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SYNOPTICAL VOLUME XXVI

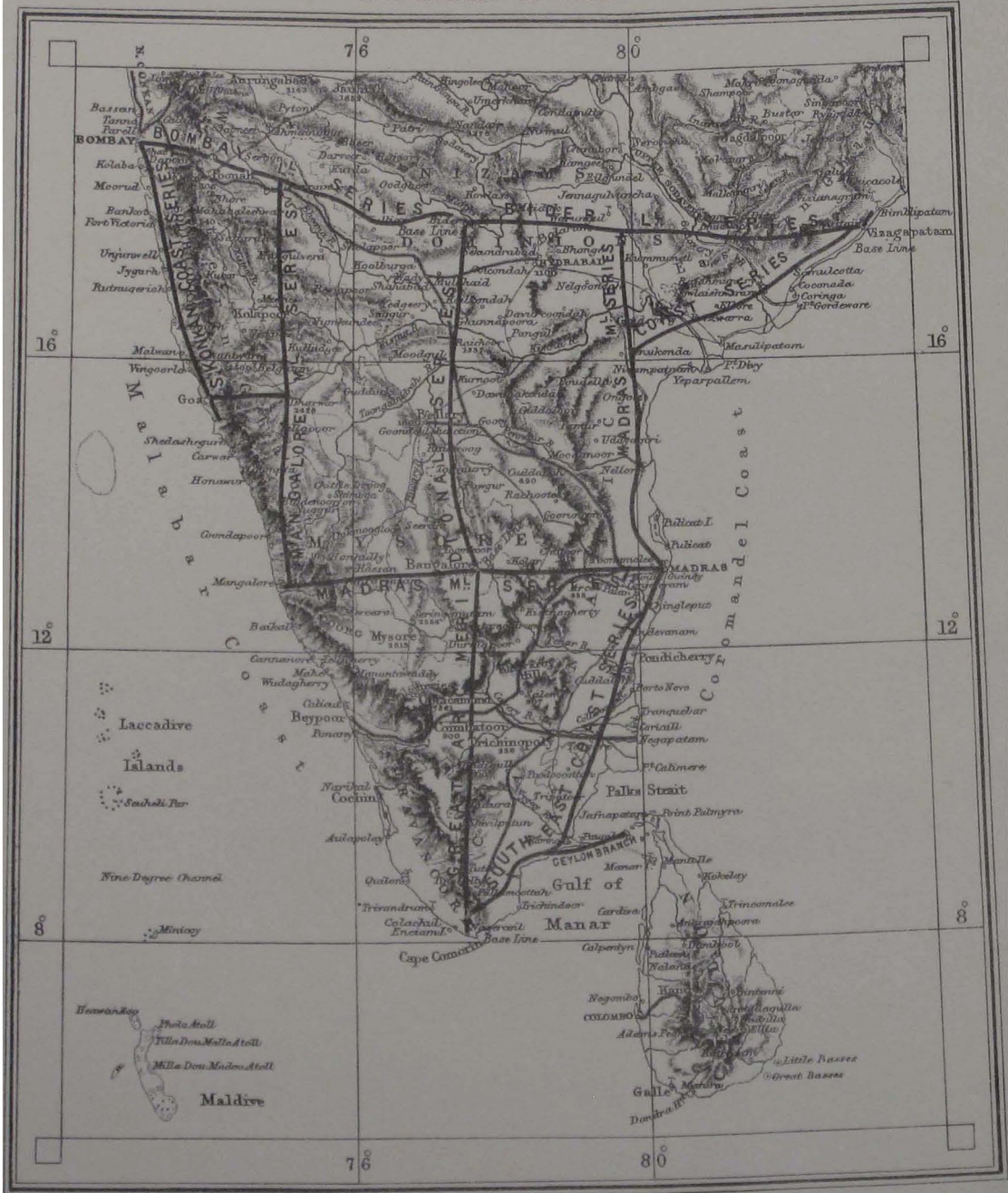
G. T. SURVEY OF INDIA.

THE BOMBAY LONGITUDINAL SERIES

APPERTAINING TO THE

SOUTHERN TRIGON.

DIAGRAM
OF
THE SOUTHERN TRIGON
OF THE
G. T. SURVEY OF INDIA



Photocopyographed at the Office of the Trigonometrical Branch, Survey of India, Dehra Dún, January 1901.

SYNOPSIS OF THE RESULTS OF THE OPERATIONS OF
THE GREAT TRIGONOMETRICAL SURVEY OF INDIA

VOLUME XXVI.

DESCRIPTIONS AND CO-ORDINATES
OF THE
PRINCIPAL AND SECONDARY STATIONS AND OTHER FIXED POINTS OF
THE BOMBAY LONGITUDINAL SERIES

OR SERIES B

OF THE
SOUTHERN TRIGON.

PREPARED IN THE OFFICE OF THE TRIGONOMETRICAL BRANCH, SURVEY OF INDIA,
COLONEL G. STRAHAN, R.E., DEPUTY SURVEYOR GENERAL, IN CHARGE.

PUBLISHED UNDER THE ORDERS OF
COLONEL H. R. THUILLIER, R.E., SURVEYOR GENERAL OF INDIA.



Dehra Dun:

PRINTED AT THE OFFICE OF THE TRIGONOMETRICAL BRANCH, SURVEY OF INDIA.

D. V. HUGHES.

1892.

Price Two Rupees.

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ERRATA.



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43—B.	At Bhoja h.s. azimuth of Pangoli h.s.	for 314° 25' 41"	read 195° 51' 1"
58—B.	Longitude of Akalkot s.	„ 76° 13' 47.28"	„ 76° 14' 47.28"
„	In the description of Akalkot s.	„ About 1½ miles W. of the town	„ In the town
63—B.	do. of Bombay, Colába Church	„ 6 miles	„ 6 furlongs

March, 1892.

J. ECCLES,
In charge of Computing Office.

REFERENCES.

The abbreviations employed in the text are as follows:—

h.s.	denotes	hill station	(secondary),
s.	"	station	"
t.s.	"	tower station	"

These abbreviations are only placed after stations where a theodolite has been set up and observations taken to surrounding points.

The latitudes and longitudes of all points shown on the Charts at the end of the volume will be found in the text. The latter exhibits numerical values of triangles only to points of a superior class, to which alone, if exhibited on the Charts, lines are drawn: the lines are either continuous throughout, or dotted for half the length and continuous for the other half: the dots indicate that the bearing was not observed. For other points difficult to identify or of comparatively less accuracy, numerical values of triangles and azimuths are not given.

March, 1892.

J. ECCLES,

In charge of Computing Office.

P R E F A C E .

The Bombay Longitudinal Series the details of which are given in this volume, forms the western half of the northern boundary of the Southern Trigon, which is that section of the triangulation of India embracing the portion of the peninsula lying south of the line joining Bombay and Vizagapatam. The general principles of the simultaneous reduction, and the procedure followed in carrying it out, are explained in Volume II of the *Account of the Operations, &c.*; and full details of the whole of the triangulation appertaining to the Trigon will be found in Volumes XII and XIII of the *Account of the Operations, &c.*

As however the entire contents of the volumes of the principal triangulation are not needed by geographers and surveyors, and moreover as these volumes give no details of the secondary triangulation—which is of considerable value for local requirements—it is obviously desirable that synopses of the final results of the whole of the operations, including the secondary as well as the principal triangulation, should be published for general use in such a form as to be most suitable for convenience of reference. This has already been done as follows:—

For the several Series forming the North-West Quadrilateral,

- I. Great Indus Series.
- II. Great Arc, Section 24° to 30°.
- III. Karáchi Longitudinal Series.
- IV. Gurbágarh Meridional Series.
- V. Rahún Meridional Series.
- VI. Jogi-Tila and Sulej Series.
- VII. North-West Himalaya Series.
- VII A. Jodhpore and Eastern Sind Meridional Series.

For those forming the South-East Quadrilateral,

- VIII. Great Arc, Section 18° to 24°.
- IX. Jabalpur Meridional Series.
- X. Bider Longitudinal Series.
- XI. Biláspur Meridional Series.
- XII. Calcutta Longitudinal Series.
- XIII. East Coast Series.
- XIII A. South Párasnáth and South Malúncha Series.

} Already published.

For those forming the North-East Quadrilateral,

- XIV. Budhon Meridional Series.
- XV. Rangir Meridional Series.
- XVI. Amua and Karára Meridional Series.
- XVII. Gurwáni and Gora Meridional Series.
- XVIII. Huriláong and Chendwár Meridional Series.
- XIX. North Párasnáth and North Malúncha Meridional Series.
- XX. Calcutta and Brahmaputra Meridional Series.
- XXI. East Calcutta Longitudinal and Eastern Frontier Series, Section 23° to 26°.
- XXII. *Assam Valley Triangulation, E. of Meridian 92°.

} Already published.

And for the following Series of the Southern Trigon, viz.,

- XXIII. South Konkan Coast Series.
- XXIV. Mangalore Meridional Series.
- XXV. South-East Coast Series.

The present is the 28th Synoptical Volume in order of publication, and the fourth of those appertaining to the Southern Trigon; it gives the results both of the principal triangulation executed exclusively with theodolites having azimuthal circles of 2½ inches in diameter, read by five micrometer microscopes, and of the secondary triangulation in which other instruments besides these were used.

By the process of reduction which has been followed, the principal triangulation has been rendered perfectly consistent both internally and externally; internally, so that if in any one of the several polygonal figures of which the chains may be composed, calculations are carried from one station to another in every possible direction, the same results will be inevitably deduced; and externally, so that the values of the co-ordinates of any station, when computed from the given co-ordinates of any other station, with the final linear and angular data, will be the same, whether the calculation is carried directly through the series, or circuitously through any of the other chains of triangles comprising the Southern Trigon. All secondary triangulation emanating from one side of the principal Series and closing on another side thereof, or on a contiguous Series, have also been made consistent throughout.

As regards the general arrangement of this volume, it may be pointed out that the Introduction, and the Names and Descriptions of the Principal Stations, were originally prepared for Volume XII of the *Account of the Operations, &c.*, and when a sufficient number of copies had been printed for that work, additional copies were struck off for this volume. The Introduction was printed in the year 1887; it gives a historical and descriptive sketch of the progress of the whole operations in the field—both principal and secondary—from year to year, mentions the Officers by whom they were conducted, the theodolites with which principal angles were measured, and indicates the work done by each of the Assistants. The adjustment of the secondary triangulation was taken in hand in the year 1885, it was put aside for about 4 years, and was completed in 1890-91 when the printing of the volume was resumed.

The data given in this volume are the following:—

First (page 1—*B.*), an alphabetical list of the names of the principal stations, showing the numbers assigned to them.

Second (page 2—*B.*), a numerical list giving the names corresponding to the numbers.

Third (page 3—*B.*), descriptions of the structure and positions of the principal stations as taken from the original records of the observations.

Fourth (page 13—*B.*), the angles and sides of the principal triangles, numbered and arranged in order from east to west.

* This is an offshoot of the Assam Longitudinal Series, and falls entirely outside of the limits of the North-East Quadrilateral. The volume is issued in a preliminary form, and therefore only a limited number of copies are available to meet any immediate demand for data: the final publication will be hereafter made on the completion of the triangulation in Burma, into the general reduction of which this Series will enter.

Fifth (page 17—*B.*), the angles and sides of certain secondary triangles. The numbering is here made consecutive to that of the principal triangles, in order to facilitate references which are made in other sections to the place where the length of a side is to be found.

Sixth (page 41—*B.*), the azimuths of surrounding stations and points at principal, principal-auxiliary and secondary stations, the latter arranged in alphabetical order.

Seventh (page 57—*B.*), the co-ordinates and descriptions of all stations and points arranged in alphabetical order.

It has not been considered necessary to publish the whole of the details of the secondary triangulation; the sides and angles of 579 triangles, which were selected as most likely to be of future use, and the azimuths of all these sides, have been given; but for a number of other points the co-ordinates only have been given. With the aid of Tables Nos. XXVI, XXVII, XXVIII, XXIX and XXX of the *Auxiliary Tables to facilitate the calculations of the Survey of India*, Dehra Dún, 1887, local surveyors, working on a system of rectangular co-ordinates, can readily transform the spheroidal co-ordinates here given to suit their own requirements.

The heights above mean sea level of the stations determined trigonometrically are controlled by a line of spirit-levelling which emanates from Bombay and extends along the series to the Bider Base-line: all particulars regarding them will be found detailed on page 57—*B.* and in the footnotes to the subsequent pages.

The longitudes depend on an astronomically determined value of the longitude of the Madras Observatory, deduced about the year 1815. The longitude of the Madras Observatory has however been re-determined by the Electro-Telegraphic method, from observations made at Greenwich, Mokattam (in Egypt), Suez, Aden, Bombay and at certain stations of the triangulation in India.

This value of the longitude of the Madras Observatory is equivalent to $80^{\circ} 14' 51''$ E.; and as the originally adopted value, on which the longitudes of the whole of the stations of this Survey are based, is $80^{\circ} 17' 21''$ E.—see page 135 of Volume II of the *Account of the Operations, &c.*—the following precept may be accepted with considerable confidence:—

**All the values of longitude in this volume require a constant correction,
probably of $-2' 30''$.**

The orthography of Indian names in the present volume is in accordance with the provincial lists of spellings constructed under the immediate orders of the Government of India. The newly authorised spellings were adopted for all names and other words contained in these lists; but for words for which there was no specific authority, the spellings have been framed in accordance with the methods followed in the preparation of the published lists, reference being made in the present instance more particularly to the Gazetted Lists for the Bombay Presidency and Nizam's Dominions. As a general rule the pronunciations of the vowels are as follows:—*a* has a variable sound as in woman, rural, paltry; *á* as in tartan; *í* as in bit; *í* as in ravino; *u* as in bull; *ú* as in rural; *o* as in note; *e* as *a* in say; *au* as *ou* in cloud; *ai* as *i* in ride. Final vowels and those in well-known terminals are unaccented. When the popular spelling of a name has been accepted by Government, its correct orthography is generally given in parenthesis where the name occurs for the first time.

The charts accompanying this volume show all the principal stations and triangulation, the positions of all secondary points, and portions of the secondary triangulations of which full details of the angles, sides and azimuths are given. With the aid of the charts it is hoped that little difficulty will be met with in finding out any of the data which may be required. The descriptions of the secondary stations are in some cases not as full and clear as might be desired: this arises from the inadequacy of the information entered on the spot by the

surveyors in their field books; every effort has been made to supplement the field books, whenever it was found practicable to do so, in order to facilitate the future identification of the stations, and all the information which is forthcoming has now been given.

The general arrangement of the volume is in accordance with that adopted in previous Synoptical Volumes. The data which it contains have been prepared chiefly under the superintendence of Mr. J. Eccles, M.A., Deputy Superintendent, the Officer in charge of the Computing Office. The Introduction to this Series was written by Captain S. G. Burrard, Deputy Superintendent. The volume like its predecessors has been printed at the Trigonometrical Branch Office at Dehra; Mr. Peychers and Mr. H. G. Shaw have rendered valuable service in the examination of the press proofs generally, and Mr. Peychers more particularly in regard to the numerical details which require the utmost care in supervision through the press, and in this respect from his natural aptitude and experience his assistance has been most valuable.

DEHRA DUN, }
January, 1892. }

G. STRAHAN, COLONEL, R.E.,
Dy. Surveyor General,
In charge Trigonometrical Surveys.

BOMBAY LONGITUDINAL SERIES.

BOMBAY LONGITUDINAL SERIES.

INTRODUCTION.

In October, 1822, a triangulation was commenced near the parallel of 18° , under the orders of Colonel W. Lambton, for the purpose of connecting the Presidency of Bombay with the Great Meridional Arc. The officer charged with the execution of this work was Captain G. Everest, afterwards Surveyor-General of India, then chief Assistant to Colonel Lambton; and a brief account of the commencement of the operations is to be found in the Introduction to *An Account of the Measurement of an Arc of the Meridian*, by Captain George Everest, London, 1830.

This series had been carried about 90 miles westward from the Great Arc, as far as the meridian of 76° , when it was suspended in consequence of the death of Colonel Lambton, which occurred in January, 1823, and occasioned the recall of Captain Everest for the purpose of taking charge of the operations of the Great Arc; nor was the work resumed for a space of several years.

At length in the latter part of 1827, Captain J. Jopp, the Deputy Surveyor General of Bombay, who was then employed in compiling maps of different portions of that Presidency, proposed to the Surveyor General, Colonel J. A. Hodgson, to carry a Trigonometrical Survey over such portions of the Bombay territories as had not yet been triangulated; his object being to correct and unite the independent detailed surveys of portions of the country which were already in his hands, as well as any others which might be subsequently made. This proposal having been, after certain explanations, assented to and recommended by the Surveyor General, met with the sanction of the Government of India; and on the 15th March, 1828, Lieutenant R. Shortrede, of the 14th Bombay European Regiment, an officer of considerable talent and mathematical knowledge, who had already been employed in the Deccan (Dakshin) survey, was appointed to superintend the execution. He was directed to measure a base in any suitable position, and thence to carry on a triangulation over the whole country, connecting it with that of Captain J. Garling on the south, and with the series commenced by Captain Everest on the east. Colonel Hodgson also intimated that, if the work was sufficiently well executed, it might be adopted into the Great Trigonometrical Survey, but he left that point to be decided by its own merits.

Lieutenant Shortrede having selected a site for his base on the Kárlí plain about 40 miles east of Bombay, and having occupied himself during the rains of 1828 in preparing the requisite apparatus, proceeded to the spot in the month of November, and with the assistance of Captains Jopp and Grafton commenced the measurement on the 12th of December, 1828, and finished it on the 16th of January, 1829. The base was 4·065 miles in length, and had the defect of a break in the measurement, caused by the river Indráyani, whose abrupt banks and uneven rocky bed prevented the measurement from being carried directly across: the length of this portion, nearly 1000 feet, was therefore determined by triangulation, and the error, arising from this source, was believed to be considerably under an inch. The remainder of this season and the next three years were occupied in extending a net work of triangles from this base over the whole country from lat. 18° to 21°, and from long. 73° to 76°.

The survey had in the first instance been under the control of the Deputy Surveyor General, but in 1831 Lieutenant Shortrede was placed under the immediate orders of Captain Everest, the Superintendent of the Great Trigonometrical Survey, who soon after directed certain alterations and improvements in the method of observing and registering the angles; he also ordered that the survey should be made more strictly a longitudinal series, and be connected as soon as possible with his triangulation of 1822-23, and pointed out a number of errors which were to be rectified by repeating the observations. These errors arose partly from defects in the instruments but chiefly from the inefficiency of the establishment employed. The theodolite did not admit of a change of zero, and all the angles were in consequence observed on one portion of the instrument, and were thus liable to errors of 4" or 5". The number of men allowed was barely sufficient for carrying the instruments and keeping up communications; none were available for the purpose of managing the signals: it was therefore necessary to mark the stations by some fixed object, which would require no attendance. The plan adopted was to send out parties at the commencement of the season to erect poles on all the stations that were required; these poles were generally trees from 10 to 20 feet in height, from which the branches had been lopped off, bound round when necessary with grass or boughs to a thickness of from 2 to 3 feet, so as to render them visible at the most distant station. They were set up exactly over the station mark, and supported by large stones piled round their base. On the observer arriving at the station, the pole was removed and erected again on his departure. But a perfectly straight tree was not always procurable in the first instance, and the poles, when set up, were liable to be broken or canted to one side by the wind. Other objects, such as tall trees nearly in the same direction might in hazy weather be mistaken for them, and in certain situations, such as at long distances or when projected against a dark background, they could not be seen at all. In this last case it became necessary to observe the point by night, and the plan adopted was to send a man to light a large straw fire on the spot, but this was also liable to cause error, as the flame might be driven about by the wind.

The errors arising from all these sources were even greater than those caused by imperfections in the theodolite, but as they were inseparable from the system then pursued, it was intended to make the angles correct each other by combining the points in every

possible way, and bringing the common sides to agreement by correcting the angles, care being taken to distribute the corrections so as to be as small as possible, excepting when an angle was known to be doubtful, when it was made to bear a larger share of error than its neighbours.

In this manner the result obtained was as good as the materials would allow, and indeed subsequently on a junction with the survey of Captain Everest, the difference was found to be only 2·3 feet on a line of 18 miles. Still however the large errors in the angles were an eyesore which it was desirable to remove if possible; and accordingly in the end of 1832 Lieutenant Shortrede constructed for his theodolite a stand which allowed a change of zero, and during the two ensuing seasons he repeated many of the angles which appeared to be most erroneous; by this means one source of error, that of the graduation of the instrument, was partly reduced, but all the others remained in full force, so that the improvement effected was but small.

On the 14th January, 1834, Lieutenant Jacob of the Bombay Engineers was appointed

Season 1834-35.

PERSONNEL.

Lieut. R. Shortrede, Executive Officer, appointed
March 15th, 1828.
Lieut. W. S. Jacob, Assistant Officer, appointed
January 14th, 1834.
Mr. J. Fraser, Asst. Surv. } appointed February
" W. S. Prier, " } 10th, 1834.
" T. Sangor, " }

an assistant to Lieutenant Shortrede, and about the same time a further accession of strength was gained by the transfer of three sub-assistants from the office of the late Deputy Surveyor General. But within a few months afterwards, Lieutenant Shortrede, though still retaining charge of the Trigonometrical Survey, was employed by the Bombay Government on other duties, which occupied his

whole time, as well as that of the greater portion of his establishment, so that the survey was not more efficient than before, in fact rather less so on account of the want of experience of Lieutenant Jacob, on whom the actual charge of the work now devolved. That officer however continued to direct his attention to the points required by the Surveyor General, and during the two following years he succeeded in completing the connection to the eastward, and in correcting a number of errors in the angles, though others still remained, as their source was not removed. In the latter part of 1836 Lieutenant Shortrede resigned his appointment in the Trigonometrical Survey, and Lieutenant Jacob at the same time was ordered by the Surveyor General to proceed to his camp near Sironj in Malwa (Málwa,) where the operations on the Great Arc were at that time being carried on, in order that he might make himself acquainted with the system there pursued.

Having now the advantage of a personal interview, Lieutenant Jacob was enabled to represent the true state of affairs on the Bombay Survey, and to explain what was really required, which apparently had not been well understood hitherto. On his return to his own Presidency in March, 1837, he obtained, by the recommendation of the Surveyor General, a greatly increased establishment on the same scale as those of the subordinate surveys in Bengal. He also on this occasion became acquainted with the use of the heliotrope as a day signal, which he was not aware before could be made simple enough to be directed by ordinary natives.

Immediately on his return in April, 1837, he commenced raising and organising his new establishment, and seized the opportunity of every clear day that occurred in the course

of the rains, for instructing them in the use of heliotropes, a few of which he constructed roughly in wood for the purpose; a further supply was afterwards obtained from Mr. Barrow, the Company's Instrument Maker in Calcutta. The rates of pay allowed being very low, the persons employed were chiefly of the lowest class, such as are usually engaged for carrying loads and other laborious occupations; yet by the end of the rains most of them had become tolerably well acquainted with their new duties, and were competent to direct the heliotropes by day as well as the lamps by night. The lamps used were made up on the spot, and consisted of an Argand burner, behind which was placed a reflector made of plate brass, 10 or 12 inches in diameter, first beaten, and then more accurately ground to the form of a small segment of a sphere, the whole built into a box with a pane of thick glass in front. In clear weather these could be seen at a distance of 40 miles. Lieutenant Jacob had also been fortunate enough to procure by purchase a new theodolite in room of the one hitherto employed, which was well known to possess several radical defects.

With all these advantages he took the field in the end of October, 1837, and in the course of the field season, was able to re-observe all the angles of the principal triangles between the meridians of 76° and of 74° , the Surveyor General having directed that an entirely new triangulation should be made. Had he not been prevented by heavy rain, which fell unseasonably in November, and by other unlooked-for interruptions, he would probably have brought the work down to its western limit at Bombay the same season.

Shortly after this in October, 1838, Lieutenant Jacob was compelled by ill-health to leave India for the Cape of Good Hope, and during his absence Captain Shortrede was re-appointed to the charge of the Survey, and by him the triangulation was continued to the coast in the ensuing season.

The work having been so far completed in a satisfactory manner, Colonel Everest subsequently directed the repetition of the eastern portion of the Series, which had been observed by himself in 1822-23, and which he considered deficient in accuracy from the inferiority of the means then employed. This work was completed in the field season of 1840-41, partly by Captain A. Waugh and partly by Lieutenant Jacob, the latter having returned to India and resumed charge of the Survey in May, 1840, thus completing the Series by uniting it with the Great Arc at the side Baktápur to Manganál.

The final computations, however, could not be made until the measurement of the Bider Base-line had been executed, which took place in the latter part of 1841. The long delay which occurred in the completion of this Series, does not appear to have arisen from any fault of those employed, but rather from the unavoidable circumstances in which they were placed.

The following description of the country is taken from a letter from Lieutenant Jacob to Colonel Everest, dated October 29th, 1842:—

“The country, through which the Bombay Longitudinal Series passes, is almost entirely “basaltic. The eastern extremity just borders on the granite formation of Hyderabad (Hydarabad)—from this as far as long. 76° extends a basaltic plain, elevated about 1800 feet above “the sea, and studded here and there with small hills capped with laterite, and usually not ex-

“ceeding 200 feet in height. At the city of Tuljapur the level of the country suddenly descends about 300 feet and rises again very gradually as you proceed westward. The hills here assume more of the tabular form, but none are found of any great height, until you approach the Sahyádrí range, commonly called the Western Gháts, branches of which extend 40 or 50 miles inland. The country here becomes broken and mountainous, the highest points reaching nearly 5000 feet above the sea. The western face of the Gháts descends at once like a wall to near the level of the sea, from which it is distant about 30 miles. The intervening tract called the Konkañ is very uneven, many of the hills being from 2000 to 3000 feet in height; this tract as well as the Sahyádrí range is mostly covered with thick jungle; while in the Deccan or elevated tract to the eastward it is rare to see a tree, except where planted in the neighbourhood of a village”.

The theodolite originally employed by Lieutenant Shortrede was made by Troughton and Simms, and was procured from England by Captain Jopp. The lower circle was of 18 inches in diameter, and was read by three moveable micrometers, the circle being fixed to the feet. It had a vertical circle of 9 inches read by two verniers to 10 seconds. It had some radical defects, and being further impaired by use and by several accidents which it met with, it was unfit for delicate observations. The angles of all the principal triangles, as revised by Lieutenant Jacob and Captain Shortrede, were taken with a theodolite by Dollond* procured by Captain Shortrede on his private account, and purchased from him by Government when Lieutenant Jacob took charge of the work. This theodolite had a horizontal circle of 15 inches, and a vertical of 12 inches, the former being read by three, and the latter by two fixed micrometers: these circles gave good results. In taking horizontal angles the zero was changed six times, so as to bring every 10° of the circle under the micrometers. The change of zero was effected in a very simple manner by means of a separate triangular plate of wood, similar to the top of the tripod stand. The feet stood upon this, and on its lower surface was cut a circular groove concentric with the instrument; this rested upon three curved ribs of hard wood fixed to the top of the stand, so as to admit a free motion in azimuth. This rude contrivance was found to answer remarkably well, and when the ribs were soaped, the motion was sufficiently equable to allow an adjustment of 10", while at the same time the force required to overcome the friction was so considerable as to prevent the possibility of an accidental slip in working the instrument.

The heliotropes used were made by Mr. Barrow, the Company's Instrument Maker at Calcutta, and consisted of a plane circular mirror of 8 inches diameter in bronze frame mounted on a tribrach with foot screws, and having rack-work motions in altitude and azimuth.

In 1845, Lieutenant H. Rivers, who was then conducting the Singi and Khánpisura Meridional Series with Dollond's 15-inch Theodolite, observed at the following stations:—Sautára, Khánpisura, Chincholi, Ágargaon and Párner; these observations have been included in this Series.

* For a full description of this instrument and the work performed by it, see Appendix No. 2 of Volume II of the *Account of the Operations of the Great Trigonometrical Survey of India*.

In 1862 the Bombay Party under Captain Haig, R.E., which had hitherto been employed

Season 1862-63.

PERSONNEL.

Captain C. T. Haig, R.E., 1st Assistant.	
Mr. J. Du Costa, Civil Assistant.	
„ John McGill,	„ „
„ G. A. Auding, 2nd Class Sub-Assistant.	„ „
„ J. E. Donohoe, 3rd „	„ „

in Gujarát, was deputed to commence a series of triangulation on the meridian of Mangalore (Mangalúr), to emanate from a flank side of the Bombay Longitudinal Series and to be carried southwards. This latter series, as it stood when Captain Haig received his orders, consisted in part of a chain of single triangles. In order to ensure a correct base for the new meridional series to start from, Captain Haig decided first of all to double the Bombay Longitudinal and thus convert it into a series of polygons, from its origin on the Great Arc as far west as the meridian of Mangalore. With this object in view he despatched Mr. McGill in November, 1862, to select and build the new stations that would be necessary, and himself proceeded in December to Udgír to commence the final observations with Barrow's 24-inch Theodolite No. 2*. On arrival, however, he learnt from Mr. McGill, that the lower mark-stones of Udgír, Wadwál, Sáwargaon and Pángaon had been removed, and the platforms had been completely thrown down, and he therefore determined not only to observe the angles of the new triangles which had been approximately laid down by Mr. McGill, but to re-observe those of all the old ones, as to do this it was only necessary to re-build and visit three additional stations, Dáud Malik, Nitali and Sautára.

With the exception of two slight interruptions the work was carried on rapidly and regularly along Lieutenant Jacob's old Series, until Alsunda station was reached on the 3rd of March. The first delay was caused by the man sent to re-build Dáud Malik Station building a station on another hill near to it, on which there was also an old survey station, probably erected by Captain Garling, as well as a small Muhammadan temple erected to the memory of Dáud Malik. The second delay was occasioned by Kem Station not having been built sufficiently high; there was a hill on which the ray to Wápla grazed, but which was so close to Kem, that the increased refraction in the evening produced scarcely any perceptible effect in raising the ray clear of the hill, which was covered with large laterite boulders.

