A CATALOGUE OF THE PUBLICATIONS OF THE GREAT TRIGONOMETRICAL SURVEY OF INDIA.

*An Account of the Measurement of an Arc of the Meridian between the parallels of 18° 3′ and 24° 7′, being a continuation of the Grand Meridional Arc of India, as detailed by the late Lieut.-Colonel Lambton, in the Volumes of the Asiatic Society of Calcutta. London, 1830.**

*An Account of the Measurement of two Sections of the Meridional Arc of India, bounded by the parallels of 18° 3′ 15″; 24° 7′ 11″; and 29° 30′ 48″. London, 1847.**

Account of the Operations of the Great Trigonometrical Survey of India: Price Ten Rupees Eight Annas per Volume.

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Appendix No. 3. Comparisons between the 10-feet Standards I_B I_S and **A**.

Appendix No. 4. Comparisons of the 6-inch Brass Scales of the Compensated Microscopes.

Appendix No. 5. Determination of the Length of the Inch [7.8] on Cary's 3-foot Brass Scale.

Appendix No. 6. Comparisons between the 10-feet Standard Bars I_S and **A** for determining the Expansion of bar **A**.

Appendix No. 7. Final determination of the Differences in Length between the 10-feet Standards I_B I_S and **A**.

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Appendix No. 7. An alternative Method of obtaining the Formulæ in Chapters VIII and XV employed in the Reduction of Triangulation.—Additional Formulæ and Demonstrations.

Appendix No. 8. On the Dispersion of Circuit Errors of Triangulation after the Angles have been corrected for Figural Conditions.

Appendix No. 9. Corrections to Azimuthal Observations for imperfect Instrumental Adjustments.

Appendix No. 10. Reduction of the N. W. Quadrilateral—the Non-Circuit Triangles and their Final Figural Adjustments.

Appendix No. 11. The Theoretical Errors of the Triangulation of the North-West Quadrilateral.

Appendix No. 12. Simultaneous Reduction of the N. W. Quadrilateral—the Computations.

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* Out of print.

Vol. III. *The Principal Triangulation—the Base-Line Figures, the Karáchi Longitudinal, N.W. Himalaya, and Great Indus Series of the North-West Quadrilateral. Dehra Doon, 1873*.*

Vol. IV. *The Principal Triangulation—the Great Arc (Section 24°-30°), Rahún, Gurhágarh and Jogí-Tíla Meridional Series and the Sutlej Series of the North-West Quadrilateral. Dehra Dún, 1876.*

Vol. IVA. *General Description of the Principal Triangulation of the Jodhpore and the Eastern Sind Meridional Series of the North-West Quadrilateral, with the Details of their Reduction and the Final Results. Dehra Dún, 1886.*

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1. General Considerations on Pendulum Operations.
2. General Considerations on the Reduction of Pendulum Observations.
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4. Sketch of the Method of Solution from the Data as proposed in foregoing Sections.
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6. On the Estimation of the Provisional Equatorial Numbers of different Pendulums.
7. Account and Explanation of the Table of Provisional Equatorial Vibration-numbers of Invariable Pendulums.
8. General Synopsis of Determinations.

Appendix No. 3. On the Theory, Use and History of the Convertible Pendulum.

1. The Convertible Pendulum as used by Kater.
2. The Theory of the Convertible Pendulum.
3. Application of the Theory in the case of Kater's and Sabine's Experiments.
4. Application of the Theory to the use of the Reversible Pendulum.
5. On the Constancy or otherwise of the Difference $A-B$.
6. Relation of the Subject to the Use of Invariable Pendulums.

Appendix No. 4. On the Length of the Seconds Pendulum determinable from Materials now existing.

1. Review of the Operations with Kater's Convertible Pendulum.
2. Final Comparison of Experiments with Kater's Convertible Pendulum.
3. Other Values of the Length of the Seconds Pendulum.

Appendix No. 5. A Bibliographical List of Works relating to Pendulum Operations in connection with the Problem of the Figure of the Earth.

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* Out of print.

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Appendix No. 1. The Details of the Separate Reduction of the Budhon Meridional Series, or Series J of the North-East Quadrilateral.

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3. Comparison of Geodetic with Electro-Telegraphic Arcs of Longitude.

4. Circuit Errors of Observed Arcs of Longitude.

5. Results of Idiometer Observations made during Season 1880-81.

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3. Results of the Triangulation.

4. Right Ascensions of Clock Stars.

Vol. X. *Electro-Telegraphic Longitude Operations executed during the years 1881-82, 1882-83 and 1883-84. Dehra Dún, 1887.*

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Vol. XIV. General Description of the Principal Triangulation of the South-West Quadrilateral, including the Simultaneous Reduction and the Details of its component Series. Dehra Dún, 1890.

