August 1865; granted 13 March 1866 [USPTO]

US Patent and Trademark Office, *Patents granted to and Applications and caveats filed by A. Meucci*, National Archives and Records Administration, College Park, MD (USA) - RG60, file 6921-1885, Papers filed in Patent Office, Marked 7. Also National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Deposition of Antonio Meucci, Defendant's Exhibit No. 110. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex), Part 1, p. 69.

<sup>6</sup>Caveats and rejected applications are not usually kept by the US Patent Office. Titles and filing dates of Meucci's caveats and rejected applications are taken from the list "Patents granted to and Applications and caveats filed by A. Meucci," reported in the following.

<sup>7</sup>Caveats and rejected applications are not usually kept by the US Patent Office. Titles and filing dates of Meucci's caveats and rejected applications are taken from the list "Patents granted to and Applications and caveats filed by A. Meucci," reported in the following.

<sup>8</sup>The Italian Patent law did not foresee an examination before the patent was granted. In case of litigation, the Court would establish the validity of the patent. Nowadays, European patents are treated much the same as the US patents.

## Legal and trial records (USA)

*Affidavit of Frederick Bachmann*, sworn (28 September 1885)<sup>9</sup>, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 3 (originally filed at the Interior Dept. file 4513-1885, Encl. 22).

*Affidavit of Nicola Barili*, sworn (September-October, 1885)<sup>10</sup>, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 6, Folder 1 (originally filed at the Interior Dept. file 4390-1885, Enclosure 3).

*Affidavit of Enrico Bendelari*, sworn 13 January 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 11).

*Affidavit of Angelo Bertolino*, sworn 18 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 7).

*Affidavit of Charles Bertolino*, sworn 18 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 6).

*Affidavit of John Citarotto*, sworn 2 January 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Deposition of Frederico Garlanda, Exhibit Dr. John Citarotto Affidavit.

*Affidavit of Matilda Ciucci*, sworn 23 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 3 (originally filed at the Interior Dept. file 4513-1885, Enclosure 14).

*Affidavit of Nestore Corradi*, sworn 3 April 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 11).

*Affidavit of David H. Craig*, sworn 20 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Exhibits and Affidavits.

*Affidavit of Leonard D. Cunningham*, sworn 10 October 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 13).

*Affidavit of Ferdinand DeLuca*, sworn 19 July 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 9 or 11<sup>11</sup>).

<sup>9</sup>This affidavit does not show any date on it. Our assumption, that it may have been sworn on 28 September 1885, stems from the fact that the Notary Public (Fredk. Kassner) is the same who notarized the affidavit of Frederick Kassan (sworn on 28 September 1885) and that both affidavits were filed at the Dept. of the Interior one after the other.

<sup>10</sup>This affidavit was received (together with other affidavits) by the US Department of Justice on 31 January 1886, attached to a letter of the Secretary of the Interior, L. Q. C. Lamar, dated 14 January 1886. Barili's affidavit was filed with the note "two sheets without jurat or signature," in that it apparently lacked a third page, which should have ended with the notary's name and date of oath. Since other two affidavits, respectively filed before and after Barili's affidavit, bore the dates of 18 September 1885 and 13 October 1885, we have assumed that Barili's affidavit may have been sworn in the epoch September-October 1885.

<sup>11</sup>No letter from the Dept. of the Interior to the Dept. of Justice, accompanying this affidavit was found. However, this affidavit was found in RG60 (Dept. of Justice) in the same file with other affidavits, which were originally filed at the Dept. of the Interior in file 4513-85, enclosures 9 or 11.