Alsunda was the station which Captain Haig selected for star observations. His original intention was to observe η Cephei for azimuth of origin of the Mangalore Meridional Series, and also, in order to render that series complete in itself as an arc of meridian, to take the altitude of ϵ Ursæ Minoris at upper and lower culminations for latitude. These altitude observations were commenced on the 4th and continued on the 5th and 6th of March. Then finding that 83 Caneri would suit admirably for prime vertical transits, Captain Haig determined to observe that star for latitude, and accordingly resolved to take no more than the three days' altitude observations. On the 10th of March he commenced the azimuth observations to η Cephei, but found that the sun was too far north to admit of the star being seen at the times of elongation: Polaris was then substituted for it, and observed both at its eastern and western elongation. Captain Haig was at Alsunda from the 3rd to the 28th of March, but owing to the unusual amount of rain, 83 Caneri was only visible on seven nights, on two of which one transit was lost. The method followed in

* For a full description of this instrument and the work performed by it, see Appendix No. 2 of Volume II of the *Account of the Operations of the Great Trigonometrical Survey of India*.

taking the prime vertical transits was the same as that described in Loomis' Astronomy. As the telescope had a set of five vertical wires, two values of the latitude could be obtained on each night. The general mean of all the observations differed from Lieutenant Jacob's value deduced from Dámargída, by slightly under $3\frac{1}{2}$ seconds in defect. Captain Haig's work on the Bombay Longitudinal Series ended at Alsunda, and he then commenced the triangulation on the Mangalore Meridian. The remaining portion of the former Series, *viz.*, that which lies between Alsunda and Bombay, has never been revised, the final angles employed in the Simultaneous Reduction of the Southern Trigon being those deduced from observations taken by Captain Shortrede and Lieutenants Jacob and Rivers with Dollond's 15-inch Theodolite.

Subsidiary lines of levels were executed in season 1881-82 by a detachment from the Tidal and Levelling Party in the districts of Násik and Ahmednagar (Ahmadnagar) with a view to the correction of the heights of the principal stations at the southern ends of the Khánpisura and Singi Meridional Series. These heights had been mostly determined 30 to 50 years ago by the trigonometrical method, and they had been found to be less accurate than was desirable, the observations having in many instances been taken at other times than that of minimum terrestrial refraction, the laws of which were scarcely known then, rendering a revision very necessary. A combination of the trigonometrical and spirit-levelling methods of operation was made by fixing the heights of certain stations with the spirit-level and from these determining those of the remainder with the theodolite. Mr. W. G. Beverley undertook the trigonometrical portion of the work, but was prevented by ill health from continuing in the field for a full season, and he died at Poona in September.

On the completion of the Simultaneous Reduction of the Southern Trigon it was found that the errors which had actually been dispersed over the Bombay Longitudinal Series between the origin Baktápur-Manganál and the terminus Karanja-Colába Observatory, were as follows:—

In	Latitude of Karanja	...	— 0"·095
„	Longitude „	...	— 0'·041
„	Azimuth of latter side	...	— 1'·465
In side {	Logarithm „	...	+ 0'·000,0001,7
	giving a ratio of about ·02 of an inch per mile.		

Secondary Triangulation.

The country traversed by the Bombay Longitudinal Series is exceptionally barren in prominent natural features and important towns, and the secondary triangulation is consequently scanty. The principal work, however, has so often been revised, and the stations almost as often changed, that several secondary points now exist which formed the principal

stations of the earlier observers. The result of these revisions is especially noticeable at the two extremities of the Series.

Lieutenant Shortrede's work was not considered suitable to be included in the Principal Triangulation of the G. T. Survey: his net-work round Poona (Puna) however fixed numerous points, especially in the neighbourhood of his base on the Kārli plain, and his triangles between the meridians of 74° and 76° extend for a considerable distance north and south of the main series. The details are incorporated partly in this Series, partly in the Mangalore Meridional Series, and partly in the Khánpisura and Singi Meridional Series of the South-West Quadrilateral.

In 1823 an observatory was established at Bombay, and from that date down to 1840 independent surveys under the Bombay Government had been constantly carried on in the surrounding countries: all these were afterwards condemned by Colonel Everest as valueless, but the old stations remained, and Lieutenant Jacob incorporated many of them into his revision as secondary stations.

On the portion of the Series east of the meridian of 76° , the greater part of the secondary work is due to Captain Everest, who fixed the positions of great numbers of conspicuous trees and tombs.

Captain Haig, when he revised the main Series in 1862-63, determined but few secondary points, most of which moreover had been already fixed by Lieutenant Jacob.

In 1865-66, the Northern Bombay Party being unable to prosecute Topographical work in Káthiáwar (Káthiávád) on account of a famine in that province, was transferred to execute the triangulation of the Island of Bombay of which a large scale survey was called for by the Bombay Government. The triangulation was executed by Mr. McGill with a 14-inch theodolite. It emanated from the side Karanja to Trombay (Turmbha) of the Principal Triangulation. In the course of the work 27 stations were observed at from which the positions of about 100 points were fixed.

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BOMBAY LONGITUDINAL SERIES.

PRINCIPAL TRIANGULATION. ALPHABETICAL LIST OF STATIONS.



Achola	IV.	Khánpisura	XXI.
Ágargaon	XXIV.	Kundráł	II.
Alsunda	XIX.	Mahádeoba	XII.
Bábulsár	XXV.	Mándvi	XXXI.
Baktápur	XXXVIII.	Manganál	XL.
	(Of the Great Arc Meridional Series, Section 18° to 24°).		(Of the Great Arc Meridional Series, Section 18° to 24°).
Bori	XXII.	Mira Dongar	XXXIII.
Chincholi	XXIII.	Nitali	X.
Colába Observatory, Bombay	XXXVI.	Pángaon	XV.
Dáud Malik	VII.	Párner	XXVI.
Deobet	IX.	Prabal	XXXII.
Dharúr	XI.	Sautára	XX.
Dhauleshvar	XXVII.	Sáwargaon	XIII.
Dighi	XXVIII.	Singi	XXX.
Garh Dáud	XIV.	Trombay	XXXV.
Harangal	VIII.	Udgír	I.
Kanheri	XVIII.	Wadwál	V.
Karanja	XXXIV.	Wáfgaon	XXIX.
Karasgaon	VI.	Wanjarvádi	III.
Kem	XVII.	Wápla	XVI.



BOMBAY LONGITUDINAL SERIES.

PRINCIPAL TRIANGULATION. NUMERICAL LIST OF STATIONS.

XXXVIII	Baktápur.	XVIII	Kanheri.
(Of the Great Arc Meridional Series, Section 18° to 24').			
XL	Manganál.	XIX	Alsunda.
(Of the Great Arc Meridional Series, Section 18° to 24').			
I	Udgír.	XX	Sautára.
II	Kundrál.	XXI	Khánpisura.
III	Wanjarvádi.	XXII	Bori.
IV	Achola.	XXIII	Chincholi.
V	Wadwál.	XXIV	Árgaon.
VI	Karasgaon.	XXV	Bábulsár.
VII	Dáud Malik.	XXVI	Párner.
VIII	Harangal.	XXVII	Dhauleshvar.
IX	Deobet.	XXVIII	Dighi.
X	Nitali.	XXIX	Wáfgaon.
XI	Dharúr.	XXX	Singi.
XII	Mahádeoba.	XXXI	Mándvi.
XIII	Sáwargaon.	XXXII	Prabal.
XIV	Garh Dáud.	XXXIII	Mira Dongar.
XV	Pángaon.	XXXIV	Karanja.
XVI	Wápla.	XXXV	Trombay.
XVII	Kem.	XXXVI	Colába Observatory, Bombay.

BOMBAY LONGITUDINAL SERIES.

DESCRIPTION OF PRINCIPAL STATIONS.



The Principal Stations hereafter described are all situated on hills or rising ground: those numbered I to XX, and XXII consist of isolated, perforated pillars of masonry, 3 feet in diameter and varying in height from 4 to 11 feet, having a mark at about the ground level and another at the upper surface in the normal of the former; around these pillars and carried to a level with their surfaces, platforms of loose stones and earth were built for the accommodation of the observatory tent: at each of these stations an aperture through the platform and the central pillar was constructed giving access to the ground level mark. The remaining stations, with certain exceptions noted below, consist of platforms, either circular or square, of loose stones and earth—a few having solid central masonry pillars—sometimes level with the ground and sometimes rising a few feet above it, and having one or more marks as described above. The exceptions referred to are the stations XXXVIII and XL of the Great Arc Series, and the stations numbered XXIV, XXVII, and XXXVI, each of which will be found fully described in the following pages.

At the stations XXXVIII and XL of the Great Arc Series, and at XIX, XXII, XXIV, XXXI and XXXIV solid, rectangular pillars of masonry, bearing sufficiently accurate marks for Topographical and Revenue Survey purposes—as shewn at page 74 of Volume II of the *Account of the Operations of the Great Trigonometrical Survey of India*—were built for the protection of the upper mark-stones.

It may here be mentioned that although the stations in the eastern portion of the Series were first fixed in the year 1822-23, no descriptions as to their original construction are forthcoming: subsequently, however, the Series was revised, and the descriptions as now given have been compiled from those furnished by the Officers who executed the triangulation as well as by other Officers who had occasion to visit the stations in later years, supplemented, as regards the adjacent villages, from the Topographical Survey Maps of the country, and corrected, so far as the local sub-divisions in which the several stations are situated, from the latest Annual Reports furnished by the District Officers to whose charge the stations were committed.

The orthography is in accordance with the official list of names of places in the Dominions of His Highness the Nizam, published in February, 1883; and with the official list for the Bombay Presidency, published in 1880. Final vowels and those in well-known terminals are unaccented. When the popular spelling of a name has been accepted by Government, its correct transliteration is given in parenthesis where the name occurs for the first time.

XXXVIII. (*Of the Great Arc Meridional Series, Section 18° to 24°*). Baktápur Hill Station, lat. 18° 30', long. 77° 37'—observed at in 1817, 1819, 1838, 1841 and 1862—is situated on the N.E. extremity of a small hill or eminence rising above an extensive table-land, about 3 miles W. by S. of Madnúr on the high road, and 4½ miles N.W. by N. of Kodáchar. It is in the lands of the village of Baktápur, taluk Búsvádá, district Indur, Nizam's territory.

The station of 1817 and 1819 consisted of a platform of stones carrying a mark-stone in its upper surface and another below. In 1838 the platform was found in good order, but the upper mark differed from the normal of the lower one by 3 inches: a solid, circular and isolated pillar of masonry was built having the upper and lower marks deeply engraved in large blocks of stone firmly embedded in the masonry, the distance between them being 48·3 inches. The pillar is surrounded by a platform of stones. No change appears to have been made in 1841. When again visited in 1862 the station was found in good preservation. The directions and distances of the circumjacent villages are:—Baktápur E., mile $\frac{1}{2}$; Kotabshapur W., miles $1\frac{1}{2}$; Votal S.W., miles $1\frac{1}{2}$; Chota Tadgúr S., miles $1\frac{1}{2}$; Nágara! S.E., miles $1\frac{1}{2}$; and Kájavádi N. by W., miles $1\frac{1}{2}$.

XL. (Of the Great Arc Meridional Series, Section 18° to 24°). Manganál Hill Station, lat. 18° 14', long. 77° 25'—observed at in 1819, 1841 and 1862—is situated on the highest point of a conspicuous hill about 150 feet above the general level of the table-land. An image of Lachmi (the Hindu goddess of wealth) stands close to the platform, from which circumstance the hill is locally known as Lachmi Devi ka Pahár. It is between the villages of Manganál and Khandokheri which lie in narrow, tortuous valleys. The station is in the lands of the village of Khandokheri, district Bidar, Nizam's territory.

In 1841 the platform of the old station was found destroyed but both the upper and lower mark-stones were in position, one at the ground level and the other 7 inches above it. A solid, circular and isolated pillar of masonry was built carrying a mark-stone in its upper surface, 22 inches above the old ground level mark. The pillar is surrounded by a platform of stones. When visited in 1862 the station was found in good preservation. The directions and distances of the circumjacent villages are:—Manganál E. by S., miles 2; Khandokheri N.W., miles $1\frac{1}{2}$; and Aurád Kasba N.E., miles 3.

I. Udgír Hill Station, lat. 18° 27', long. 77° 9'—observed at in 1822, 1840, 1862 and 1863—is situated near the N.E. end of a somewhat extensive range of low hills covered with grass, about 3 miles N. of the city and fort of Udgír. It is in the lands of the village of Naundi, taluk Udgír, district Bidar, Nizam's territory.

The station as described in 1840 consisted of a "circular platform of about 12 feet diameter with the usual mark on a large stone in the centre." When visited in 1862-63 the platform was found completely thrown down and the lower mark removed: a circular, perforated and isolated pillar of masonry $5\frac{1}{2}$ feet high was built on the old site, carrying a mark-stone in its upper surface and another below it. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Dongar Shelki N.N.W., miles $1\frac{1}{2}$; Nautha N.E., miles 2; Pipári S.E., miles 2; and Hasnakvádi W.S.W., miles 2.

II. Kundrál Hill Station, lat. 18° 37', long. 77° 23'—observed at in 1862—is situated on an undulating stretch of high ground about $1\frac{1}{2}$ miles E. of Kundrál village, and $5\frac{1}{2}$ miles S. by W. of Mudkhed. It is in district Nánded, Nizam's territory.

The station consists of a platform of stones enclosing a circular, perforated and isolated pillar of masonry 5·2 feet high, which contains two mark-stones, one in its upper surface and the other below; an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Sugaon S.W. by W., miles $2\frac{1}{2}$; Sankaur S. by E., miles $3\frac{1}{2}$; Tordera E.S.E., miles $2\frac{1}{2}$; and Shikári N. by W., miles 4.

III. Wanjarvádi Hill Station, lat. 18° 40', long. 77° 12'—observed at in 1862—is situated on an undulating stretch of high ground, about $1\frac{2}{3}$ miles N.E. by E. of Wanjarvádi village, and 4 miles N.W. by N. of that of Jalkot. It is in the lands of the village of Wanjarvádi, taluk Rájura, district Bidar, Nizam's territory.

The station consists of a platform of loose stones (supported by logs of wood) enclosing a circular, perforated and isolated pillar of masonry $5\frac{1}{2}$ feet high, which contains two mark-stones, one in its upper surface and the other below; an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Jáb S.E. by E., miles 2; Hukarana N.W., miles $1\frac{1}{2}$; Sarga W. by N., miles $3\frac{1}{2}$; Chara W. by S., miles $3\frac{1}{2}$; and Dámangaon S.W., miles $3\frac{1}{2}$.

IV. Achola Hill Station, lat. 18° 15', long. 77° 2'—observed at in 1822, 1840 and 1863—is situated on a small knoll about $\frac{3}{4}$ of a mile N.W. of Achola village. The knoll is about 150 feet in height and is capped with laterite. Nearly due N. of the station is a dargah in front of which stands a dipmál $2\frac{1}{2}$ feet square, the centres of these are distant 14·5 and 21·2 feet respectively from the station. It is in the lands of the village of Achola, taluk Udgír, district Bidar, Nizam's territory.

The station as described in 1840 is as follows:—"The centre of the station is marked in the usual manner on a large stone sunk about 1 foot below the surface, and again on one at 1·21 feet higher." When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·12 feet high was built, carrying a mark in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Talegaon N.E., miles 2; Vallándi S.W. by W., miles $1\frac{1}{2}$; Daunhiparga S.S.E., miles $2\frac{1}{2}$; and Chaunhiparga N.N.W., miles 3.

V. Wadwál Hill Station, lat. 18° 32', long. 76° 49'—observed at in 1822, 1840 and 1863—is situated

on a hill 250 feet high, lying $1\frac{1}{2}$ miles W. of Wadwál village, and $7\frac{1}{2}$ miles S.E. by E. of Karpud. It is in the lands of the village of Wadwál, taluk Rájura, district Bidar, Nizam's territory.

The station as described in 1840 consisted of a platform having a mark-stone in its upper surface and another 1·33 feet below it at the ground level. When visited in 1863 the platform was found completely thrown down and the lower mark removed: a circular, perforated and isolated pillar of masonry 3·9 feet high was built on the old site, carrying a mark-stone in its upper surface and another below. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The district officer reported in February, 1888, as follows:—"The platform as well as the central pillar of masonry have been dismantled, but the mark-stone at the base remains undisturbed." The directions and distances of the circumjacent villages are:—Dábkel S.W. by W., mile 1; Jánerval W.N.W., miles 2; Khurdali E. by N., miles $3\frac{1}{4}$; and Mouál E.S.E., miles 4.

VI. Karasgaon Hill Station, lat. $18^{\circ} 13'$, long. $76^{\circ} 36'$ —observed at in 1822, 1840 and 1863—is on a small peak about 160 feet in height, about 1 mile E. of Karasgaon village, and $4\frac{1}{2}$ miles E.S.E. of the town and fort of Ovása. It is in the lands of the village of Karasgaon, district Naldurg, Nizam's territory.

The station as described in 1840 consisted of a platform having a mark-stone in its upper surface and another 1·98 feet below. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·85 feet high was built, carrying a mark-stone in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Kunári N.E. by N., miles $1\frac{1}{4}$; Váguli S.E., miles $1\frac{1}{4}$; Jainagar E. by N., miles $2\frac{1}{4}$; and Abchanda E. by S., miles $3\frac{1}{4}$.

VII. Dáud Malik Hill Station, lat. $17^{\circ} 54'$, long. $76^{\circ} 47'$ —observed at in 1841 and 1863—is situated on a hill about 150 feet high, lying 2 miles S.W. by S. of Sira village on the road from Tuljapur to Kalliani, and about 14 miles W. of the latter place. It is in the lands of the village of Dáud Malik, district Gulbarga, Nizam's territory.

The station as described in 1841 is as follows:—"The usual mark—the old one of Captain Garling's station—is cut on a large stone about the level of the ground." When visited in 1863 the mark above mentioned was found in position: over this a circular, perforated and isolated pillar of masonry about 5 feet high was built, carrying a mark-stone in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The approximate directions and distances of the circumjacent villages are:—Kunhalli W. by S., miles 2; Mogali S.E., miles 2; Kavalli E., miles 4; and Kadmapur W.N.W., miles $1\frac{1}{4}$.

VIII. Harangal Hill Station, lat. $18^{\circ} 24'$, long. $76^{\circ} 30'$ —observed at in 1822, 1840 and 1863—is situated on the highest part of a low plateau, about 8 miles W. by S. of the large village of Látar, and $3\frac{1}{4}$ miles W.S.W. of Harangal Buzurg. It is in district Nánded, Nizam's territory.

The station as described in 1840 is as follows:—"There was a small mound on the spot but no mark could be discovered, two new marks were therefore made, one on a large stone in the centre of the old mound and a smaller one 2 feet higher to which height the platform has been raised or about 4 feet from the ground." When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·46 feet high was built, carrying a mark-stone in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Sakra W.N.W., miles $1\frac{1}{4}$; Vádi S., miles $2\frac{1}{4}$; Boira S.W., miles $3\frac{1}{4}$; Akarvi N., miles 3; and Botsángávi E., miles $3\frac{1}{4}$.

IX. Deobet Hill Station, lat. $17^{\circ} 56'$, long. $76^{\circ} 26'$ —observed at in 1822, 1841 and 1863—is situated on a low hill, about $2\frac{1}{4}$ miles S. by W. of Dhanora village, and 6 miles S.E. of Lavara on the high road from Poona (Puna) to Hyderabad (Haidarabad). The station is in the lands of the village of Pándri, pargana Gunjoti, district Naldurg, Nizam's territory.

The station as described in 1841 consisted of a platform about 6 feet high having a mark-stone in its upper surface and another below. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 11 feet high was built, carrying a mark-stone in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Moga Khurd W.N.W., miles 5; Khed N., miles $5\frac{1}{4}$; Karasgaon N.N.E., miles $4\frac{1}{4}$; and Thausigudda E. by N., miles $2\frac{1}{4}$.

X. Nitali Hill Station, lat. $18^{\circ} 17'$, long. $76^{\circ} 19'$ —observed at in 1823, 1837, 1840 and 1863—is situated on a hillock, $1\frac{1}{2}$ miles N.N.W. of Nitali, and $4\frac{1}{2}$ miles W. of Andúra village. It is in the lands of the village of Nitali, district Naldurg, Nizam's territory.

The station as described in 1837 consisted of a platform having a mark-stone in its upper surface and another 1·46 feet below it at the ground level. The upper mark-stone having been removed another was placed at the same height in 1840. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·88 feet high was built, carrying a mark-stone in its upper surface. The pillar is surrounded by a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Koand N.E., miles 2; Sumb W. by N., miles $1\frac{1}{4}$; Javoti S.W. by W., miles $2\frac{1}{4}$; and Bála E.N.E., miles $4\frac{1}{4}$.

XI. Dharúr Hill Station, lat. $18^{\circ} 3'$, long. $76^{\circ} 11'$ —observed at in 1822, 1823, 1837, 1838, 1840 and 1863—is situated on a low, flat-topped hill, 5 miles N.E. by E. of the town of Tuljapur, and $1\frac{1}{2}$ miles S.E. of Dharúr village. It is in the lands of the village of Dharúr, pargana and district Naldurg, Nizam's territory.

The station as described in 1838 consisted of a platform of stones about 15 feet high, having the usual circle and dot cut on a stone about 3 feet in height, the surface of which was about 6 inches below that of the platform. No change appears to have been made in 1840. When again visited in 1863 the platform was opened out and a lower mark found in position: over this a circular, perforated and isolated pillar of masonry about 5 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Moruda W., miles 2; Bamini E. by N., miles $3\frac{1}{2}$; Kandalla S.E. by E., miles $2\frac{1}{2}$; and Kakrumba S.S.W., miles 3.

XII. Mahádeoba Hill Station, lat. $17^{\circ} 48'$, long. $76^{\circ} 10'$ —observed at in 1863—is situated on an isolated hill, about 3 miles E. of the village of Katgaon, and 11 miles W. of the town of Naldurg. The station is in the lands of the village of Katgaon, pargana and district Naldurg, Nizam's territory.

The station consists of a platform of loose stones enclosing a circular, perforated and isolated pillar of masonry 5 feet high, which contains two mark-stones, one in its upper surface and the other below; and an aperture gives access to the lower mark. The approximate directions and distances of the circumjacent villages are:—Dindagaon N., miles 2; Arballi E.N.E., miles 2; Kirúr E.S.E., miles $3\frac{1}{2}$; and Khánápur S.S.W., miles $2\frac{1}{2}$.

XIII. Sávargaon Hill Station, lat. $17^{\circ} 56'$, long. $75^{\circ} 59'$ —observed at in 1823, 1838, 1840 and 1863—is situated on a small knoll, about $\frac{1}{2}$ miles S.E. by E. of Káti village, and 8 miles E. by S. of Selgaon on the high road from Bársi to Sholápur (Solápur). There is a small temple nearly in contact with the platform on the S.E. and about the same height with it. The station is in the lands of the village of Sávargaon, pargana Káti, district Naldurg, Nizam's territory.

The station as described in 1838 consisted of a platform having a mark-stone at the ground level and another at the height of 3.60 feet in the upper surface of the platform. No change appears to have been made in 1840. When again visited in 1863 the platform was found completely thrown down and the lower mark removed: a circular, perforated and isolated pillar of masonry 4.04 feet high was built on the old site, carrying a mark-stone in its upper surface and another below. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Sávargaon S.W., miles $2\frac{1}{2}$; Díhivádi N.N.W., miles $2\frac{1}{2}$; and Sárola N.N.W., miles 4.

XIV. Garh Dáud Hill Station, lat. $18^{\circ} 16'$, long. $76^{\circ} 2'$ —observed at in 1837, 1840 and 1863—is built on the remains of an old tower outside the ruined fort of Garh Dáud which lies about $\frac{1}{2}$ a mile to the S.E.: it is about $6\frac{1}{2}$ miles N.W. by N. of the large village of Dháráshev. The station is in the lands of the village of Ghad Devaderi, pargana Dhoki, district Naldurg, Nizam's territory.

The station as built in 1837 consisted of a platform having a mark-stone in its upper surface and another 1.93 feet below. No change appears to have been made in 1840. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 5 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Songaon W.S.W., miles 2; Alni N.E., miles $2\frac{1}{2}$; Ghautangiri S. by E., miles $3\frac{1}{2}$; and Singo E.S.E., miles $3\frac{1}{2}$.

XV. Pángaon Hill Station, lat. $18^{\circ} 7'$, long. $75^{\circ} 44'$ —observed at in 1838 and 1863—is situated on the highest point near the centre of an extensive table-land rising about 200 feet above the plain. It is $3\frac{1}{2}$ miles S.W. by W. of the village of Pángaon on the high road from Bársi to Sholápur. The station is in the lands of the village of Pángaon, táluka Bársi, district Sholápur.

The station as built in 1838 consisted of a platform having a mark-stone in its upper surface and another 3.34 feet below it at the ground level. When visited in 1863 the platform was found completely thrown down and the lower mark removed: a circular, perforated and isolated pillar of masonry 5.0 feet high was built on the old site, carrying a mark-stone in its upper surface and another below. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Korphal N.W., miles $1\frac{1}{2}$; Gulpoli S.W. by W., miles $2\frac{1}{2}$; Surdi S. by E., miles $2\frac{1}{2}$; and Rastápur E. by S., miles $1\frac{1}{2}$.

XVI. Wápla Hill Station, lat. $17^{\circ} 56'$, long. $75^{\circ} 33'$ —observed at in 1863—is situated on an elevated undulating plateau between the villages of Wápla and Uplai, and $6\frac{1}{2}$ miles W. of the Railway Station of Angar on the G. I. P. Line. The station is in the lands of the village of Uplai, táluka Múdhá, district Sholápur.

The station consists of a platform of loose stones enclosing a circular, perforated and isolated pillar of masonry $5\frac{1}{2}$ feet high, which contains two mark-stones, one in its upper surface and the other below; an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Uplai Buzurg N.N.W., miles $2\frac{1}{2}$; Anjangaon E., miles $2\frac{1}{2}$; Angar S.E. by E., miles 5; Devri S., miles $3\frac{1}{2}$; and Wápla S. by W., miles $1\frac{1}{2}$.

XVII. Kem Hill Station, lat. $18^{\circ} 11'$, long. $75^{\circ} 21'$ —observed at in 1838, 1863 and 1865—is situated on a low flat-topped hill, on which are two knolls nearly of the same height as the station, each distant about 2 miles, the one to the W. and the other to the N.W., the former being crowned by a temple. It lies about 2 miles E. by N. of the Railway Station of Kem on the G. I. P. Line. The station is in the lands of the village of Kem, taluka Karmála, district Sholápur.

The station of 1838 consisted of the usual circle and dot mark cut on a large stone at the level of the ground. When visited in 1863 the mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·8 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of loose stones, and an aperture gives access to the lower mark. In 1865 the station was found in good order. When visited in 1870 for Latitude Observations, and in 1878-79 by the Levelling Party, the upper mark-stone was found intact. The directions and distances of the circumjacent villages are:—Bhagevádi E.S.E., miles $\frac{3}{4}$; Pathurti N., miles $2\frac{1}{4}$; Jáklila E.S.E., miles 2; Kem W.S.W., miles 2; and Malori W.N.W., miles $3\frac{1}{4}$.

XVIII. Kanheri Hill Station, lat. $18^{\circ} 30'$, long. $75^{\circ} 46'$ —observed at in 1837 and 1863—is situated on a knoll of the Báleglát range, about $\frac{1}{3}$ of a mile N.W. of the road from Sáwargaon to Vási, and $4\frac{3}{4}$ miles N.E. by E. of the large village of Bhum. It is in the lands of the village of Kanheri, district Naldurg, Nizam's territory.

The station as built in 1837 consisted of a platform having the lower mark cut on the rock and another in the upper surface of the pillar. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 4·9 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. The directions and distances of the circumjacent villages are:—Kanára N.E. by N., miles $1\frac{1}{2}$; Sonágiri W. by N., miles 4; Pardi E. by N., miles $2\frac{1}{4}$; Hadangiri S.S.W., miles 2; and Bonágiri W. by N., miles $3\frac{1}{4}$.

XIX. Alsunda Hill Station, lat. $18^{\circ} 27'$, long. $75^{\circ} 3'$ —observed at in 1837 and 1863—is situated on the highest part near the western brow of a flat-topped hill which extends nearly a mile from S.E. to N.W. with a breadth of about 300 yards: it lies $3\frac{1}{2}$ miles N. by W. of Korti on the road from Pomalvádi to Karmála, and $1\frac{1}{4}$ miles W. of the road from Korti to the village of Alsunda. The station is in the lands of the village of Alsunda, taluka Karjat, district Ahmednagar (Ahmadnagar).

The station of 1837 consisted of a platform with the usual mark on top and another cut on a large stone 5·69 feet below at the level of the ground. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 5 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of earth and stones, 16 feet in diameter, and an aperture gives access to the lower mark. When visited in 1881-82 by the Levelling Party, the station was found protected by a rectangular pillar of masonry 2 feet high built over the circular pillar, the whole covered over by a large mound of earth and stones. The directions and distances of the circumjacent villages are:—Alsunda N.E. by N., miles 2; Banauri N.W. by N., miles $3\frac{1}{4}$; Chilavádi S.W., miles 3; and Malungi E., miles 5.

XX. Sautára Hill Station (locally called Tornai), lat. $18^{\circ} 46'$, long. $75^{\circ} 25'$ —observed at in 1837, 1845 and 1863—is situated on a low undulating hill near the brow of the Báleglát range, about $5\frac{1}{3}$ miles N.E. by E. of the town of Jámkhed, and $2\frac{1}{2}$ miles S.S.E. of the village of Sautára on the road from Jámkhed to Kuslamb. The station is in the lands of the village of Sautára, district Naldurg, Nizam's territory.

The station as built in 1837 consisted of a platform of stones: a mark-stone was fixed a little below the surface of the ground and another 2·5 feet above it in the upper surface of the platform. In 1845 the platform was repaired and raised and a third mark-stone placed at a height of 1·36 feet above the upper mark of 1837. When visited in 1863 the lower mark of 1837 was found in position: over this a circular, perforated and isolated pillar of masonry 3 feet in diameter and 4·5 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of stones, and an aperture gives access to the lower mark. When again visited in 1881 the upper mark-stone was not found; a new one was then fixed flush with the upper surface of the pillar and the latter protected by a cairn of stones. The directions and distances of the circumjacent villages are:—Moho W. by S., miles $2\frac{1}{4}$; Sákat E. by N., miles $2\frac{1}{4}$; Bhorvádi S.S.E., miles $3\frac{1}{4}$; and Sáwargaon S.S.W., miles $2\frac{1}{4}$.

XXI. Khánpisura Hill Station, lat. $18^{\circ} 46'$, long. $74^{\circ} 49'$ —observed at in 1838, 1845 and 1846—is situated on the highest part of a flat-topped hill rising about 500 feet above the plain: the hill is very steep on the E. and W. sides but less so on the N. and S. It lies 2 miles N. of Pisura village on the main road from the town of Shrígonda to Mándargan, and 6 miles S.W. by S. of the latter place. The hill is locally called Konjai from a temple of this name which stands 307 feet eastwards of the station. The station is in the lands of the village of Khadgaon, taluka Shrígonda, district Ahmednagar.

