Principle of the Telephone.—Prof. Govi has contrived an experiment which he calls a demonstration of the principle of the telephone. He takes two tuning forks, which he puts in close proximity to two magnets, each of which is surrounded by a copper wire which serves to connect them together. On sounding one of the tuning forks with a bow, the vibrations are transmitted by the wire and are reproduced in the other fork.—*Les Mondes*, March 17, 1883. C.

CORRESPONDENCE.

To the Committee on Publication.

In *Science* of January 25th last I find the following, in a communication by Professor Eddy, referring to the Second Law of Thermodynamics, as published in your JOURNAL: "In my reply in the same Journal for June, 1883, I showed the fallacy of his objection. So far as I know, Professor Wood has taken no notice of that reply, and now completely ignores it."

Having been called to an account in this public manner, I may be pardoned, at this late day, for saying that I intentionally ignored it, for it contained no reply to my argument.

Yours truly,

DE VOLSON WOOD.

To the Committee on Publication:

GENTLEMEN:—In the JOURNAL OF THE FRANKLIN INSTITUTE for January, 1884, I have noticed a criticism by Mr. Hugo Bilgram, on my proposition, published in the December issue of 1883, page 471, and it seems to me that your correspondent, in quoting from Dr. Grasshof, that a level surface is such "that the resulting force of all attractions is in all points normal to the same," should have observed that this same force must necessarily act in a normal direction upon the contiguous level surface, for otherwise there would be a tangential component disturbing the supposed equilibrium of the liquid mass.

This justifies my tacit assumption that the inner surface of the uniform and exceedingly thin stratum of liquid which is in my demonstration supposed to become like a shell, is a surface of level, and consequently my conclusion is unavoidable.

L. D'AURIA.

Philadelphia, February 20, 1884.

LIST OF BOOKS ADDED TO THE LIBRARY DURING OCTOBER,
NOVEMBER AND DECEMBER, 1883.

Academie des Sciences. Tables Générales des Comptes Rendus. Tomes. 1-61, in 2 Vols. Paris, 1853 and 1870.

Academie Royale des Sciences, Lettres et Beaux-arts de Belgique. Tables Générales des Bulletins. 2^e. Serie. Tomes 21-50. 1867-1880. Bruxelles, 1883.
From the Academy.

Adams, H. Notes in Mechanical Engineering. London. Spon, 1883.

Adjutant General of Pennsylvania. Annual Report. 1866. Harrisburg.

Allentown, Pennsylvania, Annual Reports of the Water Commissioners for 1876, 1877, 1879-1882.

From the Commissioners.

American Academy of Arts and Sciences. Proceedings. Vol. 10. 1882-1883. Boston.
From the Academy.

American Agriculturist. Vols. 1, 2, 3, 5-10, inclusive. New York.

American Association for the Advancement of Science. Reports of Proceedings of 7th, 13th to 20th, and 27th to 31st Meetings.
From the Association.

American Ephemeris and Nautical Almanac, for 1884 to 1886. Washington.
From the Superintendent.

American Exchange and Review. Vols. 1 to 4 and 6 and 7.
From John A. Fowler. Editor. Philadelphia.

American Geographical and Statistical Society. Journal. Vol. 1. New York.

American Geographical Society. New York. Journal. Vols. 3 to 13. 1870-1881.
From the Society.

American Iron and Steel Association. Bulletin No. 27. August 24, 1881. Vol. 15.
From the Secretary.

American Journal of Microscopy. January, March, April and June, 1881.
From Dr. W. H. Wahl.

American Machinist. Nos. 4, 6, 8, 10 and 12 of Vol. 1, 1878. New York.
From the Publisher.

American Monthly Microscopical Journal. June and August, 1881.
From Dr. W. H. Wahl.

American Pharmaceutical Association. Proceedings. 1871 to 1881. Philadelphia.
From J. M. Maisch. Editor.

- American Philosophical Society. Catalogue of the Library. Part I. 1863. Philadelphia. From the Society.
- American Philosophical Society. Transactions. New Series. Part 1. Vol. 16. Philadelphia, 1883.
- American Printer: a Manual of Typography. Philadelphia, 1883. From MacKellar, Smiths and Jordan, Publishers.
- American Water Works Association. Constitution and By-laws, with Proceedings of 1st and 2d Annual Sessions. 1881 and 1882. From J. H. Decker, Secretary.
- American Water Works Association. Annual Reports. 1st to 3d. 1881-83. From J. G. Briggs, Terre Haute, Indiana.
- Army Register. Official. January, 1876. Washington.
- Ashburner, Chas. A. Anthracite Coal Beds of Pennsylvania. Philadelphia, 1882. From the Author.
- Ashburner, Chas. A. New Method for Estimating the Contents of Highly Plicated Coal Beds as applied to the Anthracite Fields of Pennsylvania. From the Author.
- Ashburner, Chas. A. New Method of Mapping the Anthracite Coal Fields of Pennsylvania. 1881. From the Author.
- Astronomical and Meteorological Observations made in 1879. Washington, 1883. From the United States Naval Observatory.
- Astronomical Observations made under the Direction of M. F. Maury, 1845. Washington, 1851. From the Nautical Almanac Office.
- Atlantic and St. Lawrence Railroad Company. Annual Reports, 1844-1883. Portland. From the Company.
- Auditor-General's Report on Railroads of Pennsylvania. 1863, 1864 and 1866. Harrisburg.
- Bailey, R. A. United States National Loans, 1776-1880. Washington, 1882. From the Treasury Department.
- Baltimore and Ohio Railroad Company. Annual Reports, 1859-1882. From the Secretary.
- Baltimore, Md. Annual Report of the Water Department to the Mayor and Council for 1882. From B. K. Martin, Chief Engineer.
- Bangor and Piscataquis Railroad Company. Reports of the Directors. 1876-1882. From the Company.
- Banker's Magazine. April, 1867; August, 1868. New York. From I. S. Homans.
- Banks and Saving Institutions of Pennsylvania. Reports for 1880. Harrisburg. From Hon. G. W. Hall, House of Representatives.