- Affidavit of Paul DeMartini*, sworn 29 October 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 6, Folder 1 (originally filed at the Interior Dept. file 4633-1885, Enclosure 4).
- Affidavit of Torello Dendi*, sworn 18 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 4).
- Affidavit of George F. Durant*, sworn 21 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Exhibits and Affidavits
- Affidavit of John Fleming*, sworn 23 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 17). Also National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Deposition of Antonio Meucci, Defendants' Exhibit No. 121. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex), Part 2, p. 33.
- Affidavit of Frederico Garlanda*, sworn 20 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Exhibits and Affidavits.
- Affidavit of William W. Goodwin* (handwritten), sworn 13 November 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 4.
- Affidavit of Maria Gregory*, sworn 7 October 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 20).
- Affidavit of Frederic Kassan*, sworn 28 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 3 (originally filed at the Interior Dept. file 4513-1885, Enclosure 23).
- Affidavit of Michael Lemmi* (Translation of Meucci's *Memorandum Book*), sworn 28 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, Year Files Enclosures 1885-6921, Box 10, Folder 1, 230/3/46/6 (originally filed at the Interior Dept. file 4513-1885, Enclosure 2).
- Affidavit of Domenico Lorini*, sworn 9 July 1880, originally written in Spanish. Translation into English by Michael Lemmi, sworn October 9, 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 19).
- Affidavit of Domenico Mariani*, sworn 22 October 1885, originally written in Italian. Translation into English by Michael Lemmi of the same date. National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 25).
- Affidavit of Antonio Meucci*, sworn 13 October 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 6, Folder 1 (originally filed at the Interior Dept., file 4390-1885, Enclosure 2).
- Affidavit of Antonio Meucci*, sworn 9 October 1885, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Deposition of Antonio Meucci, Defendant's Exhibit No. 120. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex), Part 2, p. 10.

- Affidavit of Esterre Meucci*, sworn 2 April 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 5).
- Affidavit of Esterre Meucci*, sworn 17 December 1883, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 5).
- Affidavit of Gaetano Negretti*, sworn 5 July 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 9).
- Affidavit of Alessandro Panizzi (first)*, sworn 18 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 6, Folder 1 (originally filed at the Interior Dept. file 4390-1885, Enclosure 4). Also Records of the US Circuit Court for the District of Maryland, American Bell Tel. Co. et al. vs. The Washington Tel. Co. et al.
- Affidavit of Alessandro Panizzi (second)*, sworn 18 September 1885, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 3 (originally filed at the Interior Dept. file 4513-1885, Enclosure 21).
- Affidavit of William E. Rider*, sworn 20 April 1886 (prepared 6 January 1886), including: Articles of co-partnership with J. S. Clark (19 December 1862); Exhibit Meucci Account (31 October 1865 to 31 December 1867); Exhibit Rider-Meucci-Brown contract (16 March 1865), National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Exhibits and Affidavits.
- Affidavit of G. F. Secchi de Casali*, sworn 23 July 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 9).
- Affidavit of John Sidell*, sworn 21 July 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 9).
- Affidavit of Luigi Tartarini*, sworn 2 April 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 11).
- Affidavit of Lorenzo Ullo*, sworn 19 June 1880, National Archives and Records Administration, College Park, MD (USA) - RG60, File 6921-1885, Box 10, Folder 1 (originally filed at the Interior Dept. file 4513-1885, Enclosure 11).
- Circular of Globe Telephone Co.*, New York, issued 12 September 1885, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. - Deposition of Antonio Meucci, Complainants' Exhibit H. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex), Part 2, p. 47
- Deed, Bachmann, Frederick to Antonio and Esther Meucci (Lease for life)*, County Clerk, Richmond County, NY (USA). Signed: 1 July 1882; Recorded: 10 July 1882, Liber 143, pp. 368-370.
- Deed, Bachmann, Frederick to Barsotti, Lazzari and Polidori, Trustees*, County Clerk, Richmond County, NY (USA). Signed: 12 June 1882; Recorded: 18 July 1882, Liber 142, pp. 584-585.
- Deed, Badger, William W. to Esther Meucci*, County Clerk, Richmond County, NY (USA). Signed: 24 September 1856; Recorded: 25 September 1856, Liber 39, pp. 322-324.
- Deed, Fells, Joseph to Antonio and Esther Meucci*, [promise of cancellation of lease, on request] County Clerk, Richmond County, NY (USA). Signed: 19 February 1857; Recorded: 4 April 1857, Liber 41, pp. 21-22.