The station of 1838 was denoted by two mark-stones, one at the level of the ground and the other 2 feet below it: the upper mark-stone having been disturbed was replaced in October 1845 at a height of 1·63 feet above the lower. No change appears to have been made in 1846. When visited in 1870 in connection with the Latitude Observations, the lower mark-stone was found firmly embedded 2 feet below the ground level: over this a solid pillar of masonry 3 feet in diameter was built, carrying a mark-stone in its upper surface, 17 inches above the lower mark. When again visited in 1881 the pillar and its upper mark were found in

perfect preservation, surrounded by an irregular platform of earth and stones, about 12 feet square, rising about 8 inches above the top of the pillar. The directions and distances of the circumjacent villages are:—Vadghula N., miles 2; Khadgaon E.N.E., miles 2; Bhangaon S.W., miles 3½; and Dhorja W.S.W., miles 3¼.

XXII. Bori Hill Station, lat. 18° 25', long. 74° 40'—observed at in 1838, 1863 and 1865—is situated near the northern extremity of an extensive plateau rising about 250 feet above the G. I. P. Railway Line which runs through the Bhíma valley north of the station. It lies about 1 mile S.W. of the Railway Station of Boribyal. The station is in the lands of the village of Boribyal, taluka Bhimthadi, district Poona.

The station of 1838 consisted of a platform with the usual mark on top and another 5·1 feet below at the level of the ground. When visited in 1863 the lower mark was found in position: over this a circular, perforated and isolated pillar of masonry 5·1 feet high was built, carrying a mark-stone in its upper surface. The pillar is enclosed in a platform of earth and stones 16 feet in diameter, and an aperture gives access to the lower mark. In 1865 the station was found in good order. When visited in 1878-79 and 1881 by the Levelling Party, the station was found protected by a rectangular masonry pillar 31 inches high built over the circular pillar, a cylindrical stone with dot and circle engraved on it was found fitted loosely into this rectangular pillar, the whole enclosed in a large mound of earth and stones. The directions and distances of the circumjacent villages are:—Bori S.E. by E., miles 1½; Alegaon N.E. by N., miles 2¼; Khorauri N.N.W., miles 2½; and Mallad (on the road from Pátas to Kumbhár-gaon) S.W. by S., miles 3¾.

XXIII. Chincholi Hill Station, lat. 18° 55', long. 75° 19'—observed at in 1845—is situated on a short narrow ridge about 300 feet long trending nearly east and west, and 30 feet higher than the level of the surrounding plateau. The station is on the western end of the ridge while a large *bar* tree marks the eastern extremity. The large village of Ashti on the high road from Ahmednagar to Jámkhed lies about 10 miles to S.W. by S., and that of Ámalner 4 miles to E. by N. of the station. It is in the lands of the village of Chincholi, taluka Ashti, Nizam's territory.

The station consists of a solid platform and contains two marks, the one at its surface being 0·83 of a foot above that fixed in 1834. When visited in 1884 the station was found to consist of a solid, circular masonry pillar 2·8 feet in diameter at top with a mark-stone embedded flush with its upper surface: the pillar is surrounded by a large irregular shaped platform of loose boulders from which it is not isolated: judging from its appearance the pillar does not seem to be very ancient; and the height of the upper mark above the ground level is 10·6 feet. The azimuths and distances of the circumjacent villages are:—Chikhli 13°, miles 2; Chincholi 34°, mile ¾; and Gangarvadi 67°, miles 2¾.

XXIV. Ágargaon Hill Station, lat. 19° 11', long. 74° 55'—observed at in 1845—is situated on a low part of an extensive and irregularly shaped table-land, about 1 mile N. of that village, and 6½ miles E. by N. of Shendi which is ½ a mile E. of the high road from Ahmednagar to Aurangabad. It is in the lands of the village of Ágargaon, taluka Nagar, district Ahmednagar.

The station as originally built consisted of a platform of loose stone masonry and contained three mark-stones, one at the ground level and the other two 7·13 and 13·54 feet respectively above it. When visited in 1882 the station was found to consist of a mound of loose boulders about 10 feet high and 30 feet in diameter, having a post—erected by a Survey Party about two or three years before—rising 3½ feet above it: the mound was raised 16·43 feet above a bench-mark on the ground level and a mark-stone inserted at that height. When visited in 1883 the upper mark-stone was found in position and protected by the usual rectangular pillar of masonry. When again visited in 1885, the upper mark was found to be 12·0 feet above the bench-mark referred to in 1882. The directions and distances of the following places are:—Ahmednagar S.W., miles 9; Ranjani S.E. by E., miles 2¾; Kalhar N.E. by N., miles 2½; Pimpalgaon Uzani W. by S., miles 3¾; and Deogaon S.W., miles 3.

XXV. Bábulsár Hill Station, lat. 18° 45', long. 74° 19'—observed at in 1838—is situated in a field near the south-eastern brow of a low extensive plateau, about 2 miles E. of the village of Ránjangaon Ganpati on the high road from Poona to Sirúr Cantonment, and 8 miles S.W. of the latter place. The station is in the lands of the village of Ránjangaon Ganpati, taluka Sirúr, district Poona.

The station consists of a platform about 3 feet high which contains two mark-stones, one in its upper surface and the other 3·21 feet below it. When visited in 1881 the station was found to consist of a "platform of shaped stones 5¼ feet square "and 3·21 feet high and about a foot more above the level of the surrounding fields. The mark-stone is 8 inches below the surface "of the platform, and was found firmly fixed, though the surrounding stones were loose; these stones were cemented together "and a sort of pillar about 1¼ inches high was built for the theodolite stand to rest on": a cairn of stones has been built over the station. The directions and distances of the circumjacent villages are:—Dhok Sangvi N. by W., miles 3; Káreggaon (on the high road) N.E. by N., miles 2¼; Bábulsár E. by N., miles 1¾; Bambarda S.S.E., miles 1½; and Karanjana S.S.W., miles 2¼.

XXVI. Párner Hill Station, lat. 19° 3', long. 74° 27'—observed at in 1838, 1845 and 1846—is situated on a knoll of a flat-topped hill which rises about 450 feet above the plains to the south: it is ascended by a fair path from the village of Kumbharvadi (at the E. foot of the hill) immediately to the W. of the road from Párner to Tákale Dhokeshvar, and about 3½ miles N.W. of the town of Párner. The hill commands a fair

view all round except towards the N.E., where it is intercepted by a Muhammadan *dargah* surrounded by trees, distant 40 feet from the station. The station is in the lands of the village of Párner, *táluka* Párner, district Ahmednagar.

The station of 1838 is described as "marked by a cross on a large stone at the depth of 3·31 feet and again at the level "of the ground by the usual circle and centre." No change appears to have been made in 1845 and 1846. When visited in 1881 the station was found to consist of a perforated pillar of masonry 3 feet in diameter and 3·17 feet above the ground level, surrounded by a platform of earth and stones 10 feet in diameter; "there was no mark-stone at top, but there may be one at "the bottom of the perforation which is 19½ inches deep" a mark was let into the upper surface of the pillar and covered over by a cairn of stones. When again visited in 1885, the station was found in good condition and the upper mark apparently undisturbed. *Note*.—In September 1868 the district officer reported as follows:—"No sign to be found except a hole in the ground "in which there has apparently been a stone:" from this it appears that the station as found in 1881 was most probably built by a Survey Party, about the years 1877-78. The directions and distances of the circumjacent villages are:—Karandi N.E. by N., miles 1½; Háthákhindi W. by N., miles 1½; Viroli N.W., miles 2½; and Puna (hamlet) S.S.W., mile 1.

XXVII. Dhauleshvar Hill Station, lat. 18° 26', long. 74° 12'—observed at in 1838 and 1841—is on the roof of the temple of this name on a range of hills running E. and W.: it is about 2½ miles E.N.E. of the Borghát, and on the high road from the town of Jejuri to the Railway Station of Urili on the G. I. P. Line. The station is on the boundary of the villages of Dalimb and Amla of *tálukas* Purandhar and Bhimthadi, district Poona.

The station of 1838 consisted of a brick pillar built around the wooden *kalas* of the temple, but on revisiting it in 1841, the pillar was found to have been removed, and the theodolite was therefore centered over the wooden *kalas*. The directions and distances of the circumjacent villages are:—Dalimb N.N.W., miles 1½; Valti W. by N., miles 3½; Vaghapur S.W., miles 3½; Amla S. by E., miles 1½; and Malsiras E.S.E., miles 4½.

XXVIII. Dighi Hill Station, lat. 18° 37', long. 73° 56'—observed at in 1838, 1841 and 1842—is situated on the eastern end of the flat-topped hill 1 mile N.E. of the village of Dighi on the main road between the villages of Álandi and Kalas, and 4 miles N. of the Central Jail near Poona. The station is in the lands of the village of Dighi, *táluka* Haveli, district Poona.

The station as originally built consists of a platform about 1 foot high, having a mark-stone in its upper surface and another 2·56 feet below it. No change appears to have been made in 1841 and 1842. When again visited in 1881 the station was found to consist of "a masonry pillar and platform in perfect order. A cairn of stones was built over the mark-stone." *Note*.—The station as found in 1881 was most probably built by a Survey Party. The directions and distances of the circumjacent villages are:—Bhosri W., miles 2½; Charholi Buzurg N.E. by N., miles 2½; Lohogaon S.E. by E., miles 3½; and Kalas S. by W., miles 3½.

XXIX. Wáfgaon or Wápgaon Hill Station (locally called Gobarkhira), lat. 18° 56', long. 74° 3'—observed at in 1838—is situated on the highest point at the eastern end of an extensive plateau rising about 200 feet above the plain to the N. The station is on the boundary between the villages of Ausari and Dhamni, about 5½ miles E. of the village of Peth on the high road from the town of Khed to Sangamner, and 3½ miles S.W. by S. of Nirgudsar on the Ghod river. It is in the lands of the village of Wápgaon, *táluka* Khed, district Poona.

The station consists of a platform about 3 feet high; there are two mark-stones, one in its upper surface and the other 4·50 feet below. When visited in 1881 the station was found to consist of "a pillar and platform in perfect order, but the upper "mark-stone removed." The pillar has been covered over by a cairn of stones. The directions and distances of the circumjacent villages are:—Gaulachivádi N.W. by N., miles 2; Ausari Buzurg N. by W., miles 2½; Dhamni E.S.E., miles 3½; and Wápgaon S.S.W., miles 4.

XXX. Singi Hill Station, lat. 18° 57', long. 73° 42'—observed at in 1839, 1842 and 1845—is situated on a sharp peak of the narrow ridge of hills, about 1½ miles N. by E. of the village of Argaon above which it rises about 2000 feet. The ascent is steep on all sides and towards the S. it is almost precipitous. The upper part of the hill is composed of porous basalt, and the lower, in some parts, is amygdaloidal rock with occasional small masses of zeolite. The station is in the lands of the village of Argaon, *táluka* Khed, district Poona.

The station of 1839 was denoted by a mark-stone: in 1842 an upper mark-stone was placed, but this having been disturbed another upper mark-stone was placed in 1845 at 3·08 feet above and in the normal of the mark of 1839. When again visited in 1885, "the mark was found in position and apparently undisturbed. It is flush with the surface of the hill top; a "ring of stones about 10 feet in diameter defining a kind of platform was found which had to be filled up and levelled for the "observations. No masonry pillar exists at the station." The azimuths, directions and distances of the circumjacent villages are:—Kura Buzurg 156°, miles 1½; Kura Khurd 196°, miles 1½; Audar E. by N., miles 2; and Aunda W. by N., miles 2½.

XXXI. Mándvi Hill Station, lat. 18° 38', long. 73° 35'—observed at in 1839, 1841 and 1842—is on a ridge of the Western Gháts and occupies the peak locally known as Mándvi: it is 1½ miles W. of the village of

Vaula whence there is a very decent path to the station, and $1\frac{3}{4}$ miles E. of Tikona hill fort which is connected with it by a remarkable ridge about a mile in length along which there is a footpath. The station is at the N. end of the summit which rises precipitously from all sides to a height of about 500 feet above the level of the high ridges of the table-land. The hill is composed generally of hard vesicular basalt; the lower part is of amygdaloid. The station is in the lands of the village of Tikona, táluka Pován Mával, Bhor State.

The station of 1839 consisted of a platform having a mark-stone in its upper surface and another inserted in a circular hole, 15 inches in diameter, excavated in the rock below. No change appears to have been made in 1841. When visited in 1842 in connection with the operations of the South Konkan Coast Series, the platform was found entirely destroyed and the lower mark removed: a new station was built consisting of a platform enclosing a solid, circular and isolated pillar of masonry, having two marks, one engraved on the rock *in situ* in the excavation mentioned above and the other 2 feet above it on a stone embedded in the upper surface of the pillar which is flush with the ground. The upper part of the pillar has three stones for the support of the theodolite stand. From observations taken both at and to this station, its position was found to be identical with that of 1839. In 1881 the mark in the upper surface of the pillar, which is 5 inches lower than the surrounding platform, was found in position but the pillar was somewhat damaged. In 1885 the station was found to consist of a roughly constructed pillar of masonry $2\frac{1}{2}$ feet in diameter and 2 feet deep surrounded by an annulus: the upper mark was found firmly embedded in position. The directions and distances of the circumjacent villages are:—Malaundi N.W. by N., mile 1; Kásig S.W. by W., miles $1\frac{1}{2}$; Kolván S., miles $3\frac{1}{4}$; and Andhali S.E. by E., miles $1\frac{1}{4}$. *Note.*—In 1842 another mark surrounded by a smaller circle was also cut on the rock *in situ*: this mark is 3'35 inches to the S.E. and little above the lower mark of the present station.

XXXII. Prabal Hill Station, lat. $18^{\circ} 58'$, long. $73^{\circ} 16'$ —observed at in 1839—is situated at the end of a clear topped point on the spur running to S.E. from the hill known as Prabal which is connected with the sanitarium of Mátherán by a low ridge. The ruins of an extensive fort are found on the hill which is densely wooded; the ascent on the S.W. from the village of Poinja, and that on the E. from Varosa, both being very steep, meet a little below the summit of the hill at the gateway of the fort. The top of the hill is covered with laterite, but the station mark is cut on a sheet of trap rock, 200 feet E. of a tank and 72 feet from the edge of the precipice. It lies $2\frac{1}{2}$ miles W. of the southern end of the sanitarium of Mátherán, and $4\frac{1}{4}$ miles N. of Chauk village on the high road from Panvel to the Railway station of Kampuli. The station is in the lands of the village of Varosa, táluka Karjat, district Thána.

The station is denoted by a mark cut on the rock *in situ*, around which the places where the feet of the theodolite stand rested are suitably cut. When visited in 1881 the mark of 1839 was found all right though unprotected. The directions and distances of the circumjacent villages are:—Varosa S.E. by E., miles $2\frac{1}{4}$; Mohopa S.W. by W., miles 2; Vardoli W. by N., miles $2\frac{1}{4}$; and Lonevli N.W. by W., miles 3.

XXXIII. Mira Dongar Hill Station, lat. $18^{\circ} 41'$, long. $73^{\circ} 12'$ —observed at in 1839—is situated on the eastern end of a flatish, clean topped hill of this name, about $2\frac{1}{4}$ miles S. of the village of Adharna, and $5\frac{3}{4}$ miles S.E. of the town of Pen on the high road from Alíbag to Kampuli. The lower part of the hill is of amygdaloid; the upper is of hard basalt, and the top for about 150 to 200 feet is covered with blocks of laterite. The station is in the lands of the village of Chandi, táluka Pen, district Kolába.

The station consists of a square platform of stones in the middle of which the usual mark—circle and dot—is placed. When visited in 1881 the station was found to consist of a platform of stones $11\frac{1}{2}$ by 14 feet and 5 feet high: “the mark-stone was found loosely set in earth which had only a few days before been thrown on; the platform in fact had been newly constructed, and is stated to have been raised 3 feet higher, the original platform having fallen away. The mark-stone it was stated was in position on the old platform, but was removed and transferred to the top of the new platform by plumbing over the old position. This information was received from the *patel* (headman) of Chandupali village on the S. side of the hill.” The directions and distances of the circumjacent villages are:—Thalora E. by S., miles $1\frac{1}{4}$; Bhormal N. by W., mile 1; Saimal N.E. by E., mile 1; and Dhangarvádi W. by S., miles $1\frac{1}{4}$.

XXXIV. Karanja Hill Station, lat. $18^{\circ} 51'$, long. $72^{\circ} 59'$ —observed at in 1839 and 1842—is situated on the highest part of the southern and higher of two hills on the island of Uran about 6 miles to S.E. of Bombay. The hill is locally called Dronagiri, and has the cart road from the town of Uran to Karanja skirting its eastern face. There are two very good reservoirs of water on the hill, one at $\frac{1}{4}$ of a mile to N.W. of the station and the other $\frac{3}{4}$ of a mile in the same direction and contiguous to a dilapidated chapel. The station is in the lands of the village of Chanja, táluka Panvel, district Kolába.

The station as built in 1839 is described as “marked by a circle and centre on a square pile of stones.” No change appears to have been made in 1842. It was visited in 1866 in connection with the Bombay Island Triangulation but no statement is forthcoming to show that any change was then made. In 1881 Mr. W. G. Beverley found the station to consist of a solid, circular pillar of masonry 3 feet in diameter enclosed in a platform of stones about 10 feet square and 4 feet high. The pillar was much damaged and a flag-staff of the Harbour Surveying Department was found inserted in it, consequently the mark-stone was not found in its place but on the side of the platform: the mark-stone was firmly refixed in the centre and upper surface of the pillar. When again visited in 1885, the station was found in good preservation, and over the upper mark the usual rectangular protect-

ing pillar of masonry was built. The directions and distances of the circumjacent villages are:—Uran N., miles $1\frac{1}{2}$; Karanja S.E., mile 1; Chanja N.E. by E., mile 1; and Nagaon N.W., miles $1\frac{1}{2}$.

XXXV. Trombay (*Turbha*) Hill Station, lat. $19^{\circ} 2'$, long. $72^{\circ} 58'$ —observed at in 1839—is situated on the highest part of the hill between Trombay and Máhúl: it stands at about 2 miles to W. by N. of Trombay, and is distant about $1\frac{1}{4}$ miles S.S.E. of Borla village on the road from that place to Sion (Shiv) Railway station. The station is in the lands of the village of Trombay, taluka Sálsette (Sáshti), district Thána.

The station as built in 1839 is described as “marked by a heap of stones with the usual circle and centre in the middle.” It was visited in 1866 in connection with the Bombay Island Triangulation, but no statement is forthcoming to show that any change was then made. In 1882 Mr. Beverley found the station to consist of a “solid, circular pillar of masonry 4 feet in diameter and $3\frac{1}{2}$ feet high: one side of the pillar had fallen down and the stones had been loosely replaced. A mark-stone was found in the centre “of the pillar about $4\frac{1}{2}$ inches below its upper surface, the circle and dot being almost effaced.” The directions and distances of the circumjacent villages are:—Máhúl S.W. by W., miles 2; Maroli W.N.W., miles $1\frac{1}{2}$; Vadauli N.W., miles $1\frac{1}{2}$; and Trombay E. by N., miles 2.

XXXVI. Colába (*Kulába*) Observatory, Bombay, lat. $18^{\circ} 54'$, long. $72^{\circ} 51'$ —observed at in 1839—is on the centre of the pillar under the dome of the Astronomical Observatory, bearing N. $38\frac{1}{4}^{\circ}$ E. from the light-house and distant 608 feet therefrom. The observatory is situated at the extremity of a narrow strip of land which extends 2 miles to the south-westwards of the fort of Bombay and separates the harbour from the Back Bay. The Astronomical Observatory is the largest building on the premises and stands on a mound the top of which is 10 feet higher than the basement of the large Magnetic Observatory lying about 80 yards to the N. Adjoining the Magnetic Observatory, at its N.E. corner, is a square tower 46 feet high, called the Electrometer Tower, on the roof of which a station of the Bombay Island Triangulation was fixed (in season 1865-66) plumb over a circle and dot cut on the stone pavement of the lowermost floor, apertures being made through the intervening floors for the purpose. The Longitude station fixed in 1876 is 55 feet N. and 53 feet E. of the mark of the station of the Bombay Island Triangulation.

August, 1888.

S. G. BURRARD,
In charge of Computing Office.

BOMBAY LONGITUDINAL SERIES.

PRINCIPAL TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Spherical Excess	Corrected Plano Angle			Distance		
						Log. feet	Feet	Miles
1	Baktápur, XXXVIII	1'14	47	41	0'02	5'0810525	120518'2	22'825
	Manganál, XL	1'14	84	56	48'88	5'2104611	162353'3	30'749
	Udgir, I	1'13	47	22	11'10	5'0788764	119915'8	22'711
2	Manganál, XL	·80	38	31	28'54	4'9311287	85335'3	16'162
	Udgir, I	·80	79	52	32'85	5'1209293	134874'3	25'544
	Achola, IV	·80	61	35	58'61	5'0810525	120518'2	22'825
3	Udgir, I	·78	73	53	52'21	5'1031008	126794'6	24'014
	Achola, IV	·78	65	48	54'66	5'0805857	120388'7	22'801
	Wadwál, V	·78	40	17	13'13	4'9311287	85335'3	16'162
4	Baktápur, XXXVIII	·71	36	4	8'10	5'0110902	102586'5	19'429
	Udgir, I	·71	32	38	35'43	4'9730687	93987'2	17'801
	Kundrál, II	·71	111	17	16'47	5'2104611	162353'3	30'749
5	Kundrál, II	·45	53	38	6'26	4'9194586	83072'7	15'733
	Udgir, I	·45	42	25	30'83	4'8425882	69596'6	13'181
	Wanjarvádi, III	·46	83	56	22'91	5'0110902	102586'5	19'429

NOTE.—1. The value of the side is given in the same line with the opposite angle.

2. Stations Baktápur, XXXVIII and Manganál, XL appertain to the Great Arc Meridional Series, Section 18° to 24°, of the South-East Quadrilateral.

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle	Distance		
				Log. feet	Feet	Miles
6	Udgir, I	.79	83 47 12.92	5.1419874	138671.6	26.264
	Wanjarrádi, III	.79	59 39 42.24	5.0805857	120388.7	22.801
	Wadwál, V	.78	36 33 4.84	4.9194586	83072.7	15.733
7	Achola, IV	1.27	59 20 31.53	5.1376462	137292.3	26.002
	Wadwál, V	1.28	68 3 15.77	5.1703053	148035.3	28.037
	Karasgaon, VI	1.27	52 36 12.70	5.1031008	126794.6	24.014
8	Wadwál, V	.69	31 40 4.56	4.8588729	72255.8	13.685
	Karasgaon, VI	.69	62 21 16.18	5.0860704	121918.7	23.091
	Harangal, VIII	.70	85 58 39.26	5.1376462	137292.3	26.002
9	Harangal, VIII	.44	88 31 33.53	5.0154201	103614.4	19.624
	Karasgaon, VI	.43	47 16 38.77	4.8816428	76145.2	14.421
	Nitali, X	.43	44 11 47.70	4.8588729	72255.8	13.685
10	Karasgaon, VI	.92	73 57 13.14	5.1232450	132814.4	25.154
	Nitali, X	.92	57 28 39.79	5.0664258	116526.8	22.069
	Deobet, IX	.91	48 34 7.07	5.0154201	103614.4	19.624
11	Achola, IV	1.43	51 41 46.54	5.1227594	132665.9	25.126
	Karasgaon, VI	1.43	67 10 55.30	5.1926451	155827.8	29.513
	Dáud Malik, VII	1.43	61 7 18.16	5.1703053	148035.3	28.037
12	Karasgaon, VI	1.02	56 37 38.15	5.0757020	119042.5	22.546
	Dáud Malik, VII	1.02	54 49 53.33	5.0664258	116526.8	22.069
	Deobet, IX	1.02	68 32 28.52	5.1227594	132665.9	25.126
13	Deobet, IX	.73	46 13 37.39	4.9823670	96021.2	18.186
	Nitali, X	.73	46 36 34.46	4.9851263	96633.2	18.302
	Dharúr, XI	.73	87 9 48.15	5.1232450	132814.4	25.154
14	Nitali, X	.63	57 34 42.47	4.9736811	94119.8	17.826
	Dharúr, XI	.64	62 58 20.31	4.9970474	99322.4	18.811
	Garh Dáud, XIV	.63	59 26 57.22	4.9823670	96021.2	18.186
15	Dharúr, XI	.61	87 23 27.02	5.0851271	121654.2	23.041
	Garh Dáud, XIV	.60	41 59 50.38	4.9110660	81482.8	15.432
	Sáwargaon, XIII	.61	50 36 42.60	4.9736811	94119.8	17.826
16	Deobet, IX	.64	52 0 5.91	4.9509803	89326.5	16.918
	Dharúr, XI	.64	69 30 54.45	5.0260689	106186.4	20.111
	Mahádeoba, XII	.64	58 28 59.64	4.9851263	96633.2	18.302
17	Dharúr, XI	.46	52 57 26.99	4.8835534	76481.0	14.485
	Mahádeoba, XII	.46	58 15 14.91	4.9110660	81482.8	15.432
	Sáwargaon, XIII	.46	68 47 18.10	4.9509803	89326.5	16.918
18	Sáwargaon, XIII	.91	59 36 50.29	5.0618112	115295.2	21.836
	Garh Dáud, XIV	.90	54 51 3.43	5.0385544	109283.5	20.098
	Pángaon, XV	.91	65 32 6.28	5.0851271	121654.2	23.041
19	Garh Dáud, XIV	1.07	70 37 30.81	5.1422408	138752.5	26.279
	Pángaon, XV	1.07	57 45 25.78	5.0948241	124401.1	23.561
	Kanheri, XVIII	1.07	51 37 3.41	5.0618112	115295.2	21.836
20	Pángaon, XV	1.50	82 56 15.68	5.2623706	182966.1	34.653
	Kanheri, XVIII	1.49	48 14 47.23	5.1384264	137539.2	26.049
	Kom, XVII	1.50	48 48 57.09	5.1422408	138752.5	26.279

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle			Distance		
						Log. feet	Feet	Miles
21	Sáwargaon, XIII	.78	36	27	39.13	4.9626679	91763.1	17.379
	Pángaon, XV	.79	98	29	15.44	5.1838984	152720.9	28.924
	Wápla, XVI	.78	45	3	4.43	5.0385544	109283.5	20.698
22	Pángaon, XV	.82	55	16	50.73	5.0563150	113845.3	21.562
	Wápla, XVI	.82	83	13	36.47	5.1384264	137539.2	26.049
	Kem, XVII	.82	41	29	32.80	4.9626679	91763.1	17.379
23	Kanheri, XVIII	2.02	34	32	29.20	5.1509952	141577.8	26.814
	Kem, XVII	2.03	98	20	25.84	5.3927927	247054.5	46.791
	Alsunda, XIX	2.02	47	7	4.96	5.2623706	182966.1	34.653
24	Kanheri, XVIII	2.21	79	18	47.42	5.3363177	216929.1	41.085
	Kem, XVII	2.20	44	42	37.06	5.1911943	155308.2	29.414
	Sautára, XX	2.21	55	58	35.52	5.2623706	182966.1	34.653
25	Kem, XVII	1.95	53	37	46.66	5.2434099	175149.9	33.172
	Sautára, XX	1.95	40	36	24.01	5.1509952	141577.8	26.814
	Alsunda, XIX	1.96	85	45	49.33	5.3363177	216929.1	41.085
26	Alsunda, XIX	1.24	59	25	42.73	5.1267811	133900.2	25.360
	Bori, XXII	1.24	62	28	49.80	5.1396322	137921.6	26.122
	Kháupisura, XXI	1.23	58	5	27.47	5.1267811	132017.3	25.003
27	Kháupisura, XXI	1.69	66	20	42.49	5.2358178	172114.7	32.597
	Bori, XXII	1.69	68	12	27.43	5.2417307	174474.0	33.044
	Bábulsár, XXV	1.69	45	26	50.08	5.1267811	133900.2	25.360
28	Bori, XXII	1.51	43	22	55.49	5.0926050	123767.0	23.441
	Bábulsár, XXV	1.51	63	50	19.24	5.2087983	161732.9	30.631
	Dhauleshvar, XXVII	1.51	72	46	45.27	5.2358178	172114.7	32.597
29	Dhauleshvar, XXVII	1.11	71	58	45.73	5.1554413	143034.7	27.090
	Bábulsár, XXV	1.11	52	38	59.24	5.0776213	119569.7	22.646
	Dighi, XXVIII	1.11	55	22	15.03	5.0926050	123767.0	23.441
30	Bábulsár, XXV	1.04	54	54	2.45	5.0821833	120832.4	22.885
	Dighi, XXVIII	1.03	49	31	16.20	5.0505294	112338.7	21.276
	Wáfgaon, XXIX	1.04	75	34	41.35	5.1554413	143034.7	27.090
31	Wáfgaon, XXIX	1.10	70	50	34.74	5.1472793	140371.6	26.586
	Dighi, XXVIII	1.09	54	45	13.29	5.0840721	121359.0	22.985
	Singl, XXX	1.09	54	24	11.97	5.0821833	120832.4	22.885
32	Alsunda, XIX	1.89	82	37	44.35	5.3192520	208570.1	39.502
	Kháupisura, XXI	1.89	56	23	24.36	5.2434099	175149.9	33.172
	Sautára, XX	1.89	40	58	51.29	5.1396322	137921.6	26.122
33	Sautára, XX	.92	55	54	14.88	5.2546776	179753.6	34.044
	Kháupisura, XXI	.91	18	0	41.19	4.8268435	67118.7	12.712
	Chincholi, XXIII	.92	106	5	3.93	5.3192520	208570.1	39.502
34	Chincholi, XXIII	1.89	53	4	54.76	5.1911433	155289.9	29.411
	Kháupisura, XXI	1.89	59	10	58.08	5.2222227	166810.2	31.593
	Ágargaon, XXIV	1.90	67	44	7.16	5.2546776	179753.6	34.044
35	Ágargaon, XXIV	1.80	61	42	10.41	5.2185157	165392.5	31.324
	Kháupisura, XXI	1.80	62	32	2.45	5.2218487	166666.6	31.566
	Párner, XXVI	1.80	55	45	47.14	5.1911433	155289.9	29.411

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Spherical Excess	Corrected Plane Angle	Distance		
				Log. feet	Feet	Miles
36	Khánpisura, XXI	1'44	39 26 33'11	5'0607141	115004'3	21'781
	Párner, XXVI	1'45	74 32 30'36	5'2417307	174474'0	33'044
	Bábulsár, XXV	1'45	66 0 56'53	5'2185157	105392'5	31'324
37	Bábulsár, XXV	1'00	77 8 44'66	5'1515716	141765'9	26'850
	Párner, XXVI	'99	50 35 5'38	5'0505294	112338'7	21'276
	Wáfgaon, XXIX	'99	52 16 9'96	5'0607141	115004'3	21'781
38	Párner, XXVI	'43	8 36 52'22	5'0840721	121359'0	22'985
	Wáfgaon, XXIX	'44	161 18 30'38	5'4143940	259653'4	49'177
	Singi, XXX	'44	10 4 37'40	5'1515716	141765'9	26'850
39	Dighi, XXVIII	1'09	55 16 44'75	5'0865928	122065'5	23'118
	Singi, XXX	1'09	53 46 35'57	5'0784767	119805'5	22'690
	Mándvi, XXXI	1'09	70 56 39'68	5'1472793	140371'6	26'586
40	Singi, XXX	2'15	62 22 59'89	5'3486654	223185'2	42'270
	Mándvi, XXXI	2'15	88 37 46'57	5'4010739	251810'5	47'691
	Karanja, XXXIV	2'15	28 59 13'54	5'0865928	122065'5	23'118
41	Singi, XXX	1'37	71 36 45'19	5'2057482	160601'0	30'417
	Mándvi, XXXI	1'37	62 13 46'81	5'1753631	149748'7	28'362
	Prabal, XXXII	1'37	46 9 28'00	5'0865928	122065'5	23'118
42	Mándvi, XXXI	1'06	39 36 38'72	5'0115144	102686'7	19'448
	Prabal, XXXII	1'06	54 42 56'28	5'1188347	131472'4	24'900
	Mira Dongar, XXXIII	1'07	85 40 25'00	5'2057482	160601'0	30'417
43	Mira Dongar, XXXIII	'73	63 35 52'11	5'0283160	106737'3	20'215
	Prabal, XXXII	'72	56 53 37'21	4'9992229	99821'2	18'906
	Karanja, XXXIV	'72	59 30 30'68	5'0115144	102686'7	19'448
44	Mándvi, XXXI	1'25	26 23 59'29	5'0283160	106737'3	20'215
	Prabal, XXXII	1'26	111 36 34'01	5'3486654	223185'2	42'270
	Karanja, XXXIV	1'26	41 59 26'70	5'2057482	160601'0	30'417
45	Mira Dongar, XXXIII	'13	6 32 20'09	4'6620098	45920'8	8'697
	Karanja, XXXIV	'13	159 7 43'82	5'1573464	143663'5	27'209
	Colába Observatory Bombay, XXXVI	'13	14 19 56'09	4'9992229	99821'2	18'906
46	Prabal, XXXII	'51	33 43 45'68	4'7999925	63094'7	11'950
	Karanja, XXXIV	'52	76 19 39'72	5'0430037	110408'8	20'911
	Trombay, XXXV	'52	69 56 34'60	5'0283160	106737'3	20'215
47	Karanja, XXXIV	'21	65 2 4'20	4'7807813	60364'5	11'433
	Trombay, XXXV	'20	43 36 7'49	4'6620098	45920'8	8'697
	Colába Observatory Bombay, XXXVI	'21	71 21 48'31	4'7999925	63094'7	11'950
48	Prabal, XXXII	'24	11 22 6'23	4'6620098	45920'8	8'697
	Karanja, XXXIV	'25	141 21 44'40	5'1627447	145460'4	27'549
	Colába Observatory Bombay, XXXVI	'24	27 16 9'37	5'0283160	106737'3	20'215

October, 1891.