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Appendix No. 1. Determination of the Geodetic Elements of the Longitude Stations.

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Vol. VII. The North-West Himalaya Series, or Series C of the North-West Quadrilateral, and the Triangulation of the Kashmir Survey. Dehra Dún, 1879. (Vol. VII is of great use to mountaineers).

Vol. VIIA. The Jodhpore Meridional Series and the Eastern Sind Meridional Series of the North-West Quadrilateral. Dehra Dún, 1887.

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Vol. XXVI. The Bombay Longitudinal Series, or Series B of the Southern Trigon. Dehra Dún, 1892.

Vol. XXVII. The Madras Longitudinal Series, or Series G of the Southern Trigon. Dehra Dún, 1892.

Vol. XXVIII. The Madras Meridional and Coast Series, or Series E of the Southern Trigon. Dehra Dún, 1892.

Vol. XXIX. The Great Arc Meridional Series—Section 8° to 18°, or Series A of the Southern Trigon. Dehra Dún, 1899.

Vol. XXX. The Abu Meridional Series, or Series I, and the Gujarát Longitudinal Series, or Series K of the South-West Quadrilateral. Dehra Dún, 1892.

Vol. XXXI. The Khánpisura Meridional Series, or Series G of the South-West Quadrilateral. Dehra Dún, 1893.

Vol. XXXII. The Singi Meridional Series, or Series H of the South-West Quadrilateral. Dehra Dún, 1893.

Vol. XXXIII. The Cutch Coast Series, or Series L of the South-West Quadrilateral. Dehra Dún, 1893.

Vol. XXXIV. The Káthiáwár Meridional Series, or Series J of the South-West Quadrilateral. Dehra Dún, 1894.

Vol. XXXV. The North-East Longitudinal Series, or Series I of the North-East Quadrilateral. Dehra Dún, 1909. Price five rupees.

Descriptions and heights of all the bench-marks falling within the following sheets will be published in pamphlet form in the course of the year 1911.

Sheet No.	Limits	Sheet No.	Limits	Sheet No.	Limits	Sheet No.	Limits
35	Lat. 24° - 28° Long. 64° - 68°	45	Lat. 24° - 28° Long. 72° - 76°	55	Lat. 20° - 24° Long. 76° - 80°	66	Lat. 12° - 16° Long. 80° - 84°
38	Lat. 32° - 36° Long. 68° - 72°	46	Lat. 20° - 24° Long. 72° - 76°	56	Lat. 16° - 20° Long. 76° - 80°	72	Lat. 24° - 28° Long. 84° - 88°
39	Lat. 28° - 32° Long. 68° - 72°	47	Lat. 16° - 20° Long. 72° - 76°	57	Lat. 12° - 16° Long. 76° - 80°	73	Lat. 20° - 24° Long. 84° - 88°
40	Lat. 24° - 28° Long. 68° - 72°	48	Lat. 12° - 16° Long. 72° - 76°	58	Lat. 8° - 12° Long. 76° - 80°	74	Lat. 16° - 20° Long. 84° - 88°
41	Lat. 20° - 24° Long. 68° - 72°	49	Lat. 8° - 12° Long. 72° - 76°	63	Lat. 24° - 28° Long. 80° - 84°	78	Lat. 24° - 28° Long. 88° - 92°
43	Lat. 32° - 36° Long. 72° - 76°	53	Lat. 28° - 32° Long. 76° - 80°	64	Lat. 20° - 24° Long. 80° - 84°	79	Lat. 20° - 24° Long. 88° - 92°
44	Lat. 28° - 32° Long. 72° - 76°	54	Lat. 24° - 28° Long. 76° - 80°	65	Lat. 16° - 20° Long. 80° - 84°		

Professional Papers of the Survey of India.

Professional Paper No. 1. *On the projection for a Map of India and Adjacent Countries on the Scale of 1 : 1000000. Second Edition, Dehra Dún, 1903.*

" " *No. 2.* *Method of measuring Geodetic Bases by means of Metallic Wires by M. Jäderin. (Translated from Mémoires Présentés Par Divers Savants Á L'académie Des Sciences De L'institut De France). Dehra Dún, 1899.*

" " *No. 3.* *Method of measuring Geodetic Bases by means of Colby's Compensated Bars. Dehra Dún, 1900.*

" " *No. 4.* *Notes on the Calibration of Levels. Dehra Dún, 1900.*

" " *No. 5.* *The Attraction of the Himalaya Mountains upon the Plumb-Line in India*. Considerations of recent data. Dehra Dún, 1901. Price Two Rupees.*

" " *No. 6.* *Account of a Determination of the Co-efficients of Expansion of the wires of the Jäderin Base-Line Apparatus. Dehra Dún, 1902.*

" " *No. 7.* *Miscellaneous. Calcutta, 1903 :—*

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(4) *Description of a Sun-dial designed for use with tide gauges.*
(5) *Nickel-Steel alloys and their application to Geodesy (Translated from the French).*
(6) *Theory of electric projectors (Translated from the French).*

* *Vide* Nature, Vol 66, No. 1699 of May 22, 1902.