- Deed, Fells, Joseph to Esther Meucci*, County Clerk, Richmond County, NY (USA). Signed: 30 March 1857; Recorded: 26 June 1857, Liber 41, pp. 269-270.
- Deed, Fells, Joseph to Louis Gros*, County Clerk, Richmond County, NY (USA). Signed: 9 March 1857; Recorded: 11 April 1857, Liber 41, pp. 60-62.
- Deed, Grandi, A. Zilio to Sereno G. P. Breguglia*, 5 April 1872 - Original manuscript at National Archives and Records Administration, College Park, MD (USA), RG60, File 6921-1885, Box 10, Folder 3 (originally filed at the Interior Dept. file 4513-1885, Enclosure 8). *True copy* by Angelo Bertolino, Notary Public, NY (USA), issued 28 September 1885, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - *The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.* - Deposition of Antonio Meucci, Defendants' Exhibits 112 & 124. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex), Part 1, p. 78.
- Deed, Italian American Historical and Patriotic Society, Inc. to Supreme Lodge Order Sons of Italy in America, Inc.*, County Clerk, Richmond County, NY (USA). Signed: 24 July 1928; Recorded: 2 August 1928, Liber 665, pp. 458-460.
- Deed, Meucci, Antonio and Esther to Capt. John Bennis*, County Clerk, Richmond County, NY (USA). Signed: 14 May 1857; Recorded: 15 May 1857, Liber 41, pp. 152-154.
- Deed, Meucci, Antonio and Esther to James Mason*, County Clerk, Richmond County, NY (USA). Signed: 28 August 1856; Recorded: 11 November 1856, Liber 40, pp. 16-17.
- Deed, Meucci, Antonio and Esther to William W. Badger*, County Clerk, Richmond County, NY (USA). Signed: 22 September 1856; Recorded: 24 September 1856, Liber 39, pp. 320-322.
- Deed, Meucci, Antonio and Esther to Capt. John Bennis*, County Clerk, Richmond County, NY (USA). Signed: 18 March 1857; Recorded: 11 April 1857, Liber 41, pp. 62-64.
- Deed, Meucci, Esther to Capt. John Bennis*, County Clerk, Richmond County, NY (USA). Signed: 20 June 1857; Recorded: 26 June 1857, Liber 41, pp. 270-271.
- Deed, Salvi, Lorenzo to Antonio Meucci*, County Clerk, Richmond County, NY (USA). Signed by Antonio Meucci: 1 May 1854; signed by Salvi in Havana, Cuba, on 18 January 1855; Recorded: 23 March 1855, Liber 36, pp. 57-59.
- Deed, Society for the Preservation of the Dwelling House of the late Garibaldi at Clifton to Supreme Lodge Order Sons of Italy in America, Inc.*, County Clerk, Richmond County, NY (USA). Signed: 13 January 1915; Recorded: 6 March 1915, Liber 441, pp. 569-571.
- Deed, Supreme Lodge Order Sons of Italy in America, Inc. to Italian American Historical and Patriotic Society Inc.*, County Clerk, Richmond County, NY (USA). Signed: 30 October 1917; Recorded: 20 November 1917, Liber 478, pp. 23-25.
- Deed, Townsend, William. B. and Susan B. to Lorenzo Salvi and Antonio Meucci*, County Clerk, Richmond County, NY (USA). Signed: 12 May 1852; Recorded: 25 May 1852, Liber 26, pp. 109-112.
- Deed, Townsend, William. B. and Susan B. to Lorenzo Salvi and Antonio Meucci*, County Clerk, Richmond County, NY (USA). Signed: 1 July 1853; Recorded: 16 July 1853, Liber 31, pp. 120-123.
- Deed, Townsend, William. B. and Susan B. to Lorenzo Salvi*, County Clerk, Richmond County, NY (USA). Signed: 10 September 1851; Recorded: 24 September 1851, Liber 24, pp. 190-193.
- Deed, Wellington, Aaron H. and Margaret D. to Society for the Preservation of the Dwelling House of the late Garibaldi at Clifton*, County Clerk, Richmond County, NY (USA). Signed: 17 June 1905; Recorded: 15 July 1905, Liber 309, pp. 106-108.

*Deposition of Beckwith, Seth R.*, rendered 25-26 October 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Craig, David H.*, rendered 17 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Cross, Charles R.*, rendered April-October 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Durant, George F.*, rendered 19 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Garlanda, Federico*, rendered 19 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Mariani, Domenico*, rendered 31 December 1885 to 16 January 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of McAndrew, James C.*, rendered 13 May 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Meucci, Antonio (first)*, rendered 7 December 1885 to 13 January 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al. Also 'Deposition of Antonio Meucci,' New York Public Library (Annex).