J. ECCLES,

In charge of Computing Office.

BOMBAY LONGITUDINAL SERIES.

SECONDARY TRIANGULATION. TRIANGLES.

PRINCIPAL-AUXILIARY AND SECONDARY STATIONS, AND INTERSECTED POINTS.

Differences between the common sides of two triangles to stations and intersected points, are shown by the small figures in the column for "Distance in Feet" between the data of the two triangles, the earlier of which in order has supplied the greater value.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
49	Manganal, XL	118 6 57	5.349875	223808	42.388	54	Manganal, XL	0 ' "	4.475304	29875	5.658	Inch
	Achola, IV	29 46 33	5.100422	126015	23.866		Dongargaon No. 1	h.s.	4.217966	16518	3.138	"
	Bidar Minaret	5.129929	134874	25.544	Aurad Tower		4.394144	24782	4.694	"	"	
50	Manganal, XL	49 22 35	5.079975	120210	22.769	55	Manganal, XL	118 25 37	4.602483	40039	7.583	15
	Achola, IV	9 0 6	4.394144	24782	4.694		Dongargaon No. 1	h.s.	4.338283	21790	4.127	"
	Dongargaon No. 1	h.s.	5.129929	134874	25.544		Ipaugaon Tree No. 1	4.394144	24782	4.694	"	
51	Udgir, I	82 39 11	5.079975	120210	22.769	56	Manganal, XL	50 38 40	4.478659	30106	5.702	15
	Achola, IV	52 35 53	4.983592	96292	18.237		Dongargaon No. 1	h.s.	4.590350	38936	7.374	"
	Dongargaon No. 1	h.s.	4.931129	85335	16.162		Torna Pagoda	4.394144	24782	4.694	"	
52	Manganal, XL	34 24 37	4.427619	26768	5.070	57	Manganal, XL	75 26 46	5.208537	161636	30.613	15
	Dongargaon No. 1	h.s.	4.636066	43258	8.103		Achola, IV	50 41 10	5.111267	129201	24.470	"
	Dhonegaon	"	4.394144	24782	4.694		Chalkapur Hill Pagoda	5.129929	134874	25.544	"	
53	Manganal, XL	11 4 44	4.100853	12878	2.439	58	Manganal, XL	57 2 34	5.087918	122439	23.189	"
	Dhonegaon	h.s.	4.718401	52288	9.903		Achola, IV	35 23 39	5.079558	120104	22.747	"
	Kotagal Fort	s.	4.636066	43258	8.103		Kaplapur	67 33 47	5.129929	134874	25.544	"

Note. — A small theodolite reading to 1/4th of a minute. † C.T.I. stands for "Circular Transit Instrument"—probably a small theodolite with complete vertical circle.

1. Names followed by Roman numerals are those of Principal Stations.

2. The value of the side is given in the same line with the opposite angle.

3. Station Manganal, XL appertains to the Great Arc Meridional Series, Section 18° to 24°.

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle			Distance			Theodolite used
		°	'	"	Log. feet	Feet	Miles				Log. feet	Feet	Miles				
59	Manganal, XL Kaplapur Habarga Hill Pagoda	h.s.	17 31 3 45 7 20	5° 07' 55.8"	46704 95327 120104	7 709 18 149 22 747	fuch 15 "	72	Udgir, I Mungtal Dapka	h.s.	28 17 43 21 26 57 130 15 50	4° 70' 8.302" 4° 68' 55.355" 5° 00' 51.688"	62863 48477 101197	11 906 9 181 19 166	Inch c.r.l. "		
60	Achola, IV Kaplapur Boral	h.s.	87 2 18 75 43 22	5° 10' 09.61" 5° 08' 9.18"	37442 126172 122439	7 091 23 806 23 189	"	73	Baktapur, XXXVIII Mungtal Dapka	h.s.	31 52 4 77 20 46 70 47 10	4° 79' 8.392" 5° 06' 51.112" 5° 05' 08.999"	62863 116175 112434	11 906 22 003 21 294	"		
61	Kaplapur Boral Boral Hill Pagoda	h.s.	2 1 15 82 12 0	3° 12' 28.888" 4° 57' 13.31"	1327 37285 37442	0 251 7 062 7 091	"	74	Udgir, I Dapka Guti Hill Pagoda	h.s.	11 38 56 28 4 10	4° 18' 51.91" 4° 55' 26.233" 4° 68' 55.355"	15318 35696 48477	2 901 6 761 9 181	"		
62	Kaplapur Boral (Godavadi Hill Tree)	h.s.	5 19 0 11 49 38	4° 07' 07.64" 4° 41' 55.42"	14770 26034 37442	2 229 4 931 7 091	"	75	Mungtal Dapka Guti Hill Pagoda	h.s.	12 45 46 102 11 40	4° 18' 51.91" 4° 85' 10.54" 4° 79' 8.392"	13318 7773 62863	2 901 12 856 11 906	"		
63	Achola, IV Kaplapur Bhakti Hill Pagoda	h.s.	23 24 15 58 16 39	5° 02' 23.9" 5° 08' 7.918"	49151 103254 122439	9 309 19 934 23 189	"	76	Manganal, XL Udgir, I Udgir Hill Tomb No. 1	h.s.	3 1 30 22 44 22	4° 16' 52.92" 5° 03' 06.86" 5° 08' 10.533"	14632 107173 120518	2 771 20 298 22 825	15		
64	Manganal, XL Achola, IV Bhakti Hill Dipmal	h.s.	51 6 32 33 1 16	5° 02' 33.92" 4° 86' 8.568"	105532 73877 134874	19 987 13 994 25 544	"	77	Udgir, I Achola, IV Udgir Hill Tomb No. 2	h.s.	59 48 34 3 32 18	4° 91' 66.608" 3° 77' 03.15" 4° 93' 11.299"	85229 5893 85335	15 631 1 116 16 162	"		
65	Kaplapur Achola, IV Bhakti Hill Dipmal	h.s.	58 15 24 22 22 23	5° 02' 33.82" 4° 67' 42.61"	105532 47235 122439	19 987 8 946 23 189	"	78	Udgir, I Achola, IV Udgir Hill Tomb No. 3	h.s.	24 32 35 2 47 23	4° 88' 7.609" 3° 95' 6.433" 4° 93' 11.299"	77199 9046 85335	14 621 1 713 16 162	"		
66	Manganal, XL Achola, IV Bhakti Hill Tower	h.s.	50 53 45 32 54 8	5° 02' 23.41" 4° 86' 7.444"	105279 73096 134874	19 939 13 958 25 544	"	79	Udgir, I Achola, IV Udgir Bungalow (heliotrope)	h.s.	29 40 19 8 32 18	4° 84' 43.89" 4° 31' 29.97" 4° 93' 11.299"	68205 20483 85335	12 935 3 879 16 162	24		
67	Manganal, XL Kaplapur Bhakti Hill Tree	h.s.	11 24 41 21 11 1	4° 64' 45.4" 4° 90' 61.50"	44112 80566 120104	8 354 15 259 22 747	"	80	Udgir, I Manganal, XL Udgir Idgah	h.s.	51 47 35 8 30 37	5° 03' 75.17" 4° 31' 29.97" 5° 08' 10.533"	109023 20526 120518	20 648 3 887 22 825	15		
68	Boral Kaplapur Bhakti Hill Tree	h.s.	25 18 27 133 25 4	4° 64' 45.4" 4° 87' 47.95"	44112 74954 37442	8 354 14 106 7 091	"	81	Achola, IV Manganal, XL Udgir Idgah	h.s.	53 25 14 30 1 2	5° 03' 75.17" 4° 83' 19.80" 5° 12' 09.299"	109023 67917 134874	20 648 12 863 25 544	"		
69	Kaplapur Boral Bhakti Idgah	h.s.	145 4 1 16 10 52	4° 82' 40.81" 4° 51' 13.12"	66693 32457 37442	12 631 6 147 7 091	"	82	Manganal, XL Achola, IV Udgir Hill Maajid	h.s.	28 28 58 55 33 26	4° 81' 07.06" 5° 04' 8.575" 5° 12' 09.299"	64670 111834 134874	12 248 21 181 25 544	"		
70	Kaplapur Boral Bhakti Palace	h.s.	141 11 2 18 2 12	4° 82' 05.54" 4° 51' 42.46"	66154 32677 37442	12 529 6 189 7 091	"	83	Udgir, I Wadwal, V Lohara Hill	h.s.	40 22 0 14 14 58	4° 98' 06.32" 4° 50' 46.2" 5° 08' 05.86"	95638 39346 102389	18 113 6 884 22 801	"		
71	Manganal, XL Kaplapur Bataura Palace	h.s.	16 37 9 42 13 2	4° 60' 36.10" 4° 97' 45.72"	40144 94313 120104	7 603 17 862 22 747	"	84	Wadwal, V Achola, IV Loni Hill Tree	h.s.	38 42 37 53 44 1	4° 89' 06.42" 5° 00' 97.979" 5° 10' 31.01"	79367 102324 126795	15 032 19 380 24 014	"		

Note.—Stations Manganal, XL and Baktapur, XXXVIII appertain to the Great Arc Meridional Series, Section 18° to 24°.
 * Base taken from the Great Arc Meridional Series, Section 18° to 24°.
 † Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
85	Udgir, I	65 3 28	4 899642	79367	15.032	98	Wadwāl, V	71 34 40	5 157699	143780	27.231	Inch
	Achola, IV Loni Hill Tree	12 4 54	4 262943 4 931129	18321 85335	3.470 10.162		Karasnagon, VI Hattibetta Hill Tree	43 28 18	5 018131 5 137646	104203 137292	19.747 26.002	15 "
86	Udgir, I	119 41 6	5 048296	111762	21.167	99	Achola, IV	75 5 11	5 157699	143780	27.231	"
	Mungāl Kallur	8 26 35 51 52 19	4 276200 5 005168	18889 101197	3.577 19.166		Karasnagon, VI Hattibetta Hill Tree	9 7 56	4 373194 5 179365	23615 148035	4.473 28.037	"
87	Dapka	121 26 13	5 048296	111762	21.167	100	Achola, IV	0 56 12	2 586703	386	0.073	15
	Mungāl Kallur	29 53 2 28 40 45	4 814680 4 798392	62465 62863	12.301 11.906		Hattibetta Hill Tree Hattibetta	h.s. h.s.	4 373259 4 373194	23619 23615	4.473 4.473	"
88	Wadwāl, V	44 55 57	4 953954	89754	16.999	101	Achola, IV	10 18 0	3 646094	4427	0.838	15
	Achola, IV Malia Hill Temple	41 13 5 4 13 5	4 922019 5 103101	83737 126795	15.859 24.014		Hattibetta Maudapur Tower	h.s. h.s.	4 310058 4 373259	21911 23619	4.150 4.473	"
89	Udgir, I	84 18 17	4 953954	89754	16.999	102	Achola, IV	13 20 38	3 757215	5718	1.083	15
	Achola, IV Malia Hill Temple	24 35 50	4 574544 4 931129	37544 85335	7.111 16.162		Hattibetta Maudapur Tomb	59 5 39	4 327482 4 373259	21256 23619	4.026 4.473	"
90	Udgir, I	17 31 0	4 927003	84528	16.009	108	Achola, IV	9 12 24	3 954304	9001	1.795	15
	Wadwāl, V Malia Hill No. 1	7 52 0	4 584763 5 080586	38438 120389	7.280 22.801		Hattibetta Chaunhipparga Tower	h.s. h.s.	4 180270 4 373259	15145 23619	2.868 4.473	"
91	Udgir, I	17 55 0	4 926518	84434	15.991	104	Achola, IV	82 1 0	4 519040	33040	6.258	15
	Wadwāl, V Malia Hill No. 2	8 6 0	4 587400 5 080586	38672 120389	7.324 22.801		Hattibetta Hissamnagar Tower	h.s. h.s.	4 425142 4 373259	26616 23619	5.041 4.473	"
92	Udgir, I	39 53 0	4 883265	77458	14.670	105	Udgir, I	7 4 0	4 471476	29613	5.668	15
	Wadwāl, V Kājuri Hill Mark (heliotrope.)	54 49 29	4 994485 5 080586	98338 120389	18.700 22.801		Achola, IV Nāgarwāl Hill Dargah	13 41 51	4 755859 4 931129	59998 85335	16.795 16.162	"
93	Achola, IV	9 6 48	4 386176	24332	4.668	106	Achola, IV	24 7 40	5 010070	102346	19.384	"
	Wadwāl, V Chakūr Hill Temple	46 30 44	5 047105 5 103101	111456 126795	21.109 24.014		Dād Malik, VII Sindkhed Hill	14 21 45	4 793138 5 192045	62107 155828	11.763 29.513	"
94	Wadwāl, V	88 32 0	5 086200	121955	23.098	107	Karasnagon, VI	49 54 57	5 006975	101619	19.246	24
	Harangāl, VIII Jānval Hill	3 29 34	3 871121 5 086970	7432 121919	1.408 23.091		Dād Malik, VII Jājnur Hill Tomb	43 38 56	4 962575 5 122759	91744 132666	17.376 25.126	"
95	Harangāl, VIII	1 53 23	3 883527	7648	1.448	108	Achola, IV	27 23 12	5 006975	101619	19.246	"
	Wadwāl, V Jānval Hill Tree	29 49 33	5 062006 5 086970	113347 121919	21.846 23.091		Dād Malik, VII Jājnur Hill Tomb	17 28 24	4 821724 5 192045	60332 155828	12.593 29.513	"
96	Achola, IV	2 33 52	3 883527	7648	1.448	109	Achola, IV	27 27 57	5 007333	101703	19.262	15
	Wadwāl, V Jānval Hill Tree	129 34 55	5 119903 5 103101	131796 126795	24.961 24.014		Dād Malik, VII Jājnur Hill Tree	17 29 57	4 821547 5 192045	66305 155828	12.558 29.513	"
97	Achola, IV	7 47 51	4 805608	63916	12.105	110	Karasnagon, VI	49 55 11	5 007333	101703	19.262	"
	Wadwāl, V Digol Hill Dargah	7 48 57	4 806621 5 103101	64065 126795	12.134 24.014		Dād Malik, VII Jājnur Hill Tree	43 37 23	4 962383 5 122759	91703 132000	17.368 25.126	"

* A small theodolite reading to 1/10 of a minute. † Deduced base.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
111	Achohn, IV Daud Malik, VII Guti Hill Mark (heliotrope)	24 38 1	4 873429	74719	14 151	124	Deobet, IX Karagaon, VI Ausa	7 8 19	4 175691	14986	2 838	Inch 15
		35 44 28	5 019992	104711	19 832			67 56 21	5 066426	111764	21 168	
			5 192045	153828	29 513				5 066426	110527	22 069	
112	Wadwāl, V Harangal, VIII Burdapur	44 7 58	4 946615	88433	16 749	125	Harangal, VIII Karagaon, VI Ausa	53 17 32	4 809276	14986	2 838	"
		62 7 46	5 050259	112269	21 203			115 57 38	4 809276	64428	12 202	
		73 44 16	5 086070	121919	23 091				4 858873	72256	13 685	
118	Karagaon, VI Harangal, VIII Latur Idgah	33 54 51	4 612621	40985	7 762	126	Harangal, VIII Nitali, X Viroda Tree	34 33 49	4 655522	43204	8 183	15
		66 27 21	4 828277	67341	12 754			56 18 31	4 801836	63363	12 001	
			4 858873	72256	13 685				4 881643	76145	14 421	
114	Wadwāl, V Harangal, VIII Kalambgaon Hill Tree	63 39 42	5 041090	110151	20 862	127	Harangal, VIII Nitali, X Daud Malik Tree	49 35 12	4 771851	59136	11 200	"
		33 37 21	4 832879	68038	12 890			52 38 0	4 791565	61882	11 720	
			5 086070	121919	23 091				4 881643	76145	14 421	
115	Karagaon, VI Harangal, VIII Kalambgaon Hill Tree	86 43 57	5 041090	110151	20 862	128	Karagaon, VI Ausa Sarola Tower	113 46 0	4 436024	27348	5 180	"
		52 21 19	4 841319	87361	16 346			36 8 0	4 246017	17020	3 337	
			4 858873	72256	13 685				4 175691	14986	2 838	
116	Karagaon, VI Harangal, VIII Hari Hill	90 28 48	5 071094	117786	22 308	129	Karagaon, VI Ausa Yerandi Tower	99 50 0	4 386633	24358	4 613	15
		51 40 56	4 965749	92416	17 503			42 51 0	4 225022	16812	3 184	
			4 858873	72256	13 685				4 175691	14986	2 838	
117	Harangal, VIII Nitali, X Havi Hill Pagoda	140 15 10	5 282683	191462	36 262	130	Karagaon, VI Ausa Kauheri Tower	117 30 0	4 276166	18897	3 377	15
		25 0 56	5 102510	126622	23 981			17 46 0	3 812738	6497	1 231	
			4 881643	76145	14 421				4 175691	14986	2 838	
118	Wadwāl, V Harangal, VIII Hasagaon Pile	28 38 21	4 771007	59143	11 201	131	Harangal, VIII Nitali, X Karagaon Hill Pagoda	88 30 59	5 015426	103616	19 624	15
		52 28 53	4 900665	97874	18 337			44 12 26	4 858963	72271	13 688	
			5 086070	121919	23 091				4 881643	76145	14 421	
119	Karagaon, VI Harangal, VIII Hasagaon Pile	54 54 22	4 771007	59143	11 201	132	Wadwāl, V Harangal, VIII Ausa Hill Tree	26 18 54	4 809330	64466	12 209	"
		33 29 47	4 600890	3962	7 555			96 42 54	5 159037	144423	27 353	
			4 858873	72256	13 685				5 086070	121919	23 091	
120	Nitali, X Harangal, VIII Hasagaon Hill Peak No. 1	30 31 50	4 841828	69475	13 158	133	Karagaon, VI Harangal, VIII Ausa Hill Tree	53 24 11	4 809330	64466	12 209	"
		115 38 12	5 090959	123299	23 352			10 44 14	4 174920	14960	2 833	
			4 881643	76145	14 421				4 858873	72256	13 685	
121	Karagaon, VI Harangal, VIII Hasagaon Hill Peak No. 1	71 47 32	4 841828	69475	13 158	134	Harangal, VIII Ausa Ausa Fort	4 24 29	3 965651	9240	1 750	"
		27 6 38	4 522824	33299	6 312			28 0 0	4 751565	56437	10 689	
			4 858873	72256	13 685				4 809076	64428	12 202	
122	Karagaon, VI Harangal, VIII Hasagaon Hill Peak No. 2	73 31 22	4 845971	70141	13 284	135	Wadwāl, V Harangal, VIII Ausa Tomb No. 1	22 11 57	4 729934	53695	10 169	15
		25 25 6	4 496867	31395	5 946			98 43 15	5 147591	140472	26 605	
			4 858873	72256	13 685				5 086070	121919	23 091	
123	Karagaon, VI Harangal, VIII Shur Tower	15 44 27	4 393860	24760	4 691	136	Harangal, VIII Ausa Ausa Tomb No. 3	6 32 18	4 118672	13142	2 489	"
		36 35 0	4 733672	54409	10 305			27 23 40	4 725136	53105	10 058	
			4 858873	72256	13 685				4 809076	64428	12 202	

* A small theodolite reading to 4th of a minute.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
137	Karagaon, VI Ausa Borphal Dargah	h.s. 10 16 58 161 26 36	4' 269269 4' 520373 4' 175991	18590 33142 14986	3.521 6.277 2.838	Inch 15 *	Sálotgi Badadol Dáhitna	h.s. " " " "	65 37 49 67 42 52 66 39 19	5' 104692 5' 195918 5' 199066	127260 157007 158149	24.102 29.736 29.952	Inch 18 " " " "
138	Karagaon, VI Daud Malik, VII Rámagaon Hill Tree	44 26 12 9 59 9	5' 057666 4' 451554 5' 122759	114200 26285 132666	21.629 5.357 25.126	15 " "	Badadol Dáhitna Ambevád	h.s. " " " "	45 20 39 28 14 3 106 24 58	4' 974887 4' 797698 5' 104692	94382 62762 127260	17.875 11.887 24.102	" "
139	Dáud Malik, VII Deobet, IX Lamjan Hill Tree	53 22 18 59 55 26	5' 017091 5' 049831 5' 075702	104014 112158 119042	19.700 21.212 22.546	" "	Ambevád Dáhitna Achalal	h.s. " " " "	75 5 4 44 26 4 60 28 52	5' 020386 4' 880427 4' 974887	104806 75932 94382	19.850 14.381 17.875	" "
140	Dáud Malik, VII Deobet, IX Atka Hill	51 28 39 63 9 46	5' 010574 5' 067673 5' 075702	102465 116862 119042	19.406 22.133 22.546	" "	Achalal Dáhitna Mahádeoba, XII	h.s. " " " "	48 13 2 66 36 40 65 10 18	4' 935056 5' 045269 5' 020386	86111 105991 104806	16.309 20.074 19.850	" "
141	Karagaon, VI Dáud Malik, VII Sángri Hill Dar:ah	26 25 0 46 5 24	4' 791582 5' 009916 5' 122759	61885 100211 132666	11.721 18.979 25.126	" "	Dáhitna Mahádeoba, XII Valsung	h.s. " " " "	75 46 39 20 42 40 83 30 35	4' 924329 4' 486483 4' 935056	84010 30652 86111	15.911 5.805 16.309	" "
142	Dáud Malik, VII Deobet, IX Honali Hill	127 29 0 12 19 26	5' 105463 4' 595170 5' 075702	146374 39370 119042	27.722 7.457 22.546	" "	Mahádeoba, XII Valsung Mardi	h.s. " " s.	75 33 4 54 41 16 49 45 40	5' 027642 4' 953298 4' 924329	106572 89865 84010	20.184 17.008 15.911	" "
143	Karagaon, VI Deobet, IX Udalpur Sastur Tomb	h.s. 38 35 55 130 20 7	4' 467486 4' 979495 5' 066426	29342 95368 119527	5.557 18.062 22.069	15 *	Valsung Mardi Kandalgaon	h.s. s. h.s.	58 41 23 63 43 23 57 34 59	5' 032876 5' 053843 5' 027642	107864 113199 106572	20.429 21.439 20.184	" "
144	Deobet, IX Udalpur Sastur Tomb	15 42 0 137 39 0	4' 248014 4' 644125 4' 467486	17702 44068 29342	3.353 8.346 5.557	15 *	Kandalgaon Mardi Kurul	h.s. s. h.s.	60 36 35 30 27 15 88 56 10	4' 973117 4' 737829 5' 032876	93998 54660 107864	17.803 10.350 20.429	" "
145	Deobet, IX Udalpur Chincholi Garhi	20 43 0 89 7 0	4' 042735 4' 493991 4' 467486	11034 31188 29342	2.090 5.907 5.557	15 *	Mardi Kurul Pokhrampur	s. h.s. s.	29 44 51 82 49 27 67 25 42	4' 703365 5' 004312 4' 973117	50509 100998 93998	9.566 19.128 17.803	" "
146	Deobet, IX Udalpur Toramba Pagoda	22 51 0 34 59 0	4' 120127 4' 498167 4' 467486	13463 19869 29342	2.550 3.793 5.557	15 *	Kurul Pokhrampur Anavli	h.s. s. h.s.	80 9 45 60 57 2 34 53 13	4' 900259 4' 940560 4' 703365	79480 87209 50509	15.053 16.517 9.566	" "
147	Deobet, IX Udalpur Makni Pagoda	43 39 0 79 11 0	4' 382084 4' 535291 4' 467486	24104 34300 29342	4.565 6.496 5.557	15 *	Pokhrampur Anavli Khandáli	s. h.s. s.	90 0 10 34 10 19	4' 982581 4' 732068 4' 900259	96068 53960 79480	18.195 10.220 15.053	" "
148	Deobet, IX Udalpur Kusti Pagoda	87 37 0 53 23 0	4' 668238 4' 573137 4' 467486	46584 37423 29342	8.823 7.088 5.557	15 *	Mahádeoba, XII Achalal Vadgaon	h.s. " " " "	53 7 3 75 55 56	4' 941512 4' 028600 5' 025269	87400 84858 105991	16.553 16.071 20.074	" "
149	Deobet, IX Udalpur Marridi Tomb	124 2 0 33 56 0	4' 811689 4' 640097 4' 467486	64817 43661 29342	12.276 8.269 5.557	15 *	Vadgaon Achalal Deobet	h.s. " " " "	65 20 10 97 42 0	4' 903900 4' 410484 4' 941512	80149 25733 87400	15.180 4.874 16.553	" "

* A small theodolite reading to 1/4th of a minute.
 † This base is taken from the Synoptical Volume of the Great Arc Series, Section 8* to 18*, in which the continuation of the triangulation will be found.
 ‡ The continuation of the triangulation will be found in the Synoptical Volume of the Mangalore Meridional Series.