- Bay City, Mich. Annual Reports of the Superintendent of Water Works, 1875, 1877-1882. From the Superintendent.
- Berthelot, M. P. E. Explosive Materials. New York. Van Nostrand. 1883. From the Publisher.
- Binghampton. Annual Reports of the Board of Water Commissioners for 1876, 1878-1880 and 1882. From the Commissioners.
- Blair, H. Lectures on Rhetoric and Belles Lettres. From B. B. McKinley.
- Blake Manufacturing Company. Illustrated Catalogue of Improved Steam Pumping Machinery. New York. From the Company.
- Blodget, L. Census of Manufacturers of Philadelphia, 1883. From Charles Bullock.
- Board of Agriculture of Pennsylvania. Annual Report for 1882. Harrisburg, 1883. From Hon. G. W. Hall, House of Representatives.
- Board of Education of First School District. Philadelphia. Annual Reports. 1821-1883. From the Board.
- Board of Health. Philadelphia. Annual Reports for 1860 and 1877. From His Honor the Mayor.
- Board of Public Education. Sixty-fourth Annual Report. Philadelphia, 1883. From the Board.
- Board of Public Works. Chicago, Ill. Tenth Annual Report. 1870-1871. From the Board.
- Board of Supervising Inspectors of Steam Vessels. Proceedings of the 30th Annual Meeting. 1882. Washington. From the Supervising Inspector General.
- Board of Trade of Philadelphia. Annual Reports. 1865-1882. From G. L. Buzby, Secretary.
- Boston, Concord and Montreal Railroad. Twenty-seventh to Thirty-seventh Annual Reports of the Directors. 1873-1883. From the Company.
- Boston Journal of Chemistry. Missing Nos. required to complete Serial. Boston.
- Boston, Mass. Annual Reports of the Cochituate Water Board to City Council for 1855, 1857, 1858, 1860-1869 and 1871, 1872 and 1874-1876. Annual Reports of the Water Board for 1878 to 1883. Description of the Water Works. Chicago, 1878.

- Report of the Medical Commission upon the Sanitary Qualities of Sudbury, Mystic, Shawshine, and Charles River Waters. Boston, 1874.
- Report of the Cochituate Water Board. October 31, 1873. Boston, 1874.
- Report of Joint Standing Committee on Water, with Report of City Engineer. Boston, 1874.
From A. Febs, Chief Assistant City Engineer.
- Special Report of the Water Board. Sept. 6, 1883.
- Boston Public Library. Annual Reports of the Trustees. 1854-1877. Boston. From the Library.
- Brevets d'Inventions. Tomes 104 et 105. Paris, 1883.
From Ministre du Commerce.
- Brewer, Distiller and Wine Manufacturer. Philadelphia: P. Blakiston, Son & Co. 1883. From the Publisher.
- Bridgeport Hydraulic Company. Reports of the Superintendent to Directors. 1876, 1879, 1881 and 1883.
From the Superintendent.
- Briggs, R. Steam Heating. New York. Van Nostrand. 1883.
From the Publisher.
- Brooklyn Library. Annual Reports of the Board of Directors. Brooklyn, N. Y., 1865-1882. From the Librarian.
- Brown, J. C. French Forest Ordinance of 1689. Edinburgh: Oliver & Boyd. 1883. From the Publishers.
- Brown, Thos. Lectures on the Philosophy of the Human Mind. 2 Vols. Boston, 1826. From B. B. McKinley.
- Browne, W. R. Student's Mechanics. London: Griffin & Co., 1883.
- Buck, Rev. C. Theological Dictionary. Philadelphia, 1838.
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- Buffalo, N. Y. Annual Reports of the City Water Works, 1872-1877 and 1879-1882. From the Water Commissioners.
- Builder. 1843-1844 and 1877. London, 1844 and 1877.
- Bureau of Education. Department of Interior. U. S. Annual Reports of Commissioner of Education, for 1868 and 1881. Washington.
- Answers to Inquiries. By C. Warren. Washington, 1883.
- Circulars of Information. July and August, 1870; November and December, 1871; April and November, 1872; January, February, March, June and Nos. 1 and 3, 1874; Nos. 3 and 4, 1879; No. 3, 1883. Washington. From the Bureau.

(To be continued.)