*Deposition of Meucci, Antonio (second)*, rendered 11 September 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Deposition of Rider, William E.*, rendered 14 April 1886, National Archives and Records Administration, Northeast Region, New York, NY (USA) - Records of the US Circuit Court for the Southern District of New York - The American Bell Telephone Co. et al. vs. The Globe Telephone Co. et al.

*Incorporation of the «Society for the Preservation of the Dwelling House of the late Garibaldi at Clifton»*, County Clerk, Richmond County, NY (USA). Signed: 27 April 1905; Recorded: 9 May 1905, Liber 2, pp. 580-583.

*Letter from David Humphreys, Counsel for Globe Telephone Company of New York*, to Hon. John Goode, U. S. Solicitor General, dated ca. 27 October 1885<sup>12</sup>, National Archives and Records Administration, College Park, MD (USA) - RG60, file 6921-1885, box 10, folder 10 (originally filed at the Interior Dept., file 4513-85, Enclosure 1).

<sup>12</sup>Although the letter is not dated, it bears, in its last page, two stamps. The first reads "Department of the Interior, P. & M. Div.—Received, Oct. 28, 1885;" the second reads "Office of Com'r ...—Received, Nov. 3, 1885." Hence, it is reasonable to assume that the letter was sent around October 27, 1885.

- Letter from Charles H. Swan, Counsel for Bell Telephone Company, to Hon. G. W. Anderson, US District Attorney, Boston, MA, dated 28 June 1915, National Archives and Records Administration, College Park, MD (USA), RG267, Box 2146 - Supreme Court Case No. 13271 (Bell vs. Globe).*
- Mortgage, Meucci, Antonio and Lorenzo Salvi to William B. Townsend, County Clerk, Richmond County, NY (USA). Signed: 1 July 1853; Recorded: 15 July 1853, Liber 19, pp. 180-183; Canceled 3 April 1863.*
- Mortgage, Meucci, Antonio and Esther to Augustus A. Samanos, County Clerk, Richmond County, NY (USA). Signed: 1 May 1856; Recorded, Richmond County, 22 May 1856, Liber 25, pp. 323-326; Canceled 26 December 1864.*
- Mortgage, Meucci, Antonio and Esther to Henry H. Morange, County Clerk, Richmond County, NY (USA). Signed: 20 February 1857; Recorded: 6 March 1857, Liber 26, pp. 463-466.*
- Opinion by Judge William J. Wallace in the case of American Bell Telephone Co. et al. vs. Globe Telephone Co. et al., rendered 19 July 1887, The Federal Reporter, 31 F. 729.*
- Records of The Supreme Court of New York - Case: James Mason vs. Antonio Meucci (first trial, Bill of complaint sworn 16 February 1857; Decision filed 10 March 1857), File LJ 1857-M-382.*
- Records of The Supreme Court of New York - Case: James Mason vs. Antonio Meucci (second trial, Bill of complaint sworn 16 February 1857, same as first trial; Decision filed 25 November 1857), File LJ 1857-M-128.*
- Records of The Supreme Court of New York - Case: James Mason vs. Antonio Meucci, Esterre Meucci, William W. Badger, John Bennis, The People of the State of New York, Henry H. Morange (Bill of complaint dated 25 February 1858. Decision filed 19 March 1861), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1859-1861, File Unit SI 75, Box no. 75, Shelf Location 111622.*
- Records of The Supreme Court of New York - Case: James Mason vs. Antonio Meucci and Joseph Fells (Bill of complaint dated 20 February 1857; Decision filed 26 November 1859), File GA 1859-454.*
- Records of The Supreme Court of New York - Case: Hermann Batjer vs. Antonio Meucci (Bill of complaint dated 17 February 1857; Decision filed 26 June 1857), File LJ 1857-M-224.*
- Records of The Supreme Court of New York - Case: Hermann Batjer vs. Antonio Meucci, Esterre Meucci, William W. Badger, John Bennis, The People of the State of New York, Henry H. Morange (Bill of complaint dated 25 February 1858; Decision filed 19 March 1861), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1859-1861, File Unit SI 75, Box no. 75, Shelf Location 111622.*
- Records of The Supreme Court of New York - Case: Louis W. Viollier vs. Antonio Meucci (Bill of complaint dated 17 February 1857; Decision filed 26 June 1857), File LJ 1857-M-223.*
- Records of The Supreme Court of New York - Case: Louis W. Viollier vs. Antonio Meucci, Esterre Meucci, William W. Badger, John Bennis, The People of the State of New York, Henry H. Morange (Bill of complaint dated 25 February 1858; Decision filed 19 March 1861), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1859-1861, File Unit SI 75, Box no. 75, Shelf Location 111622.*
- Records of The Supreme Court of New York - Case: Delos D. Pier, William A. Parker and Solomon Sanders Jr. vs. Antonio Meucci, Esterre Meucci, William W. Badger, John Bennis, The People of the State of New York, Henry H. Morange (Bill of complaint dated 27 June 1857. Decision filed 28 March 1859), Municipal*