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles	
163	Achale	h.s.	4.912519	81756	15.484	Inch
	Deobet	"	4.085353	12172	2.305	18
	Allūr	"	4.903920	80149	15.180	"
164	Allūr	h.s.	5.075687	119038	22.545	"
	Deobet	"	5.068542	117096	22.177	"
	Dād Malik, VII	"	4.912519	81756	15.484	"
165	Dāhītna	h.s.	5.072571	118187	22.384	"
	Valeung	"	5.101342	126282	23.917	"
	Lechan	s.	4.486463	36652	5.805	"
166	Valeung	h.s.	5.093977	124159	23.515	"
	Lechan	s.	5.053843	113199	21.439	"
	Kandalgaoon	h.s.	5.072571	118187	22.384	"
167	Lechan	s.	5.110920	129098	24.450	"
	Kandalgaoon	h.s.	4.988141	97306	18.420	"
	Sātalgaoon	"	5.093977	124159	23.515	"
168	Sātalgaoon	h.s.	5.068991	117217	22.200	"
	Kandalgaoon	"	5.089187	122796	23.257	"
	Jalihal	s.	5.110920	129098	24.450	"
169	Kandalgaoon	h.s.	5.072649	118209	22.388	"
	Jalihal	s.	4.737859	54080	10.356	"
	Kurul	h.s.	5.068991	117217	22.200	"
170	Jalihal	s.	4.940560	87209	16.517	"
	Kurul	h.s.	4.949307	89002	16.856	"
	Anavli	"	5.072649	118209	22.388	"
171	Mahādeooba, XII	h.s.	4.813989	65161	12.341	"
	Achale	h.s.	4.808152	79095	14.980	"
	Kuranur	"	5.052609	105991	20.074	"
172	Ambevad	h.s.	4.813989	65161	12.341	18
	Achale	h.s.	4.850028	71784	13.595	"
	Kuranur	"	4.880427	75932	14.381	"
173	Mahādeooba, XII	h.s.	4.849331	70686	13.387	18
	Kuranur	h.s.	4.765192	58236	11.030	"
	Naldurg Cavalier	"	4.898152	79095	14.980	"
174	Mahādeooba, XII	h.s.	4.698843	49985	9.467	18
	Vadgaon	h.s.	4.701578	50301	9.527	"
	Naldurg Idgah	"	4.948690	84858	16.071	"
175	Mahādeooba, XII	h.s.	4.759659	57499	10.890	18
	Vadgaon	h.s.	4.608307	40580	7.686	"
	Andura Hill Pagoda	"	4.928690	84858	16.071	"
176	Mahādeooba, XII	h.s.	4.794874	62355	11.810	Inch
	Dāhītna	"	4.578843	37918	7.181	18
	Nilgaon	"	4.935056	86111	16.309	"
177	Ambevad	h.s.	4.794874	62355	11.810	18
	Dāhītna	"	5.045650	111084	21.039	"
	Nilgaon	"	4.974887	94382	17.875	"
178	Mahādeooba, XII	h.s.	4.725189	53112	10.059	18
	Dāhītna	h.s.	5.041334	109985	20.831	"
	Geneshvādi	"	4.935056	86111	16.309	"
179	Mahādeooba, XII	h.s.	4.610723	46806	7.728	18
	Geneshvādi	h.s.	4.986055	96840	18.341	"
	Kiranbhalli Hill Pagoda	"	5.041334	109985	20.831	"
180	Dāhītna	h.s.	4.877425	75409	14.282	18
	Ambevad	"	4.398920	24537	4.647	"
	Akakot	s.	4.974887	94382	17.875	"
181	Ambevad	h.s.	4.491463	31007	5.872	18
	Badadol	"	4.882999	70383	14.407	"
	Balurgi Hill Pagoda	"	4.797698	62762	11.887	"
182	Dāhītna	h.s.	4.491463	31007	5.872	"
	Badadol	"	5.057587	114179	21.625	"
	Balurgi Hill Pagoda	"	5.104692	127260	24.102	"
183	Dāhītna	h.s.	4.802083	77998	14.772	"
	Badadol	h.s.	5.028333	106741	20.216	"
	Karaji	s.	5.104692	127260	24.102	"
184	Ambevad	h.s.	4.802083	77998	14.772	18
	Badadol	"	5.040941	106886	20.812	"
	Karaji	s.	4.797698	62762	11.887	"
185	Ambevad	h.s.	4.935618	86222	16.330	18
	Badadol	"	4.902945	79973	15.146	"
	Udagi	"	4.401034	62762	11.887	"
186	Sālotgi	h.s.	4.335618	86222	16.330	"
	Badadol	h.s.	4.818301	119813	22.692	"
	Udagi	"	5.199066	158149	29.952	"
187	Udagi	h.s.	4.833961	68228	12.922	"
	Lechan	s.	4.452523	60475	13.158	"
	Suler Javnaga	"	4.995257	98914	18.734	"
188	Valeung	h.s.	4.833961	68228	12.922	18
	Lechan	s.	4.452523	60475	13.158	"
	Suler Javnaga	"	5.072571	118187	22.384	"

* A small theodolite reading to a minute. † Deduced base.

SECONDARY TRIANGULATION. TRIANGLES.

No of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
189	Lachan Sátalgaoon Nimbál	s. h.s. "	4° 6' 53.83 4° 9' 48.441 4° 9' 88.141	47357 88806 97306	8.069 16.819 18.429	18	Mahádeoba, XII Sáwargaoon, XIII Ghaibi Sahib's Dípmaal	49° 35' 12 40° 28' 58	4° 7' 65.160 4° 6' 09.545 4° 8' 83.353	58232 40653 76481	11.029 9.404 14.485	Inch 24 "	
190	Jaihal Kandalgaon Sivangi	s. h.s. "	5° 0' 23.023 27° 46' 38 88° 10' 53	105444 54055 117217	19.970 10.351 22.200	"	Nitali, X Garh Dáud, XIV Jaiphal Tree	111° 10' 27 10° 18' 56	5° 0' 36.133 4° 3' 19.954 4° 9' 97.047	108676 20891 99322	20.583 3.957 18.811	15 "	
191	Sátalgaoon Kandalgaon Sivangi	h.s. "	5° 0' 23.023 31° 47' 47 93° 36' 0	105444 68157 129098	19.970 12.908 24.450	18	Dharúr, XI Garh Dáud, XIV Jaiphal Tree	74° 21' 23 49° 8' 2	5° 0' 36.133 4° 9' 31.186 4° 9' 37.681	108676 85346 94120	20.583 16.164 17.826	"	
192	Jaihal Sivangi Halhalí Tower	s. h.s. "	4° 44' 02.61 92° 1' 0 4° 7' 37.628	27559 62070 54655	5.219 11.756 10.351	18	Harangal, VIII Nitali, X Murad Hill Mark	35° 58' 42 60° 29' 3	4° 6' 53.404 4° 8' 24.040 4° 8' 88.164	45020 66687 76145	8.526 12.030 14.421	C.T.I.	
193	Sátalgaoon Sivangi Gudápur Hill Pagoda	h.s. "	4° 9' 01.424 5° 06' 75.0 4° 8' 33.507	79675 116748 68157	15.090 22.111 12.908	18	Nitali, X Dharúr, XI Govargaoon Hill Dargah	114° 13' 20 26° 7' 24	5° 13' 74.17 4° 8' 21.194 4° 9' 82.307	137220 66251 96021	25.989 12.548 18.186	15 "	
194	Mahádeoba, XII Mardi Sholápur Fort	s. "	30° 34' 29 76° 27' 5 72° 58' 26	47774 91307 89805	9.048 17.293 17.008	18	Nitali, X Garh Dáud, XIV Dhoki Idgah	32° 46' 51 41° 20' 47	4° 7' 47.470 4° 9' 33.875 4° 9' 97.047	55908 68214 99322	10.589 12.919 18.811	"	
195	Kurul Mardi Sholápur Fort	s. "	30° 14' 26 67° 29' 13 82° 16' 21	47774 87630 93998	9.048 16.597 17.803	18	Garh Dáud, XIV Dharúr, XI Singoli Pile	28° 54' 53 11° 29' 30	4° 8' 46.372 4° 4' 61.314 4° 9' 37.681	70206 28928 94120	13.296 5.479 17.826	"	
196	Sholápur Fort Mardi Hiraj	s. "	63° 36' 3 38° 24' 39 77° 59' 18	43750 39346 47774	8.286 5.747 9.048	18	Nitali, X Dharúr, XI Singoli Pile	46° 24' 18 51° 28' 51	4° 8' 46.372 4° 8' 79.022 4° 9' 82.307	70206 78844 90021	13.296 14.364 18.186	"	
197	Kurul Mardi Hiraj	h.s. s. "	20° 52' 17 29° 4' 34 130° 3' 9	43750 59077 93998	8.286 11.302 17.803	18	Pángaoon, XV Sáwargaoon, XIII Dhárúshev Mosque	47° 35' 28 73° 15' 35	4° 9' 71.165 5° 08.5253 5° 03.8554	93576 121089 102823	17.723 23.047 20.698	24 "	
198	Mahádeoba, XII Sáwargaoon, XIII Sholápur Fort (heliotrope)	h.s. s. "	68° 7' 10 63° 23' 59 63° 23' 59	94789 91335 76481	17.952 17.298 14.485	24	Dharúr, XI Sáwargaoon, XIII Dhárúshev Mosque	83° 11' 36 36° 57' 59	4° 9' 71.165 4° 7' 53.361 4° 9' 11.066	93576 56671 81483	17.723 10.733 15.432	"	
199	Dharúr, XI Sáwargaoon, XIII Khadki Hill Temple	s. h.s. "	36° 58' 27 96° 2' 45 4° 9' 11.066	67032 110830 81483	12.695 20.991 15.432	15	Dharúr, XI Garh Dáud, XIV Dhárúshev Hill Temple	11° 8' 55 23° 25' 54	4° 5' 06.023 4° 8' 19.176 4° 9' 37.681	32064 65944 94120	6.073 12.489 17.826	"	
200	Mahádeoba, XII Sáwargaoon, XIII Khadki Hill Temple	h.s. s. "	61° 10' 44 27° 15' 26 4° 8' 83.353	67032 35040 76481	12.695 6.636 14.485	24	Garh Dáud, XIV Dharúr, XI Dhárúshev Hill Pagoda	23° 30' 52 11° 10' 40	4° 8' 19.374 4° 5' 05.961 4° 9' 37.681	65974 32000 94120	12.489 6.072 17.826	15	
201	Dharúr, XI Sáwargaoon, XIII Ghaibi Sahib's Dípmaal	h.s. s. "	42° 25' 26 28° 18' 21 4° 9' 11.066	58232 40931 81483	11.029 7.752 15.432	"	Sáwargaoon, XIII Dharúr, XI Dhárúshev Hill Pagoda	44° 15' 22 76° 12' 42	4° 8' 19.374 4° 9' 11.066 4° 9' 11.066	65974 91813 81483	12.489 17.389 15.432	"	

* A small theodolite reading to a minute.

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles					Log. feet	Feet	Miles	
215	Sāwargāon, XIII Pāngāon, XV Wāravāi Hill Peak	82 31 32 35 33 58 5 038554	5 089284 4 857645 5 038554	122824 72 52 13 646 109283 20 698	23 262 13 646 20 698	Inch 15 "	Garh Dāud, XIV Chorakalli Kulambvādi South Peak	228	22 32 0 135 57 0	4 684919 4 943633 4 665865	48408 87828 49330	9 168 16 634 8 775	Inch 15 "
216	Sāwargāon, XIII Pāngāon, XV Tuljapur Hill Temple	103 58 35 20 33 41 5 038554	5 109706 4 668325 5 038554	128738 46591 8 825 109283 20 698	24 382 8 825 20 698	24 "	Garh Dāud, XIV Chorakalli Patri Hill Tree	229	46 51 41 111 20 32	4 959275 5 065277 4 665865	91049 116219 49330	17 244 22 011 8 775	15 "
217	Sāwargāon, XIII Garh Dāud, XIV Wardal Hill Tomb	135 8 12 9 33 57 5 085127	5 171780 4 543914 5 085127	148518 34988 6 626 121654 23 041	28 128 6 626 23 041	15 "	Pāngāon, XV Kem, XVII Maheshgāon Hill Pagoda	230	10 42 45 12 49 6	4 806425 4 883270 5 138426	64036 70431 137539	12 128 14 476 26 049	15 "
218	Sāwargāon, XIII Pāngāon, XV Vairag Pagoda No. 1	7 12 16 12 0 20 5 038554	4 616950 4 839394 5 038554	41653 7 889 69087 13 085 109283 20 698	7 889 13 085 20 698	"	Kem, XVII Kanheri, XVIII Kem Hill Pagoda	231	130 52 52 2 40 55	5 280824 4 072431 5 262371	190908 11815 2 238 182066	36 157 2 238 34 653	"
219	Sāwargāon, XIII Garh Dāud, XIV Pāngāon, XV Fāngāon Hill Tree	55 2 8 57 32 42 5 085127	5 033318 5 046012 5 085127	107974 20 450 111176 21 056 121654 23 041	20 450 21 056 23 041	"	Alsunda, XIX Kanheri, XVIII Kem Hill Pagoda	232	49 52 57 31 51 36	5 280824 5 119826 5 392793	190908 131773 24 957 247054 46 791	36 157 24 957 46 791	"
220	Kanheri, XVIII Pāngāon, XV Chorakalli	56 26 31 34 30 44 88 56 45	5 063129 4 806077 5 142241	115646 21 993 78827 14 929 138752 26 279	21 993 14 929 26 279	"	Kanheri, XVIII Sautāra, XX Bhavani Hill Temple	233	39 8 59 18 45 26	5 063485 4 770476 5 191194	115740 59949 11 165 155308 29 414	21 921 11 165 29 414	24 "
221	Garh Dāud, XIV Pāngāon, XV Chorakalli	78 51 7 23 8 43 78 0 10	5 063129 4 665865 5 061811	115646 21 993 46330 8 775 115295 21 836	21 993 8 775 21 836	15 "	Sautāra, XX Alsunda, XIX Karmālā Hill Temple	234	23 32 31 55 20 36	4 853063 5 166809 5 243410	71296 146828 27 808 173150 33 172	13 503 27 808 33 172	"
222	Garh Dāud, XIV Chorakalli Yēria Dipmal No. 1	3 1 10 157 9 44 h.s.	3 857219 4 724586 4 665865	7198 1 363 53038 10 045 49330 8 775	1 363 10 045 8 775	15 "	Kem, XVII Alsunda, XIX Karmālā Hill Temple	235	24 15 41 30 25 15	4 853063 4 943776 5 150995	71296 87857 16 640 141578 26 814	13 503 16 640 26 814	"
223	Sāwargāon, XIII Garh Dāud, XIV Yēria Dipmal No. 2	14 33 36 129 43 22 5 085127	4 719580 5 205024 5 085127	52430 9 930 160333 30 366 121654 23 041	9 930 30 366 23 041	15 "	Kem, XVII Sautāra, XX Khorti Hill Mark (heliotrope)	236	52 37 25 34 17 51	5 237129 5 087831 5 336318	172635 122444 23 184 210929 41 085	32 696 23 184 41 085	"
224	Garh Dāud, XIV Chorakalli Chara Hill Dipmal	22 40 0 120 7 0 4 665865	4 470109 4 821250 4 665865	29519 5 591 60200 12 549 46330 8 775	5 591 12 549 8 775	"	Alsunda, XIX Sautāra, XX Khorti Hill Mark (heliotrope)	237	79 22 16 6 18 35	5 237129 4 285055 5 243410	172635 10304 3 056 173150 33 172	32 696 3 056 33 172	"
225	Garh Dāud, XIV Pāngāon, XV Kadaknāthvādi Hill Temple	68 35 30 43 7 4 5 061811	5 062713 4 928501 5 061811	115535 84820 16 064 115295 21 836	11 882 16 064 21 836	24 "	Alsunda, XIX Sautāra, XX Alsunda Hill Pagoda	238	43 1 27 3 27 8	5 216997 4 162731 5 243410	164815 14546 2 755 173150 33 172	31 215 2 755 33 172	15 "
226	Kanheri, XVIII Pāngāon, XV Kadaknāthvādi Hill Temple	47 16 31 14 38 23 5 142241	5 062713 4 599323 5 142241	115535 21 882 39749 7 528 138752 26 279	21 882 7 528 26 279	"	Bori, XXII Khinpisura, XXI Rasin Pagoda	239	63 42 23 45 37 11	5 104538 5 006102 5 126781	127215 101415 10 207 133900 25 360	24 094 10 207 25 360	"
227	Garh Dāud, XIV Chorakalli Kulambvādi North Peak	22 17 0 136 16 0 4 665865	4 681607 4 942422 4 665865	48040 16 588 87853 8 775 46330 8 775	16 588 8 775 8 775	15 "	Alsunda, XIX Khinpisura, XXI Rasin Pagoda	240	63 28 53 12 28 18	5 104538 4 877184 5 139632	127215 30793 26 122 137922 26 122	24 094 26 122 26 122	"

* A small theodolite reading to 1/16 of a minute.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	
			Log. feet	Feet	Miles				Log. feet	Feet	Miles		
241	Sautara, XX	36 38 29	5 233146	171059	32 398	254	Khanpissura, XXI	58 54 32	5 194038	156329	29 668	Inch 15	
	Khanpissura, XXI	10 3 2	4 699152	50021	9 474		Chincholi, XXIII	41 8 14	5 079535	120095	22 745		"
	Mugson	133 18 29	5 319252	208570	39 502		Pimpalgaon Hill Pagoda	5 254678	179754	34 044	"		
242	Sautara, XX	21 58 35	5 012765	102083	19 504	255	Chincholi, XXIII	30 46 56	5 075372	118952	22 529	"	
	Khanpissura, XXI	27 18 15	5 101175	126334	23 908		Khanpissura, XXI	19 52 30	4 897732	79019	14 966		"
	Sawarkhed Hill Temple	5 319252	208570	39 502	Koragiri Hill Mosque		5 254678	179754	34 044	"			
243	Chincholi, XXIII	12 1 0	5 012765	102983	19 504	256	Ahmednagar	66 58 84	5 075372	118952	22 529	"	
	Khanpissura, XXI	9 17 33	4 902397	79872	15 127		Khanpissura, XXI	40 46 5	4 926344	84400	15 985		"
	Sawarkhed Hill Temple	5 254678	179754	34 044	Koragiri Hill Mosque		5 090270	123103	23 315	"			
244	Khanpissura, XXI	16 19 27	4 896284	78756	14 916	257	Khanpissura, XXI	44 3 19	5 111832	129370	24 502	"	
	Chincholi, XXIII	23 34 52	5 049578	112093	21 230		Pärner, XXVI	5 250685	178109	33 733	"		
	Dongargaon No. 2	140 5 41	5 254678	179754	34 044		Nimbudern	62 44 40	5 218516	163392			31 324
245	Sawarkhed Hill Temple	11 33 52	4 204662	16020	3 034	258	Agargon, XXIV	41 52 33	5 111832	129370	24 502	"	
	Chincholi, XXIII	88 11 36	4 902397	79872	15 127		Pärner, XXVI	17 26 12	4 763985	58074	10 989		"
	Dongargaon No. 2	h.s.	4 896284	78756	14 916		Nimbudern	5 221849	166667	31 566	"		
246	Chincholi, XXIII	62 36 40	4 859504	72361	13 705	259	Ahmednagar	58 44 38	5 111832	129370	24 502	"	
	Dongargaon No. 2	h.s.	4 240094	17024	3 338		Pärner, XXVI	27 41 31	4 847128	70328	13 320		"
	Baleghat	104 54 0	4 896284	78756	14 916		Nimbudern	93 33 51	5 179098	151042	28 606		
247	Dongargaon No. 2	h.s.	4 755793	56989	10 793	260	Khanpissura, XXI	13 11 42	4 816963	65609	12 426	"	
	Baleghat	12 20 40	4 315199	20663	3 914		Ahmednagar	141 26 43	5 253192	179140	33 958		"
	Karikada Pagoda	h.s.	4 859504	72361	13 705		Dongargaon Hill Tower	5 090270	123103	23 315	"		
248	Dongargaon No. 2	15 18 40	4 566959	36894	6 988	261	Pärner, XXVI	54 50 29	5 150988	141575	26 814	"	
	Baleghat	15 52 50	4 582424	38232	7 241		Khanpissura, XXI	52 23 36	5 137312	137187	25 982		"
	Karur Hill Pagoda	h.s.	4 859504	72361	13 705		Koparvadi Hill Temple	5 218516	165392	31 324	"		
249	Pärner, XXVI	45 30 30	5 090270	123103	23 315	262	Ahmednagar	128 15 23	5 150988	141575	26 814	"	
	Khanpissura, XXI	61 4 29	5 170098	151042	28 606		Khanpissura, XXI	8 40 53	4 434785	27214	5 154		"
	Ahmednagar	73 25 1	5 218516	165392	31 324		Koparvadi Hill Temple	5 090270	123103	23 315	"		
250	Chincholi, XXIII	41 56 34	5 090270	123103	23 315	263	Pärner, XXVI	8 22 43	4 960875	91385	17 308	"	
	Khanpissura, XXI	60 38 35	5 205549	160527	30 403		Khanpissura, XXI	6 54 44	4 877816	75477	14 295		"
	Ahmednagar	77 24 51	5 254678	179754	34 044		Raitala	164 42 33	5 218516	165392	31 324		
251	Chincholi, XXIII	18 52 51	4 947547	88623	16 785	264	Chincholi, XXIII	20 49 29	4 960875	91385	17 308	15	
	Agargon, XXIV	18 38 36	4 942247	87548	16 581		Khanpissura, XXI	114 48 20	5 367982	233337	44 193		"
	Nefjun Hill	142 28 33	5 222223	166810	31 593		Raitala	5 254678	179754	34 044	"		
252	Chincholi, XXIII	18 18 56	4 945994	88307	16 725	265	Ahmednagar	44 10 26	4 732141	59069	10 221	"	
	Agargon, XXIV	18 5 54	4 940988	82295	16 533		Nimbudern	21 3 53	4 444631	27838	5 272		"
	Nefjun Hill	5 222223	166810	31 593	Ahmednagar Masjid		4 847128	70328	13 320	"			
253	Agargon, XXIV	66 48 6	5 194038	159329	29 668	266	Ahmednagar	50 28 31	4 751339	56408	10 683	"	
	Chincholi, XXIII	11 50 43	4 546576	35203	6 667		Nimbudern	23 37 0	4 466815	29296	5 549		"
	Pimpalgaon Hill Pagoda	5 222223	166810	31 593	Ahmednagar Fort		4 847128	70328	13 320	"			

* A small theodolite reading to half a minute.

† For another triangle to this station, see Khanpissura Meridional Series, by which the value of the common side was less by 36 feet.

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle			No. of Triangle	Station	Corrected Plane Angle			No. of Triangle	Station	Distance			Theodolite						
		°	'	"			Log. feet	Feet	Miles			Log. feet	Feet	Miles							
207	Nimbadera	h.s.	17	58	47	h.s.	17	58	47	280	Khanpissura, XXI Bori, XXII Pedgaon Pagoda	4	375709	23752	4	633882	43041	8	152	15	
	Ahmednagar	"	48	4	45		4	757813	57355			10	844	4	96974	93320	17	674	"		
	Ahmednagar Bhingar Tomb	"						847128	70328			13	320	5	126781	133900	25	360	"		
208	Khanpissura, XXI	h.s.	11	4	45	h.s.	11	4	45	281	Khanpissura, XXI Bori, XXII Sedatek Hill Temple	4	375709	23752	4	542323	3859	6	602	"	
	Ahmednagar	"	84	4	54		5	087113	122946			23	285	5	04020	115883	21	948	"		
	Ahmednagar Bhingar Tomb	"						09270	123103			23	315	5	126781	133900	25	360	"		
209	Parnor, XXVI	h.s.	38	4	23	h.s.	38	4	23	282	Khanpissura, XXI Bori, XXII Dhond Pagoda	4	904730	80393	15	209	4	354881	22640	4	288
	Raitala	"	106	30	14		5	09409	124856			23	647	5	08091	125340	23	739	"		
	Ahmednagar Church	"						877816	75477			14	295	5	126781	133900	25	360	"		
270	Ahmednagar	h.s.	68	38	31	h.s.	68	38	31	283	Khanpissura, XXI Bori, XXII Dhond Hill Pagoda	4	818125	65785	12	459	4	266429	19789	3	748
	Nimbadera	"	26	42	33		4	501718	31748			6	013	5	152173	141962	26	887	"		
	Ahmednagar Fara Bigh	"						847128	70328			13	320	5	126781	133900	25	360	"		
271	Nimbadera	h.s.	114	36	10	h.s.	114	36	10	284	Bori, XXII Dhauleshvar, XXVII Kurkumb Dipmal	5	185720	13365	29	046	5	122827	132686	25	130
	Ahmednagar	"	40	45	20		5	041855	110117			20	856	4	491802	31031	5	877	"		
	Dhoki Hill Pagoda	"						847128	70328			13	320	5	268798	161733	30	631	"		
272	Parnor, XXVI	h.s.	83	45	47	h.s.	83	45	47	285	Dhauleshvar, XXVII Babulsar, XXV Patas Hill Pagoda	5	183720	15393	29	046	5	144092	139345	26	391
	Ahmednagar	"	17	59	18		4	678008	47644			9	023	5	066330	116501	22	085	"		
	Dhoki Hill Pagoda	"						179098	151042			28	606	5	092005	123767	23	441	"		
273	Nimbadera	h.s.	114	59	52	h.s.	114	59	52	286	Bori, XXII Babulsar, XXV Patas Hill Pagoda	5	178414	150804	28	561	5	144092	139345	26	391
	Ahmednagar	"	39	59	57		5	029190	106952			20	256	4	657775	45475	8	613	"		
	Dhoki Hill	"						847128	70328			13	320	5	235818	172115	32	597	"		
274	Parnor, XXVI	h.s.	80	21	15	h.s.	80	21	15	287	Bori, XXII Dhauleshvar, XXVII Palvan	5	178414	150804	28	561	5	362732	239532	43	661
	Ahmednagar	"	18	44	41		4	691579	49156			9	310	5	341712	210640	41	599	"		
	Dhoki Hill	"						179098	151042			28	606	5	268798	161733	30	631	"		
275	Khanpissura, XXI	h.s.	43	55	50	h.s.	43	55	50	288	Mandvi, XXXI Dighi, XXVIII Purandhar Fort	4	951218	89375	16	927	5	112421	129545	24	535
	Ahmednagar	"	63	12	24		5	006668	114992			21	779	5	295712	195566	37	418	"		
	Kambargaon Hill Tree	"						090270	123103			23	315	5	078477	119605	22	690	"		
276	Parnor, XXVI	h.s.	5	20	11	h.s.	5	20	11	289	Dhauleshvar, XXVII Dighi, XXVIII Purandhar Fort	4	355938	22690	4	297	5	112421	129545	24	535
	Raitala	"	12	41	5		4	728946	53573			10	146	4	936493	86396	16	363	"		
	Supa Hill Idgah	"						877816	75477			14	295	5	077621	119570	22	646	"		
277	Khanpissura, XXI	h.s.	72	39	39	h.s.	72	39	39	290	Purandhar Fort Dhauleshvar, XXVII Hareli	5	113168	129768	24	577	5	202958	159572	30	222
	Bori, XXII	"	27	17	30		4	794725	62334			11	866	4	967262	99372	18	820	"		
	Chanda Hill Pagoda	"						126781	133900			25	360	4	936493	86396	16	363	"		
278	Khanpissura, XXI	h.s.	43	6	2	h.s.	43	6	2	291	Palvan Dhauleshvar, XXVII Hareli	5	006896	101600	10	243	5	202958	159572	30	222
	Bori, XXII	"	21	7	25		4	729059	53587			10	449	40	31	48	5	177698	156625	28	528
	Kuldharan Hill	"						126781	133900			25	360	5	362732	239532	43	661	"		
279	Alenda, XIX	h.s.	50	17	22	h.s.	50	17	22	292	Dhauleshvar, XXVII Babulsar, XXV Bhuleshvar Hill Pagoda	5	006896	101600	10	243	5	062840	115569	21	888
	Bori, XXII	"	41	21	26		4	940849	87267			16	528	4	436180	27301	5	171	"		
	Kuldharan Hill	"						120631	132017			25	003	5	092605	123767	23	441	"		

* A small theodolite reading to half a minute.