Professional Paper No. 8. *Experiments made to determine the Temperature Co-efficients of Watson's Magnetographs. Calcutta, 1905. Price one Rupee or one Shilling six Pence.*

" " *No. 9.* *An Account of the Scientific work of the Survey of India and a Comparison of its progress with that of Foreign Surveys. Prepared for the use of the Survey Committee, 1905.* Calcutta, 1905. Price one Rupee or one Shilling six Pence.*

" " *No. 10.* *The Pendulum operations in India, 1903 to 1907, by Major G.P. Lenox Conyngham, R.E. Dehra Dún, 1908. Price Two Rupees Eight Annas.*

Hand-books for the use of Surveyors.

Hand-book of General Instructions for the Survey of India Department. Third Edition. Calcutta, 1907. Price Three Rupees or 4s. 6d.

Hand-book of Professional Instructions for the Trigonometrical Branch, Survey of India Department. Second Edition. Calcutta, 1902. Price Three Rupees.

Hand-book of Professional Instructions for the Topographical Branch, Survey of India. Third Edition. Calcutta 1905. Price Three Rupees.

Auxiliary Tables to facilitate the calculations of the Survey of India. Fourth Edition. Revised and extended. Dehra Dún, 1906. Price Two Rupees.

Special Publications on Scientific subjects.

Report on the Explorations in Great Tibet and Mongolia made by A–K in 1879-82. Dehra Dún, 1891.

Catalogue of 249 Stars for the epoch January 1, 1892, from observations by the Great Trigonometrical Survey of India. Dehra Dún, 1893. Price Two Rupees.

Report on the Recent Determination of the Longitude of Madras. Calcutta, 1897.

Report on the Trigonometrical Results of the Earthquake in Assam. Calcutta, 1898.

The Total Solar Eclipse, January 22nd, 1898. Dehra Dún, 1898.

(1) *Report on the observations at Dumraon.*
(2) *Report on the observations at Pulgaon.*
(3) *Report on the observations at Sahdol.*

Report on the Identification and Nomenclature of the Himalayan Peaks as seen from Katmandu, Nepal.† Calcutta, 1904.

A Sketch of the Geography and Geology of the Himalaya Mountains and Tibet by Colonel S. G. Burrard, R.E., F.R.S., Superintendent, Trigonometrical Surveys and Mr. H. H. Hayden, B.A., F.G.S., Superintendent, Geological Survey of India. Calcutta, 1907-08.

Part I.—The high Peaks of Asia.
Part II.—The Principal Mountain ranges of Asia.
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Price Rs. 2 per part.

* *Vide* Nature Vol. 74, No. 1917 of July 26, 1906.
† *Vide* Nature Vol. 71, Nos. 1828 and 1830 of November 10th and 24th, 1904.

General Reports on The Operations of the Great Trigonometrical Survey of India from 1861 to 1877.
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1903-04. The Magnetic Survey of India. Pendulum Operations. Tidal and Levelling Operations. Astronomical Azimuths. Utilisation of old Traverse data for modern Surveys in the United Provinces of Agra and Oudh. Identification of Snow Peaks in Nepal. Topographical Surveys in Sind. Notes on Town and Municipal Surveys. Notes on Riverain Surveys in the Punjab. Calcutta, 1906.

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Accounts of the progress of Indian Geodesy were submitted to the International Geodetic Conferences that met at

Stuttgart in 1898,

Paris in 1900,

Copenhagen in 1903,

Buda Pesth in 1906,

London and Cambridge in 1909,

and were published in the reports of the Conferences.

Accounts of the progress of Geodesy and Geography in India were published in the Annual Reports of the Board of Scientific Advice from 1905 to date.

A paper on Himalayan Attractian was published in the Monthly Notices of the Royal Astronomical Society, January 1902.

Summaries of the progress of Geodesy in India were published in the following numbers of the ***Philosophical Transactions of the Royal Society of London*** *:—*

Series A, Vol. 186 (1895) pp. 754–816.

Series A, Vol. 205 (1905) pp. 289–318.