Archives of the City of New York - Record Group Staten Island County Clerk, Series 1859-1861, File Unit SI 75, Box no. 75, Shelf Location 111622.

*Records of The Supreme Court of New York* - Case: *H. H. Morange vs. Ester Meucci, Antonio Meucci, John Bennis, Delos D. Pier, William A. Parker, Solomon Sanders Jr., James Mason, Hermann Batjer, Louis W. Viollier* (Bill of complaint dated 30 July 1857; Decision filed 12 June 1858), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1857-1858, File Unit SI 73, Box no. 73, Shelf Location 111620.

*Records of The Supreme Court of New York* - Case: (Appeal) *H. H. Morange vs. Esther Meucci, Antonio Meucci, John Bennis, Delos D. Pier, William A. Parker, Solomon Sanders Jr., James Mason, Hermann Batjer, Louis W. Viollier* (Appeal requested 23 July 1858; Decision filed 12 February 1861, confirmed 10 September 1861), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1859-1861, File Unit SI 75, Box no. 75, Shelf Location 111622.

*Records of The Supreme Court of New York* - Case: (Surplus money from auction sale) *H. H. Morange vs. Esther Meucci, Antonio Meucci, John Bennis, Delos D. Pier, William A. Parker, Solomon Sanders Jr., James Mason, Hermann Batjer, Louis W. Viollier* (Claims for surplus money filed by *J. Moody* and *W. I. Street* on 28 December 1861 and by *Esther Meucci* on 6 January 1862; Decision rendered on 7 April 1862), Municipal Archives of the City of New York - Record Group Staten Island County Clerk, Series 1850-1860, File Unit SI 365, Box no. 365, Shelf Location 11912.

#### Letters written or received by or concerning Antonio Meucci

From *Antonio Meucci* to his brother *Giuseppe* (14 November 1855), published by Respighi, "Il Telefono e la Priorità di Antonio Meucci" (see bibl.), p. 15

From *Antonio Meucci* to *Giuseppe Garibaldi* (23 September 1859), Museo Centrale del Risorgimento, Rome, Italy

From *Antonio Meucci* to his brother *Giuseppe* (20 December 1859), Museo Storico PT, Rome, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (26 December 1859), Biblioteca Nazionale Centrale, Rome, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (14 January 1861), Museo del Risorgimento, Milan, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (24 May 1861), Museo Centrale del Risorgimento, Rome, Italy

From *Antonio Meucci* to his brother *Giuseppe* (16 February 1863), Museo Storico PT, Rome, Italy

From *Antonio Meucci* to his brother *Giuseppe* (16 April 1863), Museo Storico PT, Rome, Italy

From *Antonio Meucci* to his brother *Giuseppe* (31 March 1864) [enclosing circular «Antonio Meucci's Patent Oil»], Museo Storico PT, Rome, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (27 April 1864), Biblioteca Nazionale Centrale, Florence, Italy

From *Antonio Meucci* to his brother *Giuseppe* (27 August 1864), Museo Storico PT Rome, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (end 1864?), Museo Centrale del Risorgimento, Rome, Italy

From *Antonio Meucci* to *Giuseppe Garibaldi* (22 March 1865), Museo del Risorgimento, Milan, Italy

From *Giuseppe Garibaldi* to *Antonio Meucci* (10 April 1865), published by L'Eco d'Italia, New York, "Una lettera di Garibaldi" (see bibl.), 16 June 1865