† For another triangle to this station, see Mangalore Meridional Series, by which the value of the common side was less by a feet.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle o ' "	Distance			No. of Triangle	Station	Corrected Plane Angle o ' "	Distance			Theodolite used	
			Log. feet	Feet	Miles				Log. feet	Feet	Miles		
293	Dighi, XXVIII	47 59 12	5.062840	115569	21.888	306	Mándvi, XXXI	50 57 56	5.017596	104135	19.723	Inch 15	
	Bábulsár, XXV	65 9 1	5.149662	141144	26.732		Dighi, XXVIII	65 41 52	5.087008	122182	23.141		"
	Bhuleshvar Hill Pagoda	5.155441	143935	27.090	Siuhgad		5.078477	119805	22.690	"	"		
294	Bábulsár, XXV	52 8 32	4.328938	109380	20.716	307	Dhauleshvar, XXVII	45 33 33	5.017596	104135	19.723	"	
	Dhauleshvar, XXVIII	11 9 35	4.428347	26813	5.078		Dighi, XXVIII	79 22 34	5.156495	143352	27.150		"
	Koudhápuri Pagoda	5.094605	123767	23.441	Siuhgad		5.077621	119570	22.640	"	"		
295	Dighi, XXVIII	82 46 42	5.251679	178517	33.810	308	Dhauleshvar, XXVII	33 12 43	4.974055	94201	17.841	"	
	Singí, XXX	45 57 12	5.111730	129339	24.496		Dighi, XXVIII	102 44 28	5.224654	167747	31.770		"
	Kanathur Hill Mark	5.147279	140372	26.586	Agamba		5.077621	119570	22.646	"	"		
296	Wáfgaon, XXIX	77 29 17	5.079229	120013	22.730	300	Mándvi, XXXI	51 39 45	4.974055	94201	17.841	"	
	Dighi, XXVIII	23 7 7	4.683658	48268	9.142		Dighi, XXVIII	42 19 58	4.907829	86878	15.318		"
	Jinjaria	5.082183	120832	22.885	Agamba		86 0 17	5.078477	119805	22.690	"		
297	Bábulsár, XXV	56 20 18	5.079229	120013	22.730	310	Agamba	100 40 52	5.085226	121682	23.046	"	
	Dighi, XXVIII	97 15 32	4.806982	64118	12.144		Mándvi, XXXI	38 32 22	4.887342	77151	14.612		"
	Jinjaria	5.155441	143935	27.090	Chanathur		40 46 46	4.907829	86878	15.318	"		
298	Bábulsár, XXV	22 29 9	4.695748	49630	9.400	311	Purandhar Fort	5.085226	121682	23.046	"		
	Párner, XXVI	95 6 39	5.111437	129252	24.480		Mándvi, XXXI	50 50 57	5.185373	153240		29.023	"
	Korthan Hill Dippal	5.060714	115004	21.781	Chanathur		91 8 31	5.295712	197566	37.418		"	
299	Párner, XXVI	41 32 1	5.135954	136758	25.901	312	Mándvi, XXXI	148 31 57	5.023836	105642	20.008	"	
	Wáfgaon, XXIX	95 2 48	5.312715	205454	38.911		Agamba	7 54 41	4.444902	27855	5.276		"
	Varoda	43 25 11	5.151572	141766	26.850		Tung Fort	4.907829	86878	15.318	"		
300	Singí, XXX	62 5 31	5.135954	136758	25.901	313	Singí, XXX	18 51 37	4.630879	42744	8.006	"	
	Wáfgaon, XXIX	66 15 43	5.151258	141663	26.830		Mándvi, XXXI	93 45 1	5.120395	131945	24.990		"
	Varoda	51 38 46	5.084072	121359	22.985		Morguri Fort	67 23 22	5.086593	122065	23.118		"
301	Singí, XXX	33 59 58	4.917659	82729	15.668	314	Dighi, XXVIII	40 44 47	4.980146	95531	18.003	"	
	Varoda	72 45 28	5.150134	141207	26.761		Singí, XXX	65 42 3	5.125137	133394	25.264		"
	Narányangad Hill Pagoda	5.151258	141663	26.830	Bhatras		73 33 10	5.147279	140372	26.586	"		
302	Dighi, XXVIII	35 17 13	4.909728	81232	15.385	315	Mándvi, XXXI	34 36 55	4.980146	95531	18.003	"	
	Singí, XXX	51 18 25	5.040424	109755	20.787		Singí, XXX	11 55 26	4.540905	34746	6.581		"
	Sauringi Hill Tree	5.147279	140372	26.586	Bhatras		133 27 39	5.086593	122065	23.118	"		
303	Dighi, XXVIII	52 30 55	5.046999	114429	21.104	316	Singí, XXX	30 3 47	4.889978	77621	14.701	"	
	Singí, XXX	39 3 35	4.946874	88486	16.759		Mándvi, XXXI	21 55 0	4.762100	57535	10.954		"
	Vakalvadi	88 25 30	5.147279	140372	26.586		Pála	128 1 13	5.086593	122065	23.118		"
304	Dhauleshvar, XXVII	22 0 24	4.801267	63280	11.985	317	Bhatras	157 23 34	4.889978	77621	14.701	"	
	Dighi, XXVIII	23 4 7	4.820668	66171	12.532		Mándvi, XXXI	12 41 55	4.647254	44387	8.407		"
	Phursangi Pagoda	5.077621	119570	22.640	Pála		9 54 31	4.540905	34746	6.581	"		
305	Dighi, XXVIII	97 0 50	5.179416	151153	28.627	318	Bhatras	65 3 49	4.793187	62114	11.764	"	
	Mándvi, XXXI	31 6 35	4.895999	79686	14.903		Mándvi, XXXI	84 27 21	4.833650	68179	12.913		"
	Bápedeghat Hill Pagoda	5.078477	119805	22.690	Shelkarvadi		30 28 50	4.540905	34746	6.581	"		

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used	
			Log. feet	Feet	Miles				Log. feet	Feet	Miles		
319	Pála	h.s.	4° 79' 31.87	62114	0	11.764	Karanja, XXXIV Kapra Pangoli	13 9 5	4° 71' 94.59	52415	9.927	Theodolite used 15	
	Mándvi, XXXI	"	4° 9' 18.305	82852	15.692	"		135 19 13	5° 20' 47.4	161985	30.679		"
	Shedavádi	"	4° 88' 99.78	77621	14.791	"		31 31 42	5° 08' 08.66	120466	22.816		"
320	Singi, XXX	h.s.	4° 93' 08.52	85281	16.152	"	Mándvi, XXXI Bhoja Pangoli	64 33 53	4° 88' 83.72	77334	14.647	"	
	Mándvi, XXXI	h.s.	4° 63' 70.3	43401	8.220	"		59 47 20	4° 86' 70.24	73625	13.944		"
	Umbra	"	5° 08' 65.93	122065	23.118	"		56 8 47	4° 85' 19.70	71116	13.469		"
321	Dighi, XXVIII	h.s.	4° 93' 08.52	85281	16.152	"	Kapra Pangoli Rájváchí Hill Fort	14 33 49	4° 17' 30.87	14897	2.821	"	
	Mándvi, XXXI	h.s.	5° 01' 65.56	103886	19.675	"		47 39 36	4° 64' 13.66	43789	8.293		"
	Umbra	h.s.	5° 07' 84.77	119805	22.690	"		4 71' 94.59	5° 41' 5	52415	9.927		"
322	Bhatras	h.s.	4° 46' 50.7	70227	13.301	"	Aupa Kapra Nágháni Hill Mark	17 53 23	4° 75' 15.00	56429	10.687	"	
	Mándvi, XXXI	"	4° 58' 89.83	38813	7.351	"		113 23 55	5° 22' 68.29	168589	31.930		"
	Jerra	"	4° 54' 09.05	34746	6.581	"		5 13' 99.69	5° 13' 99.69	138028	26.142		"
323	Pála	h.s.	4° 16' 27	846597	70227	13.301	Mira Dongar, XXXIII Karanja, XXXIV Nalauda	78 27 7	5° 04' 50.29	110925	21.008	"	
	Mándvi, XXXI	"	4° 00' 01.1	40180	7.610	"		39 42 7	4° 85' 92.71	72322	13.697		"
	Jerra	"	4° 88' 99.78	77621	14.791	"		61 50 46	4° 99' 22.3	99821	18.906		"
324	Bhatras	h.s.	4° 24' 13.1	17544	3.323	"	Prabal, XXXII Golba Observatory, Bombay, XXXVI Mankigad Hill Fort	86 23 6	5° 04' 50.29	110925	21.008	"	
	Jerra	"	4° 41' 77.6	27055	5.238	"		19 43 24	4° 57' 59.8	37662	7.133		"
	Kárlí Base-line W. End	h.s.	4° 58' 89.83	38813	7.351	"		5 02' 83.16	5° 02' 83.16	106737	20.215		"
325	Bhatras	h.s.	4° 33' 16.72	21462	4.065	"	Prabal, XXXII Golba Observatory, Bombay, XXXVI Mankigad Hill Fort	67 17 8	5° 12' 80.66	134306	25.437	"	
	Kárlí Base-line W. End	h.s.	4° 27' 49.20	18833	3.597	"		20 13 4	4° 70' 17.18	50317	9.530		"
	Kárlí Base-line E. End	"	4° 41' 77.6	27655	5.238	"		5 16' 27.45	5° 16' 27.45	145460	27.549		"
326	Jerra	h.s.	4° 33' 16.72	21462	4.065	"	Prabal, XXXII Mira Dongar, XXXIII Karnála Hill Fort	40 15 40	4° 86' 43.35	73170	13.858	"	
	Kárlí Base-line W. End	h.s.	4° 37' 31.58	23613	4.472	"		24 49 46	4° 67' 08.4	47543	9.004		"
	Kárlí Base-line E. End	"	4° 24' 13.1	17544	3.323	"		5 01' 15.14	5° 01' 15.14	102607	19.448		"
327	Singi, XXX	h.s.	5° 19' 37.88	156238	29.591	"	Karanja, XXXIV Mira Dongar, XXXIII Karnála Hill Fort	46 58 9	4° 86' 43.35	73170	13.858	"	
	Mándvi, XXXI	h.s.	4° 78' 68.14	61209	11.593	"		38 46 7	4° 79' 12.3	62679	11.871		"
	Bhímashakar Hill Tree	"	5° 08' 65.93	122065	23.118	"		4 99' 22.3	4° 99' 22.3	99821	18.906		"
328	Karanja, XXXIV	h.s.	4° 95' 56.7	91110	17.256	"	Mándvi, XXXI Mira Dongar, XXXIII Jinkhor Hill Peak	37 41 24	4° 97' 31.86	94013	17.805	"	
	Singi, XXX	h.s.	5° 37' 65.84	238004	45.076	"		83 33 1	5° 18' 41.11	152796	28.939		"
	Aupa	"	5° 40' 10.74	251810	47.691	"		5 11' 83.5	5° 11' 83.5	131472	24.900		"
329	Mándvi, XXXI	h.s.	4° 95' 56.7	91110	17.256	"	Karanja, XXXIV Mira Dongar, XXXIII Jinkhor Hill Peak	54 28 59	4° 97' 31.86	94013	17.805	"	
	Singi, XXX	h.s.	5° 20' 33.50	196042	37.129	"		65 43 18	5° 02' 37.7	105287	19.941		"
	Aupa	h.s.	5° 08' 65.93	122065	23.118	"		4 99' 22.3	4° 99' 22.3	99821	18.906		"
330	Mira Dongar, XXXIII	h.s.	5° 08' 65.93	120466	22.816	"	Pangoli Kapra Sondavádi Hill Peak	19 10 11	4° 42' 38.82	26538	5.026	"	
	Karanja, XXXIV	h.s.	4° 91' 26.60	83935	15.726	"		120 23 55	4° 84' 33.94	69710	13.203		"
	Kapra	h.s.	4° 99' 22.3	99821	18.906	"		4 71' 94.59	5° 41' 5	52415	9.927		"
331	Aupa	h.s.	5° 08' 65.93	120466	22.816	"	Kolba Observatory, Bombay, XXXVI Karanja, XXXIV Chandri East Peak	40 17 0	5° 11' 35.28	129876	24.598	"	
	Karanja, XXXIV	h.s.	4° 41' 26.60	138028	26.142	"		126 30 5	5° 20' 80.5	161487	30.581		"
	Kapra	"	5° 37' 65.84	238004	45.076	"		4 66' 20.10	4° 66' 20.10	45921	8.697		"

* Base taken from the South Konkan Coast Series.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle o ' "	Distance			Theodolite used
			Log. feet	Feet	Miles	
345	Singi, XXX	23 53 53	5 113528	120876	24 598	Inch 15
	Karanja, XXXIV	27 51 52	5 175626	140839	28 379	
	Chandri East Peak	5 401074	251810	47 091		
346	Singi, XXX	24 22 18	5 111023	129129	24 456	"
	Karanja, XXXIV	29 12 37	5 183871	152711	28 923	
347	Chandri West Peak	5 401074	251810	47 691		"
	Colaba Observatory, Bombay, XXXVI	41 16 35	5 111023	129129	24 456	
	Karanja, XXXIV	125 9 20	5 204218	160036	30 310	
348	Chandri West Peak	4 662010	45921	8 697		"
	Colaba Observatory, Bombay, XXXVI	60 28 9	5 180820	151642	28 720	
349	Mira Dongar, XXXIII	64 0 44	5 194961	156661	29 671	"
	Uravra Hill Peak	81 51 41	5 157346	143663	27 209	
	Karanja, XXXIV	57 28 24	5 111116	120157	24 461	
350	Mira Dongar, XXXIII	89 14 56	5 329713	213655	40 465	"
	Singi, XXX	55 54 44	5 247876	176960	33 515	
	Maland Hill No. 1	5 086593	122065	23 118		
351	Karanja, XXXIV	69 23 26	5 329713	213655	40 465	"
	Maland Hill No. 1	32 43 5	5 348665	223185	42 270	
	Mira Dongar, XXXIII	96 31 2	5 320996	213794	40 491	
352	Maland Hill No. 2	45 49 22	5 188444	154328	29 229	"
	Singi, XXX	89 10 10	5 329996	213794	40 491	
	Maland Hill No. 2	56 1 6	5 248709	177300	33 580	
353	Karanja, XXXIV	27 55 35	5 719012	52362	9 917	"
	Maland Hill No. 2	79 24 25	5 040288	109908	20 816	
	Prabal, XXXII	5 028316	106737	20 215		
354	Trombay Masjid	65 15 7	4 719012	52362	9 917	"
	Colaba Observatory, Bombay, XXXVI	61 5 20	4 706607	50887	9 648	
	Karanja, XXXIV	4 602010	45921	8 697		
355	Trombay Masjid	26 11 49	4 588777	38795	7 348	"
	Colaba Observatory, Bombay, XXXVI	17 11 18	4 444465	25970	4 918	
	Butcher's Island Tower	4 780781	60364	11 433		
356	Karanja, XXXIV	12 54 15	4 257858	18107	3 459	"
	Trombay, XXXV	116 0 15	4 862573	72874	13 802	
	Bombay, Siou Fort	4 799993	63095	11 950		

POONA SECONDARY TRIANGULATION.						
No. of Triangle	Station	Corrected Plane Angle o ' "	Distance			Theodolite used
			Log. feet	Feet	Miles	
358	Karanja, XXXIV	65 44 38	4 785128	60972	11 548	Inch 15
	Trombay, XXXV	43 30 52	4 663992	46131	8 737	
	Bombay, Colaba Light-house	4 799993	63095	11 950		
359	Mandvi, XXXI	48 24 17	4 786483	61162	11 584	"
	Aglamba	50 7 53	4 797755	62770	11 888	
	Poona Base-line W. End	81 27 50	4 907829	80878	15 318	
360	Dighi, XXVIII	38 45 37	4 786483	61162	11 584	"
	Aglamba	35 32 24	4 757759	57248	10 842	
	Poona Base-line W. End	105 21 59	4 974055	94201	17 841	
361	Aglamba	31 42 28	4 530946	33958	6 431	"
	Poona Base-line W. End	77 5 42	4 799191	62978	11 928	
	Poona Base-line E. End	71 11 50	4 786483	61162	11 584	
362	Dighi, XXVIII	30 28 6	4 530946	33958	6 431	"
	Poona Base-line W. End	28 16 17	4 501341	31721	6 008	
	Poona Base-line E. End	121 15 37	4 757759	57248	10 842	
363	Dighi, XXVIII	3 50 12	3 939181	8693	1 646	"
	Poona Base-line E. End	162 1 53	4 602923	40080	7 591	
	Banera White Pagoda	80 10 17	3 939181	31721	6 008	
364	Poona Base-line E. End	76 42 28	3 933809	8586	1 626	"
	Banera White Pagoda	3 539631	3464	0 656		
	Poona Base-line No. 8	80 10 17	3 939181	8693	1 646	
365	Poona Base-line E. End	53 2 53	3 581133	3812	0 722	"
	Poona Base-line No. 8	80 22 27	3 672353	4703	0 891	
	Pimpri Nilakh	46 34 40	3 539631	3464	0 656	
366	Poona Base-line No. 3	45 4 58	4 030939	10738	2 034	"
	Pimpri Nilakh	120 21 32	4 116776	13085	2 478	
	Mahalunga	14 33 30	3 581133	3812	0 722	
367	Mahalunga	32 46 39	3 701819	6102	1 173	"
	Pimpri Nilakh	77 21 15	4 047653	11160	2 114	
	Poona Base-line No. 2	69 52 6	4 030939	10738	2 034	
368	Poona Base-line No. 3	99 37 32	3 791819	6102	1 173	"
	Pimpri Nilakh	43 0 17	3 631798	4283	0 811	
	Poona Base-line No. 2	37 22 11	3 581133	3812	0 722	

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
369	Poona Base-line No. 3 s.	54 32 35	4 182473	15222	2 883	382	Dighi, XXVIII	55 19 0	4 448399	28080	5 318	Inch 15
	Mahatunga No. 1 "	81 0 50	4 266191	18458	3 496		Poona Base-line E. End	56 25 0	4 451051	28448	5 368	
370	Poona Base-line No. 1 s.	44 26 35	4 116776	13085	2 478	383	Yaravda Hill	17 1 6	4 501341	31721	6 008	24
	Mahatunga h.s.	30 46 30	3 902360	7987	1 513		Dhauleshvar, XXVII	54 48 41	4 501297	36832	6 976	
371	Poona Base-line No. 2 s.	72 0 26	4 171595	14846	2 812	384	Poona Observatory	108 10 13	5 077621	119570	22 646	15
	Mahatunga h.s.	77 13 4	4 182473	15222	2 883		Poona Old Observatory	47 15 15	4 663477	73026	13 831	
372	Poona Base-line No. 1 s.	18 39 10	3 902360	7987	1 513	385	Poona Church	24 3 52	4 607969	40548	7 680	"
	Mahatunga h.s.	134 48 7	4 248419	17718	3 350		Mandvi, XXXI	19 17 25	4 625814	42249	8 002	
373	Poona Base-line No. 1 s.	46 48 16	4 088935	12273	2 324	386	Poona Church	91 11 25	5 106740	127862	24 216	"
	Mahatunga Pagoda	61 52 4	4 171595	14846	2 812		Poona Base-line E. End	76 4 15	4 625814	42249	8 002	
374	Poona Base-line No. 2 s.	13 19 28	3 732657	5403	1 023	387	Poona Church	57 8 58	4 563101	36568	6 026	"
	Pimpia Nilakh Baleradi House	27 9 42	4 029495	10703	2 027		Dighi, XXVIII	54 42 0	4 889083	77461	14 671	
375	Dighi, XXVIII	64 16 3	3 763918	5806	1 100	388	Poona Base-line E. End	28 17 0	4 652944	44972	8 517	"
	Poona Base-line E. End	41 52 8	3 633079	4302	0 815		Vanandi Bunglow	23 12 17	4 679106	47765	9 046	
376	Poona Base-line E. End	5 29 7	3 696156	4968	0 941	389	Poona Base-line E. End	75 34 13	5 069669	117400	22 235	"
	Kirkee Idgh	32 7 53	4 441543	27641	5 235		Parvati Pagoda No. 1	23 30 38	4 679106	47765	9 046	
377	Dighi, XXVIII	25 8 12	4 164566	14607	2 767	390	Dhauleshvar, XXVII	23 43 22	4 682082	48103	9 127	"
	Poona Base-line E. End	42 8 55	4 363162	23076	4 371		Dighi, XXVIII	69 45 1	5 050712	112386	21 285	
378	Poona Base-line E. End	31 11 52	4 234163	17146	3 247	391	Parvati Pagoda No. 2	145 54 58	4 254403	17964	3 402	"
	Kirkee House	42 11 53	4 347011	22234	4 211		Poona Base-line No. 3	27 52 46	4 175787	14989	2 839	
379	Dhauleshvar, XXVII	11 24 5	4 373650	23639	4 477	392	Ganesh Khind Pagoda	16 17 41	4 275474	18857	3 571	"
	Dighi, XXVIII	77 47 1	5 067718	116874	22 135		Poona Base-line E. End	53 16 12	4 731303	53805	10 202	
380	Kirkee Refuse Kiln (heliotrope)	12 55 6	4 428689	26834	5 082	393	Ganesh Khind Hill	23 31 59	4 275474	18857	3 571	"
	Poona Base-line No. 8 s.	82 6 8	5 075152	118892	22 517		Poona Base-line E. End	114 16 21	4 634003	43053	8 154	
381	Dhauleshvar, XXVII	13 25 51	4 477924	30056	5 602	394	Poona Base-line W. End	40 43 25	4 392674	24609	4 678	"
	Mahatunga Kirkee Church	33 26 6	4 310673	20449	3 873		Sua Hill No. 1	120 44 15	4 512408	32539	6 163	
382	Poona Base-line No. 8 s.	76 29 56	5 077621	119570	22 646	395	Poona Base-line W. End	40 43 25	4 392674	24609	4 678	"
	Kirkee Mess House (heliotrope)	5 077621	119570	22 646	5 077621		Sua Hill No. 1	120 44 15	4 512408	32539	6 163	

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles	
395	Poona Base-line No. 2 s.	53 43 42	4 217557	16503	3 126	Inch 15
	Poona Base-line No. 1 "	82 26 39	4 307316	20292	3 843	"
	Sus Hill No. 2	4 151516	14175	2 685	"	"
396	Poona Base-line No. 2 s.	69 26 42	4 343334	22046	4 175	"
	Poona Base-line No. 1 "	73 32 24	4 353729	22580	4 277	"
	Sus Rock	4 151516	14175	2 685	"	"
397	Mahalunga Sus s.	41 59 44	3 729870	5369	1 017	"
	Sus h.s.	42 27 34	3 733744	5417	1 026	"
	Sus Pagoda	3 902360	7987	1 513	"	"
398	Poona Base-line No. 1 s.	18 12 37	4 302127	20051	3 797	"
	Sus h.s.	148 24 41	4 526449	33608	6 365	"
	Laula Hill Pagoda	4 171595	14846	2 812	"	"
399	Dhaleshvar, XXVII Dighi, XXVIII s.	16 21 57	4 611530	40882	7 743	"
	Banera Hill Pagoda	108 8 9	5 139597	137882	26 114	"
		5 077621	119570	22 640	"	"
400	Poona Base-line E. End s.	134 43 57	3 825103	6685	1 266	"
	Poona Base-line No. 8 "	23 39 56	3 577174	3777	0 715	"
	Aundus Pagoda	3 539631	3464	0 656	"	"
401	Poona Base-line E. End s.	46 31 17	3 625079	4218	0 799	"
	Poona Base-line No. 8 "	96 53 33	3 761213	5771	1 093	"
	Pimpia Nilakh Pagoda	3 539631	3464	0 656	"	"
402	Pimpia Nilakh s.	100 56 30	3 625079	4218	0 799	"
	Poona Base-line No. 3 "	16 31 6	3 086658	1221	0 231	"
	Pimpia Nilakh Pagoda	3 581133	3812	0 722	"	"

BOMBAY ISLAND SECONDARY TRIANGULATION.

No. of Triangle	Station	Corrected Plane Angle	Distance			Theodolite used
			Log. feet	Feet	Miles	
411	Trombay, XXXV s.	43 39 4	4 661669	45885	8 600	"
	Karanja, XXXIV s.	64 41 50	4 778851	60097	11 382	"
	Bombay, Colaba s.	71 39 6	4 799993	63095	11 950	"
412	Bombay, Colaba s.	48 30 22	4 595962	39442	7 470	"
	Karanja, XXXIV s.	70 52 31	4 690808	49752	9 423	"
	Elephanta h.s.	60 37 7	4 661669	45885	8 600	"

* Deducted base.
 Note.—The observations of the Bombay Island Triangulation were made with a 14-inch Theodolite, with the exception of those of Triangles 405, 406 and 407 which were made with a 10-inch Theodolite.

No. of Triangle	Station	Corrected Plane Angle	Distance			Time in Days	Station	Corrected Plane Angle	Distance			
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
415	Uran Crosse Island Bombay, Colába	h.s. s. "	35 50 5 92 41 10 51 28 45	4 355859 4 587892 4 481788	22691 38716 30344	4 208 7 333 5 743	Kurla Trombay, XXXV Bombay, Golangi	h.s. "	79 4 29 59 8 26 41 47 5	4 405620 4 347267 4 237255	25446 22247 17269	4 819 4 213 3 271
416	Crosse Island Bombay, Colába " Malabar	s. h.s. "	62 26 16 43 34 25 73 59 19	4 320725 4 211441 4 355859	20928 16272 22691	3 964 3 082 4 298	Bombay, Golangi Trombay, XXXV Butcher's Island	h.s. s.	63 36 7 53 3 56 63 19 57	4 406639 4 357186 4 405620	25506 22761 25446	4 831 4 311 4 819
417	Bombay, Colába " " St. Thomas's Cathedral	s. h.s.	37 0 10 42 15 16 100 44 34	4 107895 4 156047 4 320725	12820 14323 20928	2 428 2 713 3 964	Butcher's Island Trombay, XXXV Elephantia	s. h.s.	69 31 44 29 17 44 80 50 32	4 384815 4 101799 4 406639	24256 12642 25506	4 594 2 394 4 831
418	Bombay, St. Thomas's Cathedral " Malabar " Vári Bandar	s. h.s. "	59 2 27 51 29 26 69 28 7	4 060648 4 029884 4 107895	11739 10712 12820	2 223 2 029 2 428	Trombay, XXXV Elephantia Bombay, Colába	h.s. s.	53 43 47 103 7 29 23 8 44	4 696808 4 778851 4 384815	49752 60097 44256	9 423 11 382 4 594
419	Bombay, Malabar " Vári Bandar " Khaumbála	h.s. s. t.s.	60 4 50 35 54 39 84 0 31	4 009909 3 840314 4 069448	10231 6923 11739	1 938 1 311 2 223	Karanja, XXXIV Crosse Island Bombay, Colába	s. "	29 2 26 78 59 33 71 58 1	4 355859 4 661669 4 647858	22691 45835 44449	4 298 8 690 8 418
420	Bombay, Vári Bandar " Khaumbála " Reek	h.s. t.s. s.	73 16 14 39 33 58 67 9 48	4 026578 3 849477 4 009909	10631 7071 10231	2 013 1 339 1 938	Trombay, XXXV Elephantia Bombay, Golangi	h.s. "	82 21 40 50 23 15 47 15 5	4 515047 4 405620 4 384815	32738 25446 24256	6 200 4 819 4 594
421	Bombay, Khaumbála " Reek " Chepti	t.s. s. "	64 17 6 44 45 58 70 56 56	4 005748 3 898746 4 026578	10133 7920 10631	1 919 1 500 2 013	Bombay, Colába Elephantia Bombay, Golangi	s. h.s. "	41 2 25 52 44 14 86 13 21	4 515047 4 598593 4 696808	32738 59682 49752	6 200 7 516 9 423
422	Bombay, Reek " Chepti " Golangi	s. h.s. "	80 34 3 42 13 32 57 12 25	4 075230 3 908545 4 005748	11891 8101 10133	2 252 1 534 1 919	Elephantia Uran Bombay, Golangi	h.s. "	102 9 52 46 3 29 31 46 39	4 647827 4 515047 4 379189	44445 32738 23944	8 418 6 200 4 535
423	Bombay, Chepti Golangi " Dádar	s. h.s. s.	31 57 54 85 49 17 62 12 49	3 852223 4 127822 4 075230	7116 13405 11891	1 348 2 539 2 252	Elephantia Bombay, Golangi Prongs Light-house	h.s. "	56 18 2 88 45 14	4 677147 4 756943 4 515047	47550 57140 32738	9 006 10 822 6 200
424	Bombay, Golangi " Dádar " Mátunga	h.s. s. h.s.	53 22 30 75 7 51 51 29 39	3 863190 3 943922 3 852223	7268 8780 7116	1 382 1 665 1 348	Uran Bombay, Golangi Prongs Light-house	h.s. "	65 4 11 56 58 35	4 677147 4 643101 4 647827	47550 43964 44445	9 006 8 327 8 418
425	Bombay, Dádar " Mátunga " Malamála	s. h.s. s.	70 8 48 42 10 13 62 40 59	3 887021 3 779869 3 863190	7726 6024 7268	1 463 1 141 1 382	Bombay, St. Thomas's Cathedral " Colába " Oyster Rock	s. "	19 4 55 41 31 2	3 730368 4 037338 4 156047	5375 10898 14323	1 018 2 064 2 713
426	Bombay, Malamála " Mátunga Kurla	s. h.s. "	87 0 55 59 9 31 33 49 34	4 141740 4 076115 3 887931	13859 11916 7726	2 625 2 257 1 463	Uran Bombay, Colába Oyster Rock	h.s. s.	2 36 33 16 31 58	3 730368 4 526318 4 587892	5375 33598 38716	1 018 6 363 7 333
427	Bombay, Mátunga Kurla Trombay, XXXV	h.s. "	63 33 36 70 29 56 45 56 28	4 237255 4 259581 4 141740	17269 18179 13859	3 271 3 443 2 625	Bombay, Colába St. Thomas's Cathedral " Walkeshwar	s. h.s.	51 14 9 75 40 36 53 5 15	4 145144 4 239486 4 156047	13068 17357 14323	2 646 3 287 2 713

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance			
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
441	Bombay, Malabar	h.s.	4' 145144	13968	2.646	454	Bombay, Colaba	s.	4' 101153	15529	2.941	
	" St. Thomas's Cathedral	s.	3' 772339	5920	1.121		" Wálkeshwar	h.s.	3' 981168	9376	1.814	
	" Wálkeshwar	h.s.	4' 107895	12820	2.428		" Colaba Fort Press	h.s.	4' 239486	17357	3.287	
442	Bombay, Malabar	h.s.	4' 134632	13634	2.582	455	Bombay, St. Thomas's Cathedral	s.	4' 191153	15529	2.941	
	" St. Thomas's Cathedral	s.	4' 366740	20265	3.838		" Wálkeshwar	h.s.	3' 724623	5304	1.005	
	" Colaba R. C. Chapel	h.s.	4' 107895	12820	2.428		" Colaba Fort Press	h.s.	4' 145144	13968	2.646	
443	Bombay, Wálkeshwar	h.s.	4' 134632	13634	2.582	456	Bombay, Colaba	s.	55 38 57	14372	2.722	
	" St. Thomas's Cathedral	s.	4' 224879	16783	3.179		" Wálkeshwar	h.s.	3' 939789	8705	1.649	
	" Colaba R. C. Chapel	h.s.	4' 145144	13968	2.646		" Colaba Cotton Press	h.s.	4' 239486	17357	3.287	
444	Cross Island	s.	4' 253832	17940	3.308	457	Bombay, Malabar	h.s.	4' 157504	14372	2.722	
	Bombay, Malabar	h.s.	4' 287448	19384	3.671		" Wálkeshwar	h.s.	4' 190565	15508	2.937	
	" Colaba Church	h.s.	4' 211441	16272	3.082		" Colaba Cotton Press	h.s.	3' 772339	5920	1.121	
445	Bombay, St. Thomas's Cathedral	s.	4' 253832	17940	3.308	458	Bombay, St. Thomas's Cathedral	s.	119 21 51	15989	3.028	
	" Malabar	h.s.	4' 036297	16922	2.609		" Malabar	h.s.	3' 710099	5151	0.976	
	" Colaba Church	h.s.	4' 107895	12820	2.428		" Hydraulic Press	h.s.	4' 107895	12820	2.428	
446	Bombay, Colaba	s.	4' 167477	14705	2.785	459	Bombay, Colaba	s.	46 53 6	15989	3.028	
	" Wálkeshwar	h.s.	3' 175553	5195	0.984		" Malabar	h.s.	3' 981551	9584	1.815	
	" Colaba Monument	h.s.	4' 239486	17357	3.287		" Hydraulic Press	h.s.	4' 320725	20928	3.964	
447	Bombay, Malabar	h.s.	4' 167477	14705	2.785	460	Cross Island	s.	80 30 17	4.492336	31070	5.884
	" Wálkeshwar	h.s.	4' 232807	17093	3.237		" Uran	h.s.	4' 127033	13416	2.541	
	" Colaba Monument	h.s.	3' 772339	5920	1.121		Bombay, Dolphin Light	h.s.	4' 481788	30324	5.743	
448	Bombay, Colaba	s.	4' 147415	14042	2.659	461	Bombay, Colaba	s.	35 0 42	4.492336	31070	5.884
	" Wálkeshwar	h.s.	3' 813796	6513	1.234		" Uran	h.s.	3' 909422	9987	1.891	
	" Colaba Dharmshala	h.s.	4' 239486	17357	3.287		Bombay, Dolphin Light	h.s.	4' 587892	38716	7.333	
449	Bombay, St. Thomas's Cathedral	s.	4' 147415	14042	2.659	462	Bombay, St. Thomas's Cathedral	s.	99 27 16	4.139481	13787	2.611
	" Wálkeshwar	h.s.	3' 829933	7815	1.480		" Malabar	h.s.	3' 529771	3387	0.641	
	" Colaba Dharmshala	h.s.	4' 145144	13968	2.646		" Cooperage Tree	h.s.	4' 107895	12820	2.428	
450	Bombay, Malabar	h.s.	3' 834044	6824	1.292	463	Bombay, Wálkeshwar	h.s.	80 34 49	4.139481	13787	2.611
	" St. Thomas's Cathedral	s.	4' 211497	16274	3.082		" Malabar	h.s.	4' 128985	13458	2.549	
	" Cotton Press	h.s.	4' 107895	12820	2.428		" Cooperage Tree	h.s.	3' 772339	5920	1.121	
451	Bombay, Wálkeshwar	h.s.	3' 834044	6824	1.292	464	Bombay, Colaba	s.	59 53 1	4.188085	15420	2.921
	" St. Thomas's Cathedral	s.	4' 169290	14767	2.707		" Wálkeshwar	h.s.	4' 087180	12223	2.315	
	" Cotton Press	h.s.	4' 145144	13968	2.646		" Dockyard Flag-staff	h.s.	4' 239486	17357	3.287	
452	Bombay, Colaba	s.	4' 172531	14878	2.818	465	Cross Island	s.	51 28 32	4.107895	12820	2.428
	" Wálkeshwar	h.s.	3' 806854	7882	1.493		Bombay, Malabar	h.s.	31 44 3	3.935467	8619	1.632
	" Colaba Scott Press	h.s.	4' 239486	17357	3.287		" St. Thomas's Cathedral	s.	96 47 25	4.211441	16272	3.082
453	Bombay, St. Thomas's Cathedral	s.	4' 172531	14878	2.818	466	Bombay, Malabar	h.s.	31 21 12	3.856271	7182	1.360
	" Wálkeshwar	h.s.	3' 818867	6589	1.248		" St. Thomas's Cathedral	s.	36 53 5	3.918366	8285	1.569
	" Colaba Scott Press	h.s.	4' 145144	13968	2.646		" Kalbadevi Road	h.s.	111 45 43	4.107895	12820	2.428

BOMBAY LONGITUDINAL SERIES.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance			
			Log. feet	Feet	Miles				Log. feet	Feet	Miles	
467	Cross Island Bombay, St. Thomas's Cathedral " Kalbadevi Road	s. " " " "	51 4 50 59 54 20 69 0 50	3 856271 3 902391 3 935407	7182 7987 8619	480	Bombay, Malabar " Kalbadevi Road " Marine Lines Flag-staff	h.s. s. s.	33 42 18 97 12 18 3 918306	3 784162 4 036491 3 918306	6084 10877 8285	1 152 2 060 1 569
468	Bombay, Malabar " Kalbadevi Road " St. Andrew's Church	h.s. s. s.	36 37 23 109 51 47 69 0 50	3 951002 4 149019 3 918306	8952 14113 8285	481	Cross Island Bombay, Kalbadevi Road " Castle Flag-staff	s. s. s.	60 44 14 58 36 2 3 902391	3 902710 3 892333 3 902391	7993 7851 7987	1 514 1 481 1 513
469	Cross Island Bombay, Kalbadevi Road " St. Andrew's Church	s. " " " "	59 6 54 70 54 46	3 951002 3 993756 3 902391	8952 9857 7987	482	Cross Island Bombay, Kalbadevi Road " Palm Tree	s. " " " "	58 6 17 59 20 30	3 883166 3 888662 3 902391	7641 7742 7987	1 447 1 466 1 513
470	Bombay, St. Thomas's Cathedral " Walkeshwar " Band Stand	s. h.s. h.s.	74 31 21 9 34 21	4 131413 3 368335 4 145144	13534 2335 13908	483	Cross Island Bombay, St. Thomas's Cathedral " Mint	s. " " " "	7 7 35 29 14 5	3 256132 3 851271 3 935467	1804 7100 8619	0 342 1 345 1 632
471	Trombay, XXXV Elephanta Bombay, Dockyard Clock Tower	h.s. " " h.s.	54 28 1 94 35 56	4 584314 4 672406 4 384815	38399 47033 24256	484	Bombay, Kalbadevi Road " Malabar " House No. 1	s. h.s. " "	113 11 49 27 56 50	4 084192 3 791682 3 918306	12139 6190 8285	2 299 1 172 1 569
472	Uran Elephanta Bombay, Dockyard Clock Tower	h.s. " " " "	83 44 33 57 57 11	4 584314 4 515107 4 379189	38399 35742 23944	485	Bombay, Colaba Malabar " House No. 1	s. h.s. " "	34 54 14 45 39 32	4 084192 4 181065 4 320795	12139 15173 20928	2 299 2 874 3 964
473	Bombay, Malabar " Kalbadevi Road " Fort House	h.s. s. s.	35 37 43 109 44 53	3 928772 4 137222 3 918306	8487 13716 8285	486	Bombay, Colaba St. Thomas's Cathedral " Malabar Point Flag-staff	s. " " " "	53 22 39 71 34 9	4 146890 4 210532 4 150047	14025 16378 14323	2 656 3 140 2 713
474	Cross Island Bombay, Kalbadevi Road " Fort House	s. " " " "	56 54 15 71 3 40	3 928772 3 981483 3 902391	8487 9583 7987	487	Bombay, Kalbadevi Road " St. Thomas's Cathedral " Malabar Point Flag-staff	s. " " " "	83 21 52 66 3 30	4 146890 4 110730 3 856271	14025 12904 7182	2 656 2 444 1 360
475	Bombay, Kalbadevi Road " Malabar " Fort Cotton Press	s. h.s. h.s.	107 59 12 33 28 22	4 102009 3 865347 3 918306	12648 7334 8285	488	Bombay, Colaba Walkeshwar " Malabar Hill Flag-staff	s. h.s. " "	7 59 53 123 34 2	3 508918 4 286237 4 239486	3228 19330 17357	0 611 3 661 3 287
476	Bombay, Walkeshwar " Malabar " Fort Cotton Press	h.s. " " " "	68 0 54 86 15 36	4 102009 4 133871 3 772339	12648 13610 5920	489	Bombay, Walkeshwar " Colaba " Malabar Hill Tree	h.s. s. " "	125 1 10 10 8 4	4 304431 4 363581 4 239486	20157 4331 17357	3 818 0 820 3 287
477	Bombay, Kalbadevi Road " Malabar " "Times of India" Press	s. h.s. " "	110 22 3 31 47 26	4 102463 3 852100 3 918306	12661 7115 8285	490	Bombay, Malabar " Colaba " Malabar Hill Tree	h.s. s. " "	60 17 15 4 5 55	4 304431 3 219793 4 320725	20157 1059 20928	3 818 0 314 3 964
478	Bombay, Walkeshwar " Malabar " "Times of India" Press	h.s. " " " "	66 38 13 87 56 32	4 102463 4 139335 3 772339	12661 13783 5920	491	Cross Island Bombay, Kalbadevi Road " Gossain's Mat	s. " " " "	34 5 25 44 44 5	3 659279 3 758169 3 902391	4563 5730 7987	0 864 1 085 1 513
479	Cross Island Bombay, Kalbadevi Road " Marine Lines Flag-staff	s. " " " "	39 36 23 83 34 15	3 784162 3 9276925 3 902391	6084 9483 7987	492	Bombay, Malabar " Vani Bandar " Fort Mark (heliotrope)	h.s. " " " "	33 47 12 76 16 31	3 841988 4 084252 4 069648	6950 12141 11739	1 316 2 209 2 223

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance			No. of Triangle	Station	Corrected Plane Angle	Distance		
			Log. feet	Feet	Miles				Log. feet	Feet	Miles
483	Bombay, Kālbādevi Road	s. 95 5 53	3 841988	6950	1 316	506	Uran	h.s. 37 47 59	4 333711	21563	4 084
	" Vari Bandar	h.s. 40 30 54	3 656397	4533	0 859	506	Butcher Island	s. 100 42 58	4 538678	34568	6 547
	" Fort Mark (heliotope)		3 688497	4881	0 924	506	Bombay, Imperial Press		4 379448	23305	4 414
484	Bombay, Kālbādevi Road	s. 63 46 12	3 863126	7297	1 382	507	Elephanta	h.s. 67 30 51	4 507001	32137	6 086
	Cross Island	" 15 18 51	3 332108	2148	0 407	507	Uran	h.s. 68 58 53	4 511439	32467	6 149
	Bombay, Sailors' Home	" 3 902391	3 902391	7987	1 513	507	Bombay, Carnac Bandar	s. 43 30 16	4 379189	23944	4 535
485	Bombay, St. Thomas's Cathedral	s. 57 40 33	3 863126	7297	1 382	508	Bombay, Khambāla	t.s. 60 0 49	3 795442	6244	1 183
	Cross Island	" 35 45 59	3 703022	5047	0 956	508	" Malabār	h.s. 46 9 36	3 715953	5199	0 985
	Bombay, Sailors' Home	" 3 935467	3 935467	8619	1 632	508	" Grant Road Theatre	s. 73 49 35	3 840314	6923	1 311
486	Bombay, Malabār	h.s. 19 45 23	3 816897	6560	1 242	509	Bombay, Kālbādevi Road	s. 48 19 35	3 795442	6244	1 183
	" Vari Bandar	s. 123 1 15	4 211441	16272	3 082	509	" Malabār	h.s. 34 3 28	3 679364	4681	0 883
	Cross Island	" 37 13 22	4 009648	11739	2 223	509	" Grant Road Theatre	s. 97 30 57	3 918300	8285	1 569
487	Bombay, St. Thomas's Cathedral	s. 54 49 45	3 848262	7051	1 336	510	Bombay, Khambāla	t.s. 33 59 42	3 768965	5874	1 113
	Cross Island	" 37 26 23	3 719658	5244	0 993	510	" Grant Road Theatre	s. 134 54 33	4 009909	10231	1 938
	Bombay, Free Church	" 3 935467	3 935467	8619	1 632	510	" Vāri Baudār	h.s. 21 5 45	3 715953	5199	0 985
488	Bombay, Vari Bandar	h.s. 68 40 24	3 848262	7051	1 336	511	Bombay, Malabār	h.s. 31 23 39	3 602087	4000	0 758
	Cross Island	s. 51 15 31	3 771152	5904	1 118	511	" Grant Road Theatre	s. 94 12 32	3 884141	7659	1 451
	Bombay, Free Church	" 3 816897	3 816897	6560	1 242	511	" Bhuleshvar Church	s. 42 13 31	3 602087	4000	0 758
489	Cross Island	s. 45 53 34	3 795189	6240	1 182	512	Bombay, Vāri Bandar	h.s. 57 3 20	3 698552	4905	0 946
	Bombay, St. Thomas's Cathedral	" 51 26 52	3 822270	6796	1 287	512	" Grant Road Theatre	s. 57 3 20	3 698552	4905	0 946
	" Jakria Masjid	" 3 935467	3 935467	8619	1 632	512	" Bhuleshvar Church	s. 64 24 19	3 965102	9228	1 748
500	Bombay, Malabār	h.s. 27 45 23	3 795189	6240	1 182	513	Bombay, Vāri Bandar	h.s. 26 26 42	3 658647	4557	0 863
	" St. Thomas's Cathedral	s. 45 20 33	3 979136	9531	1 805	513	" Khambāla	t.s. 26 26 42	4 009909	10231	1 938
	" Jakria Masjid	" 4 107895	4 107895	12620	2 428	513	" Bhuleshvar Temple	h.s. 75 46 43	3 965102	9228	1 748
501	Elephanta	h.s. 83 26 3	4 598753	39697	7 518	514	Bombay, Malabār	t.s. 57 33 49	3 904956	8034	1 522
	Trombay, XXXV	s. 59 11 29	4 535345	34320	6 300	514	" Khambāla	h.s. 4 1 28	3 030801	1074	0 203
	Bombay, Akbar Cotton Press	" 4 384815	4 384815	24256	4 594	514	" Bhuleshvar Temple	s. 14 35 2	3 585625	3852	0 729
502	Butcher Island	s. 114 14 22	4 598753	39697	7 518	515	Bombay, Vāri Bandar	h.s. 39 30 5	3 487646	3074	0 582
	Trombay, XXXV	" 29 53 45	4 336435	21699	4 110	515	" Kālbādevi Road	s. 64 50 43	3 640850	4374	0 828
	Bombay, Akbar Cotton Press	" 4 406639	4 406639	25506	4 831	515	" Kālbādevi Temple	" 3 670364	4081	0 887	
503	Bombay, Colāba	s. 33 51 40	4 357186	22761	4 311	516	Bombay, Kālbādevi Road	s. 39 30 5	3 487646	3074	0 582
	" Golangi	h.s. 69 52 19	4 583821	38355	7 264	516	" Grant Road Theatre	" 3 640850	4374	0 828	
	Butcher Island	s. 76 16 1	4 598593	39682	7 516	516	" Girgaon Back Bay Works	" 3 670364	4081	0 887	
504	Butcher Island	s. 35 11 51	4 367447	23305	4 414	517	Bombay, Grant Road Theatre	s. 91 53 1	3 749935	5623	1 065
	" Butcher Island	h.s. 73 14 52	4 587892	38716	7 333	517	" Kālbādevi Road	" 31 47 52	3 471917	2964	0 561
	Uran	" 71 33 17	4 583821	38355	7 264	517	" Girgaon Ice Manufactory	" 3 670364	4081	0 887	
505	Trombay, XXXV	s. 30 42 31	4 333711	21563	4 084	518	Bombay, St. Thomas's Cathedral	s. 22 28 35	3 749935	5623	1 065
	Butcher Island	" 112 7 52	4 592332	39114	7 408	518	" Kālbādevi Road	" 128 17 26	4 062330	11543	2 186
	Bombay, Imperial Press	" 4 406639	4 406639	25506	4 831	518	" Girgaon Ice Manufactory	" 3 856271	7182	1 360	

* Deduced base.

No. of Triangle	Station	Corrected Plane Angle	Distance		No. of Triangle	Station	Corrected Plane Angle	Distance		Distance			
			Log. feet	Feet				Log. feet	Feet	Log. feet	Miles		
519	Bombay, Kálbádevi Road " Malabár " Mughal's Imámbara Mosque	s. h.s. h.s.	117 37 28 15 48 55 3 918 300	4 004747 3 492735 3 918300	10110 3110 8285	1 915 0 589 1 509	532	Bombay, Vári Bandar " Kálbádevi Road " Grant Road Temple	h.s. s. s.	55 19 40 73 21 39 3 688497	5143 5901 4881	0 974 1 135 0 924	
520	Bombay, Khambála " Malabár " Mughal's Imámbara Mosque	t.s. h.s. h.s.	74 20 37 64 24 9 3 840314	4 004747 3 976302 3 840314	10110 9469 6923	1 915 1 793 1 311	533	Bombay, St. Thomas's Cathedral " Vári Bandar " Mázgaon Church	s. h.s. h.s.	11 3 27 127 2 6 4 029884	3076 12803 10712	0 583 2 425 2 029	
521	Bombay, St. Thomas's Cathedral " Khambála " Mughal's Imámbara	s. t.s. t.s.	26 58 33 30 19 53 4 221674	3 953267 3 999872 4 221674	8980 9997 16660	1 701 1 893 3 155	534	Cross Island Bombay, Vári Bandar " Mázgaon Church	s. h.s. h.s.	27 24 59 73 28 58 3 816897	3076 6405 6560	0 583 1 213 1 242	
522	Bombay, Vári Bandar " Khambála " Mughal's Imámbara	h.s. t.s. t.s.	42 59 8 7 58 58 4 009909	3 953267 3 262227 4 009909	8980 1829 10231	1 701 0 346 1 938	535	Bombay, Golangi Butcher Island Bombay, Mázgaon Flag-staff	h.s. s. s.	54 22 43 32 9 24 4 357180	18536 12136 22701	3 511 2 299 4 311	
523	Cross Island Bombay, St. Thomas's Cathedral " Elphinstone Press	s. " "	85 7 10 34 40 19 3 935467	3 995449 3 752045 3 935467	9806 5650 8619	1 874 1 070 1 632	536	Bombay, Rock " Nesbit Lane " A	s. " "	57 24 41 71 37 3 5 0 58 16	3 680706 3 733359 3 645431	4794 5400 4420	0 908 1 023 0 837
524	Bombay, Malabár " Khambála " Sonapur Tomb	h.s. t.s. t.s.	40 58 25 68 43 13 3 940314	3 781302 3 866548 3 940314	6044 7354 6923	1 145 1 393 1 311	537	Bombay, Khambála " Nesbit Lane " A	t.s. s. "	38 1 27 47 45 30 94 33 3	3 680706 3 758238 3 889758	4794 5731 7758	0 908 1 085 1 469
525	Bombay, Vári Bandar " Grant Road Theatre " Nesbit Lane	h.s. s. s.	61 25 0 38 57 32 79 37 28	3 719680 3 574612 3 768965	5244 3755 5874	0 993 0 711 1 113	538	Bombay, Khambála " A " Mázgaon House	t.s. s. "	33 22 59 113 27 3 3 758238	3 760744 3 982756 3 758238	5764 9611 5731	1 092 1 820 1 085
526	Bombay, Khambála " Grant Road Theatre " Nesbit Lane	t.s. s. "	42 14 47 95 57 1 41 48 12	3 719680 3 889758 3 715953	5244 7758 5199	0 993 1 469 0 985	539	Bombay, A " Khambála " Byculla Synagogue	s. t.s. "	81 14 4 48 16 33 3 758238	3 865794 3 743842 3 758238	7342 5544 5731	1 390 1 050 1 085
527	Bombay, Grant Road Theatre " Nesbit Lane " Byculla Hospital	s. " "	30 22 3 42 57 41 3 442089	3 442089 3 571709 3 719680	2768 3731 5244	0 524 0 707 0 993	540	Bombay, Grant Road Theatre " Khambála " Byculla Synagogue	s. t.s. "	104 47 24 31 59 41 3 715953	3 865794 3 604573 3 715953	7342 4823 5199	1 390 0 762 0 985
528	Bombay, Vári Bandar " Nesbit Lane " Byculla Hospital	h.s. s. h.s.	47 6 38 36 39 47 3 574612	3 442089 3 353234 3 574612	2768 2755 2255	0 524 0 427 0 711	541	Bombay, Nesbit Lane " Vári Bandar " Byculla Press	s. h.s. "	97 55 30 43 34 28 3 574612	3 776289 3 618803 3 574612	5974 4158 3755	1 132 0 788 0 711
529	Bombay, Khambála " Nesbit Lane " Rock	t.s. s. "	21 18 53 119 2 33 39 38 34	3 645431 4 226578 3 889758	4420 10631 7758	0 837 2 013 1 469	542	Bombay, Malabár " Vári Bandar " Byculla Press	h.s. " "	25 39 48 32 39 26 4 069648	3 776289 3 871800 4 069648	5974 7444 11739	1 132 1 410 2 223
530	Bombay, Rock " Nesbit Lane " Goválí Tank Temple	s. " "	22 8 43 145 22 19 3 645431	3 886974 4 065220 3 645431	7709 11620 4420	1 460 2 201 0 837	543	Bombay, Vári Bandar " Grant Road Theatre " Byculla Church	h.s. s. "	46 35 14 41 54 47 3 768965	3 630303 3 593822 3 768965	4269 3926 5874	0 809 0 743 1 113
531	Bombay, Vári Bandar " Nesbit Lane " Goválí Tank Temple	h.s. s. "	59 57 37 95 5 54 3 574612	3 886974 3 947966 3 574612	7709 8869 3755	1 460 1 680 0 711	544	Bombay, Khambála " Grant Road Theatre " Byculla Church	t.s. s. "	38 10 22 92 59 46 3 715953	3 630303 3 886966 3 715953	4269 6698 5199	0 809 1 306 0 985

* Deducted base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance		No. of Triangle	Station	Corrected Plane Angle	Distance	
			Log. feet	Feet				Log. feet	Feet
545	Bombay, Golangi	h.s. 45 42 22	3 784997	6094	558	Bombay, Nesbit Lane	s. 56 50 1	3 866673	7357
	" Rock	s. 62 12 40	3 876917	7532		" Khaubala	t.s. 5 8 47	2 896699	788
	" C	" 72 4 58	3 908545	8101		" Byculla Temple No. 1	" 3 889758	7758	1 469
546	Bombay, A	s. 75 33 6	3 784997	6094	559	Bombay, Nesbit Lane	s. 64 35 8	3 646573	4432
	" Rock	" 45 21 14	3 651015	4477		" A	" 13 7 25	3 046902	1114
	" C	" 59 5 40	3 732359	5400		" Byculla Temple No. 2	" 3 680706	4794	0 908
547	Bombay, C	s. 35 50 58	3 435595	2726	560	Bombay, Golangi	h.s. 38 36 49	4 081042	12052
	" A	" 70 2 53	3 641070	4376		" Rock	s. 116 35 0	4 237288	17270
	" B	" 74 6 9	3 651015	4477		" Mahalakahmi Temple	" 3 908545	8101	1 534
548	Bombay, Khambala	t.s. 28 10 21	3 435595	2726	561	Bombay, A	s. 163 48 6	4 081042	12052
	" A	s. 68 52 42	3 731332	5387		" Rock	" 9 1 6	3 830703	6772
	" B	" 82 56 57	3 758238	5731		" Mahalakahmi Temple	" 3 732359	5400	1 023
549	Bombay, B	s. 45 40 7	3 640518	4370	562	Bombay, Grant Road Theatre	s. 85 26 59	3 990694	9788
	" Khambala	t.s. 72 29 11	3 765410	5827		" Nesbit Lane	" 62 16 5	3 939075	8691
	" Byculla Race Stand	" 3 731332	5387	" Haj Ali Temple		" 3 719680	5244	0 993	
550	Bombay, A	s. 49 32 20	3 640518	4370	563	Bombay, A	s. 131 31 47	3 990694	9788
	" Khambala	t.s. 44 18 50	3 603442	4013		" Nesbit Lane	" 26 57 37	3 772893	5928
	" Byculla Race Stand	" 3 758238	5731	" Haj Ali Temple		" 3 680706	4794	0 908	
551	Bombay, Colaba	s. 29 27 22	4 185315	15322	564	Bombay, Nesbit Lane	s. 81 59 9	3 828895	6744
	" St. Thomas's Cathedral	" 123 10 32	4 416289	26079		" Rock	" 57 32 41	3 759403	5747
	" Tárdeo Factory	" 4 156047	14323	" Sonápur Deud House		" 3 645431	4420	0 837	
552	Bombay, Golangi	h.s. 27 54 34	4 408549	25618	565	Bombay, Chepti	s. 36 30 20	3 828895	6744
	" Colaba	s. 18 33 45	4 241123	17423		" Rock	" 26 51 51	3 709471	5122
	" Chimney No. 1	" 3 398593	39682	" Sonápur Deud House		" 4 005748	10133	1 919	
553	Bombay, St. Thomas's Cathedral	s. 122 11 17	4 408549	25618	566	Bombay, Rock	s. 72 2 27	3 828926	6744
	" Colaba	" 29 34 16	4 174312	14939		" Vári Bandar	h.s. 22 6 41	3 426278	2669
	" Chimney No. 1	" 4 156047	14323	" Chinchpokli Tower		" 3 849477	7071	1 339	
554	Bombay, Colaba	s. 36 53 30	4 205033	16034	567	Bombay, Khambala	t.s. 41 11 47	3 828926	6744
	" Cross Island	" 84 56 38	4 424969	26605		" Vári Bandar	h.s. 51 9 33	3 001753	7975
	" Bombay, Khambala Flag-staff	" 4 353859	22691	" Chinchpokli Tower		" 4 009909	10231	1 938	
555	Bombay, Grant Road Theatre	s. 6 17 23	3 051076	1125	568	Bombay, Golangi	h.s. 54 36 9	4 285652	19304
	" Khambala	t.s. 24 8 10	3 623064	4108		" Butcher Island	s. 19 21 59	3 895037	7853
	" Tárdeo Alliance Co's Works	" 3 715953	5199	" Bombay, Tank Bandar Saw Mills No. 1		" 4 357186	22761	4 311	
556	Bombay, A	s. 10 22 9	3 051076	1125	569	Trombay, XXXV	s. 39 42 48	4 285652	19304
	" Khambala	t.s. 56 8 4	3 715088	5189		" Butcher Island	s. 82 41 56	4 476652	29968
	" Tárdeo Alliance Co's Works	" 3 758238	5731	" Bombay, Tank Bandar Saw Mills No. 1		" 4 406639	85506	4 831	
557	Bombay, A	s. 96 23 19	3 866673	7357	570	Bombay, Golangi	h.s. 54 35 54	4 283506	19209
	" Khambala	t.s. 32 52 40	3 604057	4018		" Butcher Island	s. 20 22 43	3 014146	8206
	" Byculla Temple No. 1	" 3 758238	5731	" Bombay, Tank Bandar Saw Mills No. 2		" 4 357186	22761	4 311	

No. of Triangle	Station	Corrected Plane Angle	Distance		No. of Triangle	Station	Corrected Plane Angle	Distance		Distance		
			Log. feet	Feet				Log. feet	Feet	Log. feet	Miles	
571	Trombay, XXXV	39 12 40	4 283506	19209	584	Bombay, Golangi	h.a.	89 38 48	4 400519	25149	4 763	
	Butcher Island	53 42 40	4 480044	30203		Kurla	"	"	82 9 10	4 074308	11866	2 247
	Bombay, Tank Baudar Saw Mills No. 2		4 406639	25506		4 831	Bombay, Warli	"	"	62 12 2	4 347267	22247	4 213
572	Cross Island	77 55 59	4 282360	19158	585	Bombay, Warli	h.a.	36 3 23	3 845793	7011	1 328	
	Butcher Island	37 5 17	4 072411	11814		2 238	Golangi	"	"	58 58 45	4 008958	10208	1 933
573	Bombay, Tank Bandar Magazine		4 249264	17753	3 362	"	Chinchpokli Gas Works	"	"	4 074308	11866	2 247
	Butcher Island	83 24 0	4 518344	32987	6 248	Bombay, Khambala	t.s.	2 3 46	3 845793	7011	1 328	
574	Trombay, XXXV	40 25 5	4 381204	24955	4 550	Golangi	h.a.	2 51 0	3 980100	9685	1 834	
	Bombay, Chimney No. 2		4 406639	25506	4 831	"	Chinchpokli Gas Works	"	"	4 222229	16681	3 159
575	Elephanta	63 14 45	4 518344	32987	6 248	Bombay, C	s.	119 44 0	3 783012	6068	1 149	
	Trombay, XXXV	75 42 49	4 553875	35799	6 780	"	"	21 29 33	3 408251	2560	0 485	
576	Bombay, C		4 384815	24956	4 594	"	Chimney No. 3	"	"	3 641070	4376	0 829
	Bombay, B	77 51 58	3 670057	4678	0 886	Bombay, Chepti	s.	56 28 28	3 783012	6068	1 149	
577	"	35 59 39	3 449027	2812	0 533	"	"	96 3 52	3 859596	7238	1 371	
	Bombay, Chepti		3 641070	4376	0 829	"	Chimney No. 3	"	"	3 525873	3356	0 636
578	Bombay, Vári Bandar	41 13 8	3 670057	4678	0 886	Bombay, Warli	h.a.	10 2 27	3 596646	3950	0 748	
	Grant Road Theatre	110 33 58	3 822612	6647	1 259	Golangi	"	82 27 11	4 079327	12604	2 273	
579	"	42 9 52	3 997468	9942	1 883	"	Chinchpokli House	"	"	4 074308	11866	2 247
	Muna Hajani Temple	114 28 4	4 129712	13481	2 553	Bombay, Khambala	t.s.	6 7 1	3 596646	3950	0 748	
580	Bombay, Nesbit Lane	74 1 12	3 997468	9942	1 883	Golangi	h.a.	20 37 26	4 115888	13958	2 473	
	Grant Road Theatre	75 30 32	4 000542	10012	1 896	"	Chinchpokli House	"	"	4 222229	16681	3 159
581	"	166 13 16	3 737610	5465	1 035	Bombay, Didar	s.	60 40 38	3 841076	6935	1 314	
	Muna Hajani Temple	6 57 18	3 44320	2779	0 520	Golangi	h.s.	55 52 23	3 818546	6585	1 247	
582	Bombay, B		3 435595	2726	0 516	"	Máhin Road	s.	63 26 59	3 852223	7116	1 348
	Bombay, A	13 48 26	3 737610	5465	1 035	Bombay, C	s.	63 3 18	3 841076	6935	1 314	
583	"	152 33 17	4 023446	10555	1 999	"	Golangi	h.s.	41 26 57	3 711812	5150	0 975
	Love Grove Mark (helio.)		3 737359	5400	1 023	"	Máhin Road	s.	75 29 45	3 876917	7532	1 427
584	Bombay, Rock	72 53 59	3 507385	3217	0 609	Bombay, Máhin Road	s.	53 41 12	3 750578	5631	1 066	
	Bombay, Chepti	21 15 58	3 086569	1221	0 231	Golangi	h.s.	43 20 43	3 686949	4797	0 908	
585	"	5 26 44	3 507385	3217	0 609	"	Chimney No. 4	"	"	3 841076	6935	1 314
	Love Grove Temple	169 56 26	3 772338	5920	1 121	Bombay, Warli	h.s.	27 31 29	3 795978	5631	1 066	
586	Bombay, A		3 435595	2726	0 516	Golangi	"	49 20 44	3 965855	9244	1 751	
	Bombay, B	46 27 8	4 351651	30622	5 800	"	Chimney No. 4	"	"	4 074308	11866	2 247
587	Love Grove Temple	78 45 54	4 466229	35506	4 831	Bombay, Rock	s.	33 6 5	3 869162	7399	1 401	
	Trombay, XXXV		4 406639	25506	4 831	A	"	123 24 39	4 033426	11309	2 142	
588	Butcher Island		4 406639	25506	4 831	"	Gandli Hill Mark (helio.)	"	"	3 732559	5400	1 023
	Bombay, Múzgeon Oil Press		4 406639	25506	4 831	Bombay, A	s.	145 52 59	3 869162	7399	1 401	
589	"		4 406639	25506	4 831	"	B	"	22 11 20	3 697392	4982	0 944
	"		4 406639	25506	4 831	"	Gandli Hill Mark (helio.)	"	"	3 435595	2726	0 516

* Deducted base.

SECONDARY TRIANGULATION. TRIANGLES.