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From *Antonio Meucci to Enrico Bendelari* (29 August 1865), published by L'Eco d'Italia, New York, "Nuove Scoperte Italiane" (see bibl.), 21 October 1865  
From *Enrico Bendelari to Antonio Meucci* (15 September 1865), published by L'Eco d'Italia, New York, "Nuove Scoperte Italiane" (see bibl.), 21 October 1865; *Il Commercio di Genova* (see bibl.), 1 December 1865  
From *Antonio Meucci to Ignazio Corbellini*, Arenzano (Genova) (13 October 1865), published by L'Eco d'Italia, New York, "Nuove Scoperte Italiane" (see bibl.), 21 October 1865; *Il Commercio di Genova* (see bibl.), 1 December 1865  
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ANALYTICAL  
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## Foreword

The page numbers reported in this Analytical Index refer to the edition on paper of the book (in Italian). They are not essential for the electronic version of the book since the reader can use the "Find" command to retrieve any desired information, without consulting this Analytical Index. This notwithstanding, we report it here for completeness.

This index does not include the names that appear in the bibliographic references.

The page numbers in bold letters are where the item indicated is dealt with more extensively.

The illustrations are indicated with 'ill.', followed by the page number.

If an item appears several times on the same page, it is indicated only once.

The explanatory notes are written in italics. If, however, they form an integral part of the indexed word they are written in normal print.

The cities in the United States are indicated by name, followed by the two-letter abbreviation of the State, after the comma, e.g. 'Germantown, PA'. The cities in Italy are indicated by name followed by the two-letter abbreviation of the province in brackets, e.g. 'Gradisca d'Isonzo (UD)' unless they are chief province towns, in which case they are followed by [I], the abbreviation of 'Italy'. The cities in other countries are indicated by name, followed by the international abbreviation of the country in square brackets, e. g. 'Joachimstahl [D]'. For convenience of the reader said abbreviations are reported hereinafter.

In some cases, there is a main entry (e.g. 'Meucci, Antonio') and several orders of subentries (up to three). The subentries are preceded by one or more dashes (up to three), depending on the order in which they appear (e.g. '— telephone'; '— — coil'; '— — — high impedance'). The subentries may either precede or follow the main entry. For example, the entry 'New York' includes subentries such as 'Public Library,' to indicate 'New York Public Library,' and 'Italians in,' to indicate 'Italians in New York.'

The note 'see' is a reference for the reader to the word that either follows 'see' or, if not shown, precedes it (e.g. 'bottles for beer see' refers the reader to the entry 'beer'). If there are several cross-references, they are separated by semicolons (;). If the cross-referenced entry is a subentry, the main entry is shown followed by the symbol /, repeated as many times as needed to reach the desired subentry. For example, 'Ritter-Kellner see paper/pulp/manufacturing processes/bisulfite ...' means that 'Ritter-Kellner' is indexed under the subentry 'bisulfite ...,' which is a subentry of 'manufacturing processes,' which is a subentry of 'pulp,' which is a subentry of the main entry 'paper.'

## Abbreviations

<i>abbr.</i>	abbrevia-ted, -tion	<i>Col.</i>	colonel
<i>Ave.</i>	Avenue	<i>Com.</i>	commander
<i>bact.</i>	bacteriolog-ist, -y	<i>dep.</i>	deported
<i>beer</i>	beer, brew-er, -ing	<i>Dept.</i>	Department
<i>bioch.</i>	biochemi-st, -cal, -stry	<i>Dr.</i>	Doctor
<i>biol.</i>	biolog-ist, -ical, -y	<i>E.</i>	English
<i>bot.</i>	botan-ist, -ical, -y	<i>e.g.</i>	for example
<i>bros.</i>	brothers	<i>el.</i>	electric-al, -ity, -ian
<i>candle</i>	candle-making	<i>eng.</i>	engineer
<i>C.</i>	century	<i>et al.</i>	et alii (and others)
<i>Capt.</i>	Captain	<i>fig.</i>	figurative
<i>cav.</i>	Cavalier	<i>F.</i>	French
<i>chem.</i>	chemi-cal, -stry, -st	<i>Gar.</i>	Garibaldian

<i>Gen.</i>	General	<i>M<sup>o</sup></i>	Maestro
<i>geog.</i>	geograph-y, -ic	<i>n.</i>	née (maiden name)
<i>Ger.</i>	German	<i>op.</i>	opera
<i>hist.</i>	histor-ian, -y, -ical	<i>paper</i>	paper, -maker, -making
<i>Hon.</i>	Honorable	<i>phil.</i>	philosoph-er, -ical, -y
<i>ill.</i>	illustration	<i>phys.</i>	physic-ist, -al, -s
<i>It.</i>	Italian	<i>physiol.</i>	physiolog-ist, -ical, -y
<i>jour.</i>	journal, -ist	<i>piano</i>	piano, -maker, -making
<i>Jr.</i>	Junior	<i>pol.</i>	politic-al, -ian, -s
<i>Lat.</i>	Latin	<i>Pres.</i>	President
<i>Law</i>	concerning Law	<i>Prof.</i>	Professor
<i>Lt.</i>	lieutenant	<i>pseud.</i>	pseudonym
<i>M.</i>	( <i>F.</i> ) Mr.	<i>reg.</i>	region
<i>m.</i>	married (acquired name)	<i>Rev.</i>	Reverend
<i>M.D.</i>	Medical Doctor	<i>sci.</i>	scien-tific, -ce
<i>Maj.</i>	Major	<i>sculp.</i>	sculptor
<i>mech.</i>	mechanic-al, -s	<i>sopr.</i>	soprano
<i>mer.</i>	merchant, trader	<i>Sp.</i>	Spanish
<i>microb.</i>	microbiolog-ist, -y	<i>tel.</i>	telephon-e, -ic
<i>mil.</i>	military	<i>ten.</i>	tenor
<i>min.</i>	Minister	<i>wr.</i>	wrong
<i>miner.</i>	mineralog-ist, -y	<i>zool.</i>	zoolog-ical, -y
<i>mus.</i>	music, -ian, -al		

## Abbreviations of the Italian Province names quoted in this volume

(AL)	Alessandria	(PS)	Pesaro
(AN)	Ancona	(PV)	Pavia
(BA)	Bari	(PZ)	Potenza
(BG)	Bergamo	(RC)	Reggio Calabria
(BS)	Brescia	(RI)	Rieti
(CE)	Caserta	(ROMA)	Rome ( <i>It. Roma</i> )
(CN)	Cuneo	(SA)	Salerno
(CO)	Como	(SI)	Siena
(CR)	Cremona	(SS)	Sassari
(CZ)	Catanzaro	(TN)	Trento
(FI)	Florence ( <i>It. Firenze</i> )	(TO)	Turin ( <i>It. Torino</i> )
(FO)	Forlì	(TP)	Trapani
(GE)	Genoa ( <i>It. Genova</i> )	(TR)	Terni
(GR)	Grosseto	(TV)	Treviso
(LI)	Leghorn ( <i>It. Livorno</i> )	(UD)	Udine
(LT)	Latina	(VA)	Varese
(MC)	Macerata	(VC)	Vercelli
(ME)	Messina	(VI)	Vicenza
(MI)	Milan ( <i>It. Milano</i> )	(VR)	Verona
(NA)	Naples ( <i>It. Napoli</i> )	(VT)	Viterbo
(PG)	Perugia		

## Abbreviations of the Nation names quoted in this volume

[A]	Austria	[C]	Cuba
[B]	Belgium	[CDN]	Canada
[BR]	Brazil	[CH]	Switzerland

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[CZ]	Czech Republic	[NIC]	Nicaragua
[D]	Germany	[P]	Portugal
[DK]	Denmark	[PA]	Panama
[E]	Spain	[PE]	Peru
[EST]	Estonia	[PL]	Poland
[ET]	Egypt	[VRC]	People's Republic of China
[F]	France	[RCH]	Chile
[GB]	Great Britain	[RP]	Philippines
[GBG]	Guernsey	[RSM]	San Marino Republic
[GBZ]	Gibraltar	[RUS]	Russia
[H]	Hungary	[S]	Sweden
[HR]	Croatia	[SYR]	Syria
[I]	Italy	[TN]	Tunisia
[IRQ]	Iraq	[TR]	Turkey
[J]	Japan	[U]	Uruguay
[LAR]	Libya	[UKR]	Ukraine
[MA]	Morocco	[USA]	United States of America
[N]	Norway	[USB]	Uzbekistan

#### Abbreviations of the US State names quoted in this volume

CO	Colorado	NH	New Hampshire
DC	District of Columbia	NJ	New Jersey
IL	Illinois	NY	New York
LA	Louisiana	OH	Ohio
MA	Massachusetts	PA	Pennsylvania
MD	Maryland	SC	South Carolina
MI	Michigan	VA	Virginia
MO	Missouri	WI	Wisconsin

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