No. of Triangle	Station	Corrected Plane Angle	Distance		No. of Triangle	Station	Corrected Plane Angle	Distance	
			Log. feet	Feet				Log. feet	Feet
597	Bombay, C	s. 128 1 40	4 091342	17341	610	Bombay, Golangi	h.s.	3 741543	5515
	" Golangi	h.s. 23 14 10	3 791044	6181		" Mahim Road	s. 47 54 19	3 821617	6632
598	" Gaudli Hill Tree		3 876917	7532		" Dadar House		3 841076	6935
	Bombay, Mahim Road	s. 141 8 24	4 091342	17341	611	Elephanta	h.s.	3 833482	6815
599	" Gaudli Hill Tree	h.s. 18 12 47	3 788705	6148		Bombay, Golangi	"	4 530998	33930
	Bombay, Golangi	h.s. 31 25 32	3 643582	4401		" Matunga R. C. Church	"	4 515047	32738
600	" Mahim Tree	s. 85 24 51	3 925087	8414	612	Butcher Island	s.	3 333482	6815
	Bombay, Wari	h.s. 4 28 53	3 623997	4206	613	Bombay, Golangi	h.s.	4 143343	25982
601	" Parel Paper Mills	h.s. 8 15 8	3 888006	7727		" Matunga R. C. Church	"	4 357186	22761
	Bombay, Mahim Road	s. 3 27 42	3 623997	4206		Bombay, Mahim Road	s.	3 544901	3507
602	" Parel Paper Mills	h.s. 2 15 7	3 437332	2737		" Dadar	"	3 811297	6476
	Bombay, Khambhala	t.s. 6 26 14	3 328910	2133	614	" Nayauga House	h.s.	3 818546	6585
603	" Parel Flag-staff	h.s. 54 50 27	4 191765	1551	615	Bombay, Matunga	h.s.	4 274755	18826
	Bombay, Golangi	s. 64 29 22	3 831777	6789		" Kurli	"	4 245544	17601
604	Bombay, Dadar	s. 54 24 55	4 222229	16681	616	Bandra, Santa Monte Church	h.s.	4 141740	13859
	" Mahim Road	h.s. 6 26 14	3 328910	2133		Bombay, Golangi	h.s.	4 274755	18826
605	" Nayauga Hill Tree	s. 66 56 37	3 805203	6386		" Kurli	"	4 279554	19035
	Elephanta	h.s. 32 54 53	4 302455	20066	617	Bandra, Santa Monte Church	h.s.	4 347207	22247
606	Butcher Island	s. 127 3 57	4 469315	29466		Trombay, XXXV	h.s.	4 298820	19898
	Bombay, Siwri Fort	h.s. 37 19 28	4 302455	20066	618	Bombay, Golangi	h.s.	4 271024	18665
607	Bombay, Golangi	h.s. 9 9 34	3 362254	2303		" Kurli	"	4 298820	19898
	" Wari Village Flag-staff	h.s. 115 43 49	4 115011	13032	619	Bombay, Matunga	h.s.	4 519585	33082
608	Trombay, XXXV	h.s. 20 37 17	4 148273	14069		Bandra, Santa Andre Church	h.s.	4 259581	18179
	Bombay, Golangi	h.s. 119 48 42	4 539846	34661	620	Bombay, Matunga	h.s.	4 246385	17635
609	" Wari Fort	h.s. 35 27 15	4 148273	14069	621	Bandra, Santa Andre Church	h.s.	4 141740	13859
	Kurli	h.s. 78 1 37	4 375255	23728		Bombay, Golangi	h.s.	4 270155	18627
610	Bombay, Wari Fort	h.s. 35 27 15	4 148273	14069	622	" Wari	"	4 375308	13725
	" Wari Fort	h.s. 78 1 37	4 375255	23728		" Siou Hill Tree No. 1	"	4 174308	11866
611	Bombay, Wari Fort	h.s. 35 27 15	4 148273	14069	623	Bombay, Matunga	h.s.	3 814629	6526
	" Wari Fort	h.s. 78 1 37	4 375255	23728		" Malmala	s.	3 084416	9648
612	Bombay, Wari Fort	h.s. 35 27 15	4 148273	14069	624	" Siou Hill Tree No. 2	"	3 887931	7726
	" Wari Fort	h.s. 78 1 37	4 375255	23728					

* Deducted base.

No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance		No. of Triangle	Station	Corrected Plane Angle ° ' "	Distance	
			Log. feet	Feet				Log. feet	Feet	Miles
623	Trombay, XXXV	60 23 58	4' 356975	22750	626	Bombay, Golangi	0 / "	4' 381966	24097
	Bombay, Golangi	h.a.	4' 251960	17863		Trombay, XXXV	52 14 37	4' 400666	28845
	Kurla Chimney	43 3 27	4' 405620	25446		Kalani Church	71 9 12	4' 405620	25446
624	Bombay, Warli	63 44 15	4' 356975	22750	627	Trombay, XXXV	86 28 41	4' 404474	25379
	"	h.a.	4' 404115	25328		Elephanuta	20 58 48	3' 959229	9104
	Kurla Chimney	88 22 26	4' 074308	11866		Trombay Palm Tree	h.s.	4' 384815	24256
625	Kurla	141 28 53	4' 381966	24097					
	Trombay, XXXV	12 0 46	3' 905973	8053					
	Kalani Church		4' 237255	17269					

J. ECCLES,

*In charge of Computing Office.**December, 1891.*

BOMBAY LONGITUDINAL SERIES.

AZIMUTHS OF SURROUNDING STATIONS AND POINTS AT PRINCIPAL,
PRINCIPAL-AUXILIARY AND SECONDARY STATIONS.

The following table contains, in the first column, the name of each Principal, Principal-Auxiliary, or Secondary Station, at which azimuths of surrounding Points have been measured; immediately followed by those azimuths. The second column contains the number of the triangle which gives the distance between the Station and the Point.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Achaler h.s.		Achola, IV—(Contd.)	
Dáhitna h.s. 59 4 37	152	Udgir Hill Masjid 217 14 34	82
Kuranur " 59 11 23	171	Udgir Idgah 219 22 46	81
Mahádeooba, XII 107 17 39	153	Udgir Bungalow (helio.) 219 44 18	79
Vadgaon " 158 14 40	161	Nágara Hill Dargah 224 53 51	105
Deobet " 175 12 30	162	Dongargaon No. 1 h.s. 263 47 54	50
Allúr " 268 29 52	163	Manganál, XL 272 47 59 ⁸⁵	2
Ambevad " 358 35 45	152	Bidar Minaret 302 34 33	49
		Bhalki Hill Pagoda 304 47 24	63
		Bhalki Hill Tower 305 42 8	66
		Bhalki Hill Dipinal 305 49 16	64
		Chalkapur Hill Pagoda 323 29 10	57
		Kaplapur " 328 11 39	58
		Boral " 345 25 59	60
Achola, IV		Agargaon, XXIV	
Guti Hill Mark (helio.) 9 42 43	111	Pimpalgaon Hill Pagoda 10 20 25	253
Dáud Malik, VII 34 20 44 ²²	11	Khánpisura, XXI 11 16 28 ⁴¹	34
Sindkhed Hill 58 28 24	106	Párner, XXVI 72 58 40 ⁶²	35
Jájnúr Hill Tomb 61 43 56	108	Nimbadera h.s. 114 51 14	258
Jájnúr Hill Tree 61 48 41	109	Netjai " 284 53 43	251
Hissámnagar Tower 80 2 55	104	Netjai Hill 285 26 25	252
Karasaon, VI 86 2 32 ¹⁸	7	Chincholi, XXIII 303 32 19 ³⁶	34
Jánval Hill Tree 142 49 13	96		
Wadwál, V 145 23 4 ⁹⁹	3	Agalamba h.s.	
Mamdapur Tomb 148 43 17	102	Chandúr h.s. 42 16 44	310
Mamdapur Tower 151 45 55	101	Tung Fort 135 2 55	312
Chaunhipparga Tower 152 51 31	103	Mándvi, XXXI 142 57 36	300
Digol Hill Dargah 153 10 56	97	Poona Base-line W. End s. 193 5 29	359
Chákúr Hill Temple 154 29 53	93	Poona Base-line E. End " 224 47 57	361
Hattibetta Hill Tree 161 7 43	99		
Hattibetta h.s. 162 3 55	100		
Malia Hill Temple 186 36 10	88		
Loni Hill Tree 199 7 6	84		
Udgir, I 211 12 0 ⁴⁴	2		
Udgir Hill Tomb No. 3 213 59 23	78		
Udgir Hill Tomb No. 2 214 44 18	77		

NOTE.—Station Manganál, XL appertains to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Aglamba h.s.—(Contd.)		Anavli h.s.	
Dighi, XXVIII	228 57 53	Khundáli	s. 196 18 52
Gauesh Khind Hill	241 5 38	Pokhrapur	" 230 29 11
Poona Old Observatory	253 1 45	Kurul	h.s. 265 22 24
Vanaudi Bungalow	257 14 53	Jalihal	s. 349 37 50
Dhaulshvar, XXVII	273 0 42		
		Aupa h.s.	
Ahmednagar h.s.		Mándvi, XXXI	0 30 45
Khánpisura, XXI	9 48 22	Nágháni Hill Mark	22 14 9
Kambargaon Hill Tree	73 0 46	Kapria	h.s. 40 7 32
Ahmednagar Fara Bâgh	73 19 30	Karanja, XXXIV	61 29 42
Párner, XXVI	83 13 23	Singi, XXX	333 31 40
Ahmednagar Fort	91 29 30		
Ahmednagar Bhingár Tomb	93 53 16	Ausa h.s.	
Ahmednagar Masjid	97 47 35	Deobet, IX	22 34 2
Dhoki Hill Pagoda	101 12 41	Borphal Dargah	116 12 6
Dhoki Hill	101 58 4	Ausa Fort	133 41 4
Koparvâdi Hill Temple	138 3 45	Ausa Tomb No. 3	134 17 24
Nimbadora	h.s. 141 58 1	Harangal, VIII	161 41 4
Dongarganj Hill Tower	151 15 5	Yérâudi Tower	234 47 42
Chincholi, XXIII	292 23 31	Sarola Tower	241 30 42
Roragiri Hill Mosque	302 49 58	Kanheri Tower	259 52 42
		Karasaon, VI	277 38 42
Akalkot s.			
Dâhitna	h.s. 137 48 42	Bâbulsâr, XXV	
Ambevâd	" 272 51 52	Bhuleshvar Hill Pagoda	5 53 35
		Dhaulshvar, XXVII	18 23 35.64
Allúr h.s.		Kondhâpuri Pagoda	70 32 8
Achalor	h.s. 88 30 30	Dighi, XXVIII	71 2 35.99
Deobet	" 166 40 16	Wâfgaon, XXIX	125 56 39.48
Dâud Malik, VII	237 41 49	Jinjaria	h.s. 127 22 54
		Korthan Hill Dipmal	180 36 16
Alsunda, XIX		Párner, XXVI	203 5 25.14
Rasin Pagoda	81 25 24	Khánpisura, XXI	269 6 23.11
Bori, XXII	85 28 33.33	Bori, XXI	314 33 14.88
Kuldharan Hill	135 45 55	Pâtas Hill Pagoda	326 14 23
Khánpisura, XXI	144 54 17.30		
Alsunda Hill Pagoda	184 30 37	Badadol h.s.	
Sautâra, XX	227 32 3.54	Sâlotgi	h.s. 66 2 8
Kanheri, XVIII	266 10 47.84	Balurgi Hill Pagoda	73 13 1
Karmâla Hill Temple	282 52 40	Karâji	s. 75 0 4
Khorth Hill Mark (helio.)	306 54 20	Udagi	h.s. 114 28 52
Kem, XVII	313 17 54.83	Dâhitna	" 131 45 0
Kem Hill Pagoda	316 3 45	Ambevâd	" 177 5 59
Ambevâd h.s.		Baktâpur, XXXVIII	
Balurgi Hill Pagoda	20 18 21	Manganâl, XL	36 27 29.54
Karâji	s. 41 2 53	Udgîr, I	84 8 30.69
Udagi	h.s. 70 18 8	Dapka	h.s. 90 17 55
Akalkot	s. 92 55 47	Kundrâl, II	120 12 39.51
Dâhitna	h.s. 103 30 47	Mungîâl	" 122 9 59
Kuranur	" 126 20 18		
Nilagaon	" 137 37 56	Bâleghât h.s.	
Achalor	" 178 35 51	Karul Hill Pagoda	90 46 7
Badadol	" 357 5 49	Karikada Pagoda	94 18 17
		Dongargaon No. 2	h.s. 106 38 57
		Chincholi, XXIII	211 32 57

NOTE.—Stations Baktâpur, XXXVIII and Manganâl, XL appertain to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Bhatras h.s.		Bombay, Chepti s.	
Kárlí Base-line W. End s. 107 9 34	324	Bombay, Khaumbála t.s. 11 12 13	421
Jevra h.s. 131 0 26	322	" Love Grove Temple s. 51 52 58	581
Kárlí Base-line E. End s. 157 55 24	325	" Dádar s. 226 3 51	423
Pála h.s. 188 17 31	317	" Golangi h.s. 258 1 45	422
Singi, XXX 212 13 26	314	" Chimney No. 3 282 30 51	588
Shelárvádi " 280 37 16	318	" House No. 2 297 45 51	576
Dighi, XXVIII 285 46 36	314	" Rock s. 300 15 17	421
Mándvi, XXXI 345 41 5	315	" Sonápur Dead House 336 45 37	565
		" B " 338 58 59	576
Bhoja h.s.		Bombay, Colába s.	
Mándvi, XXXI 255 8 21	333	Bombay, Malabár Point Flag-staff 156 30 46	486
Pangoli h.s. 314 25 41	333	" Wálkeshwar h.s. 158 39 16	440
Bombay, A s.		" Malabár Hill Flag-staff 166 39 9	488
Bombay, Byculla Race Stand 9 14 37	550	" Malabár Hill Tree 168 47 20	489
" Tárdeo Alliance Co's Works 48 24 48	556	" Malabár " 172 53 15	416
" Khambála t.s. 58 46 57	537	" Khambála Flag-staff 179 34 10	554
" Mahálakshmi Temple 77 3 44	561	" Chimney No. 1 180 19 9	552
" Haj Ali Temple 95 45 41	563	" Tárdeo Factory 180 26 3	551
" Love Grove Mark (helio.) 120 42 21	579	" Golangi " 198 52 54	434
" B s. 127 39 39	547	" House No. 1 207 47 29	485
" Love Grove Temple 133 6 23	582	" Colába Dharmshála 208 15 23	448
" Gandli Hill Mark (helio.) 149 50 59	595	" St. Thomas's Cathedral s. 209 53 25	417
" C " 197 42 32	546	" Colába Monument 210 15 11	446
" Rock " 273 15 38	536	" Colába Cotton Press 214 18 13	456
" Mázgaon House 305 19 54	538	Cross Island " 216 27 40	415
" Byculla Temple No. 2 311 6 29	559	Trombay, XXXV 216 46 35	411
" Byculla Temple No. 1 322 23 38	557	Bombay, Colába Scott Press 217 22 23	452
" Nesbit Lane " 324 13 54	536	" Dockyard Flag-staff 218 32 17	464
" Byculla Synagogue 337 32 53	539	" Hydraulic Press 219 46 21	459
		" Colába Fort Press 221 28 50	454
Bombay, B s.		Butcher Island " 232 44 34	503
Bombay, Khambála t.s. 30 36 29	548	Bombay, Dolphin Light 232 55 43	461
" Love Grove Mark (helio.) 113 52 48	579	Elophanta h.s. 239 55 19	412
" Love Grove Temple 137 43 6	581	Bombay, Oyster Rock 251 24 27	438
" Chepti s. 158 59 4	576	Uran " 267 56 25	415
" Gandli Hill Mark (helio.) 161 46 33	596	Karanja, XXXIV 288 25 41	411
" C " 233 33 23	547	Bombay, Dádar s.	
" Chimney No. 3 255 2 56	587	Bombay, Máhim Road s. 44 32 11	591
" House No. 2 269 33 2	575	" Chepti " 46 4 22	423
" A " 307 39 32	547	" Malhala " 198 34 54	425
" Byculla Race Stand 344 56 22	549	" Mátunga h.s. 268 43 42	424
		" Náygaon House 331 49 11	613
Bombay, C s.		" Golangi Hill Tree 340 2 49	603
Bombay, A s. 17 42 34	516	" Golangi " 343 51 33	423
" B " 53 33 32	547	Bombay, Golangi h.s.	
" Gandli Hill Tree 118 30 16	597	Bombay, Mázgaon Flag-staff 3 24 1	535
" Máhim Tree 161 7 5	599	" Tank Bandar Saw Mills No. 2 3 37 12	570
" Máhim Road " 183 28 38	592	" Tank Bandar Saw Mills No. 1 3 37 27	568
" Golangi h.s. 246 31 56	545	" Colába s. 18 53 37	434
" Chimney No. 3 293 49 32	587	" Rock " 20 49 58	422
" Rock s. 318 36 54	515	" Prongs Light-house 21 25 30	436
" House No. 2 335 41 34	575	" Chinchpokli House 31 32 7	589
Bombay, Carnac Bandar s.		" Chimney No. 1 46 48 11	552
Elephanta h.s. 258 1 9	507	" Khambála t.s. 52 9 33	586
Uran " 301 31 25	507	" Chinchpokli Gas Works 55 0 33	585
		" Mahálakshmi Temple 59 26 47	560

BOMBAY LONGITUDINAL SERIES.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance		
Bombay, Golangi h.s.—(Ctd.) ° ' "		Bombay, Kálbádevi Road s.—(Ctd.) ° ' "			
Bombay, Chimuey No. 4	64 38 34	508	Bombay, Sailors' Home	342 16 45	494
" C	s. 66 32 20	545	" House No. 1	346 5 17	484
" Chopti	" 78 2 23	422	" St. Thomas's Cathedral s.	347 31 23	466
" Gandli Hill Tree	" 89 46 30	597	" "Times of India" Press	348 55 3	477
" Máhim Tree	97 57 52	599	" St. Andrew's Church	349 25 19	468
" Parel Paper Mills	105 44 10	600	" Fort House	349 34 13	473
" Parel Flag-staff	107 0 0	602	" Fort Cotton Press	351 17 54	475
" Máhim Road	" 107 59 17	591			
" Warli	h.s. 113 59 18	584			
" Warli Village Flag-staff	123 8 52	607	Bombay, Khambála t.s.		
" Warli Fort	125 36 29	608	Bombay, Malabár	h.s. 19 3 43	419
Bándra, Santa Monte Church	150 3 22	616	" Chopti	s. 191 12 8	421
Bándra, Protestant Church	151 25 23	617	" B	" 210 36 19	548
Bombay, Dádar House	155 53 36	610	" Parel Flag-staff	" 225 42 36	602
" Dádar	s. 163 51 40	423	" Chinchpokli Gas Works	230 5 4	586
" Náygaon Hill Tree	174 55 54	604	" Golangi	h.s. 232 8 50	586
Kalani Church	193 10 34	626	" Chinchpokli House	238 15 51	590
Bombay, Mátunga R. C. Church	198 20 45	611	" A	s. 238 46 40	537
Kurla Chinnay	202 21 44	623	" Chinchpokli Tower	253 51 25	567
Kurla	h.s. 203 38 6	428	" Rock	" 255 29 14	420
Bombay, Sion Hill Tree No. 1	207 7 25	621	" Byculla Temple No. 1	271 39 20	557
" Mátunga	" 217 14 10	424	" Mátunga House	272 9 39	538
Trombay, XXXV	245 25 11	428	" Nesbit Lane	" 276 48 7	526
Bombay, Siwri Fort	271 41 50	606	" Byculla Church	280 52 32	544
Elephanta	" 292 40 16	433	" Byculla Race Stand	283 5 30	549
Butcher Island	s. 309 1 18	429	" Byculla Synagogue	287 3 13	539
Uran	h.s. 324 26 55	435	" Tárdeo Alliance Co's Works	294 54 44	555
			" Vári Bandar	h.s. 295 3 12	419
			" Mughal's Imábára	303 2 10	521
			" Mughal's Imábára Mosque	304 43 6	520
Bombay, Grant Road Theatre s.			" Sonápur Tomb	310 20 30	524
Bombay, Girgaon Back Bay Works	32 27 16	516	" Grant Road Theatre	s. 319 2 54	508
" Girgaon Ice Manufactory	59 29 34	517	" Bhuleshvar Temple	321 29 54	513
" Malabár	h.s. 65 13 30	508	" St. Thomas's Cathedral	" 333 22 3	521
" Khambála	t.s. 139 3 5	508			
" Tárdeo Alliance Co's Works	145 20 28	555	Bombay, Máhim Road s.		
" Haj Ali Temple	149 33 7	562	Bombay, C	s. 3 28 40	592
" Mama Hajani Temple	159 29 34	577	" Gandli Hill Tree	69 7 19	598
" Byculla Church	232 2 51	543	" Dádar	" 224 31 56	591
" Nesbit Lane	s. 235 0 6	525	" Dádar House	" 224 49 16	610
" Byculla Synagogue	243 50 29	540	" Náygaon House	255 40 2	613
" Byculla Hospital	265 22 9	527	" Náygaon Hill Tree	266 59 23	604
" Vári Bandar	h.s. 273 57 38	510	" Golangi Hill Tree	278 56 51	603
" Kálbádevi Road	s. 327 36 33	509	" Golangi	h.s. 287 58 55	591
" Bhuleshvar Church	331 0 58	511	" Parel Paper Mills	291 26 37	601
			" Chimney No. 4	341 40 7	593
Bombay, Kálbádevi Road s.					
Bombay, Marine Lines Flag-staff	2 4 48	479	Bombay, Malabár h.s.		
" Malabár Point Flag-staff	70 53 15	487	Bombay, Wálkeshwar	h.s. 39 0 37	441
" Malabár	h.s. 99 17 6	466	" Malabár Hill Tree	53 10 22	490
" Girgaon Back Bay Works	108 6 36	516	" Khambála	t.s. 199 3 35	419
" Girgaon Ice Manufactory	115 48 49	517	" Byculla Press	233 28 37	542
" Grant Road Theatre	s. 147 36 41	509	" Grant Road Theatre	s. 245 13 11	508
" Grant Road Temple	150 1 36	532	" Sonápur Tomb	249 2 0	524
" Kálbádevi Temple	208 48 13	515	" Vári Bandar	h.s. 259 8 25	418
" Mughal's Imábára Mosque	216 54 34	519	" Mughal's Imábára Mosque	263 27 44	519
" Vári Bandar	h.s. 223 23 15	493	" Bhuleshvar Temple	274 50 18	514
Cross Island	s. 278 30 33	467	" Bhuleshvar Church	276 36 50	511
Bombay, Fort Mark (holio.)	318 29 8	493	Cross Island	s. 278 53 48	416
" Gosain's Mat	323 14 38	491	Bombay, Kálbádevi Road	" 279 16 39	466
" Castle Flag-staff	337 6 35	481			
" Palm Tree	337 51 3	482			

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance		
Bombay, Malabár h.s.—(Contd.)		Bombay, Rock s.—(Contd.)			
Bombay, Jakria Masjid	282 52 28	500	Bombay, Sonápur Dead House	93 23 54	564
" Fort Mark (helio.)	292 55 37	492	" Love Grove Mark (helio.)	107 4 20	580
" House No. 1	307 13 35	484	" Chepti	s. 120 15 45	421
" St. Thomas's Cathedral	s. 310 37 51	417	" Gandli Hill Mark (helio.)	126 21 59	595
" "Times of India" Press	311 4 5	477	" C	" 138 37 8	515
" Fort Cotton Press	312 45 1	475	" Golangi	h.s. 200 49 48	422
" Marine Lines Flag-staff	312 58 57	480			
" Fort House	314 54 22	473			
" St. Andrew's Church	315 54 2	468	Bombay, St. Thomas's Cathedral s.		
" Cooperage Tree	324 39 11	462	Bombay, Colába Fort Press	8 37 51	455
" Hydraulic Press	326 56 14	458	" Oyster Rock	10 48 54	438
" Colába Cotton Press	331 5 14	457	" Hydraulic Press	11 16 32	458
" Cotton Press	334 8 28	450	" Colába Scott Press	20 55 51	453
" Colába Monument	342 15 24	447	" Cotton Press	22 41 27	450
" Colába Church	347 43 21	444	" Colába	s. 29 53 49	417
" Colába R. C. Chapel	352 8 10	442	" Colába R. C. Chapel	30 41 22	442
" Colába	s. 352 53 7	416	" Band Stand	31 3 4	470
			" Cooperage Tree	31 11 7	462
Bombay, Malmala s.			" Colába Dharmshála	31 15 31	449
Bombay, Dádar	s. 18 35 1	425	" Colába Church	32 47 49	445
Kurla	h.s. 228 53 7	426	" Malabár Point Flag-staff	101 27 58	486
Bombay, Sion Hill Tree No. 2	231 7 58	622	" Wálkeshwar	h.s. 105 34 25	440
" Mátunga	" 315 54 2	425	" Malabár	" 130 38 23	417
			" Girgaon Ice Manufactory	145 2 53	518
Bombay, Mátunga h.s.			" Chimney No. 1	152 5 6	553
Bombay, Golangi	h.s. 37 14 28	424	" Tárdeo Factory	153 4 21	551
" Návgaon House	60 1 53	614	" Khambála	t.s. 153 22 27	521
" Dádar	s. 88 44 7	424	" Kálbádevi Road	e. 167 31 28	466
Bándra, Santa Monte Church	122 39 29	615	" Sailors' Home	169 45 15	495
Bándra, Santa Andre Church	131 53 52	619	" Free Church	172 36 3	497
Bombay, Malmala	" 135 54 20	425	" Jakria Masjid	175 58 56	499
" Sion Hill Tree No. 2	178 15 3	622	" Mughal's Imámbára	180 21 0	521
Kurla	h.s. 195 3 51	426	" Vári Bandar	h.s. 189 40 50	418
Trombay, XXXV	258 37 27	427	" Elphinstone Press	192 45 29	523
			" Mázgaon Church	200 44 17	533
			Cross Island	s. 227 25 48	465
			Bombay Mint	256 39 53	483
Bombay, Nesbit Lane s.			Bombay, Vári Bandar h.s.		
Bombay, Byculla Hospital	12 2 40	527	Bombay, Fort Mark (helio.)	2 52 32	492
" Grant Road Theatre	s. 55 0 21	525	" St. Thomas's Cathedral	s. 9 40 56	418
" Gováli Tank Temple	70 28 47	530	" Free Church	24 48 12	498
" Byculla Press	73 18 23	511	" Kálbádevi Road	" 43 23 26	493
" Khambála	t.s. 96 48 33	526	" Kálbádevi Temple	47 24 54	515
" Haj Ali Temple	117 16 26	562	" Bhuleshvar Temple	50 39 23	513
" Mama Hajani Temple	129 1 33	578	" Bhuleshvar Church	51 44 26	512
" Sonápur Dead House	133 51 57	564	" Mughal's Imámbára	72 4 34	522
" A	s. 144 14 3	536	" Malabár	h.s. 79 9 3	418
" Byculla Temple No. 1	153 38 34	558	" Grant Road Theatre	s. 93 57 57	510
" Byculla Temple No. 2	208 49 11	559	" Gováli Tank Temple	95 25 20	531
" Rock	" 215 51 6	529	" Grant Road Temple	98 43 6	532
" Vári Bandar	h.s. 335 22 53	525	" Byculla Hospital	108 16 19	528
			" Byculla Press	111 48 29	541
			" Khambála	t.s. 115 3 42	419
Bombay, Rock s.			" Mama Hajani Temple	136 7 49	577
Bombay, Vári Bandar	h.s. 8 19 59	420	" Byculla Church	140 33 11	543
" Nesbit Lane	s. 35 51 13	529	" Nesbit Lane	s. 155 22 57	525
" Gováli Tank Temple	57 59 56	530	" Chinchpokli Tower	166 13 15	566
" Khambála	t.s. 75 29 47	420	" Rock	" 188 19 56	420
" Chinchpokli Tower	80 22 26	566	" Mázgaon Church	242 38 50	533
" Maháalakshmi Temple	84 14 48	560	Cross Island	" 316 7 48	496
" A	s. 93 15 54	536			

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Bombay, Wálkeshwar h.s.		Butcher Island s.	
Bombay, Malabár Hill Tree	213 37 45	Bombay, Colába	s. 52 46 17
" Malabár Hill Flag-staff	215 4 53	Cross Island	" 73 46 13
" Malabár	h.s. 219 0 24	Bombay, Akbar Cotton Press	" 78 7 53
" St. Thomas's Cathedral s.	285 33 40	Imperial Press	" 80 14 23
" "Times of India" Press	285 38 37	" Mázgaon Flag-staff	" 96 52 54
" Fort Cotton Press	287 1 18	" Tank Bandar Saw Mills No. 2	108 39 35
" Band Stand	295 8 1	" Chimney No. 2	108 58 15
" Dockyard Flag-staff	295 21 37	" Tank Bandar Saw Mills No. 1	109 40 19
" Cooperage Tree	299 35 13	" Tank Bandar Magazine	110 51 30
" Colába Fort Press	305 22 50	" Mázgaon Oil Press	113 36 21
" Colába Cotton Press	308 38 32	" Golangi	h.s. 129 2 18
" Colába Scott Press	311 43 29	" Siwri Fort	" 135 10 2
" Cotton Press	312 51 19	" Mátunga R. C. Church	143 15 20
" Colába Dharmshála	317 57 44	Trombay, XXXV	192 22 15
" Colába Monument	322 34 39	Elephanta	" 262 13 59
" Colába R. C. Chapel	337 12 49	Uran	" 339 31 25
" Colába	" 338 38 55		
Bombay, Warli h.s.		Chandúr h.s.	
Bombay, Warli Village Flag-staff	178 14 52	Mándvi, XXXI	181 27 8
Kurla Chimney	230 14 26	Aglamba	h.s. 222 13 54
Kurla	h.s. 231 46 39	Purandhar Fort	s. 272 35 39
Bombay, Sion Hill Tree No. 1	246 36 45		
" Golangi	" 293 58 41	Chincholi, XXIII	
" Parel Paper Mills	298 27 34	Báleghát	h.s. 31 33 28
" Chinchpokli House	313 1 8	Khánpisura, XXI	70 35 15' 50
" Chimney No. 4	321 30 10	Sáwarkhed Hill Temple	82 36 16
" Chiuchpokli Gas Works	330 2 4	Raitala	" 91 24 45
		Dongargaon No. 2	" 94 10 8
		Roragiri Hill Mosque	101 22 12
		Pimpalgaon Hill Pagoda	111 43 29
		Ahmednagar	" 112 31 50
		Agargaon, XXIV	123 40 12' 16
		Netjai Hill	141 59 8
		Netjai	" 142 33 3
		Sautára, XX	324 30 10' 65
Boral h.s.		Chorakalli h.s.	
Boral Hill Pagoda	158 59 6	Pángaon, XV	38 17 6
Achola, IV	165 27 44	Patri Hill Tree	71 37 28
Bhalki Hill Tree	215 52 39	Chara Hill Dipmal	80 23 56
Bhalki Palace	223 8 54	Kulambvádi South Peak	96 13 56
Bhalki Idgah	225 0 14	Kalambvádi North Peak	96 32 56
Godavádi Hill Tree	229 21 28	Yéria Dipmal No. 1	117 26 40
Kaplapur	h.s. 241 11 6	Kanheri, XVIII	127 13 51
		Garh Dáud, XIV	320 16 56
Bori, XXII		Colába Observatory, Bombay, XXXVI	
Palvan	h.s. 18 41 30	Trombay, XXXV	216 43 38' 20
Kurkumb Dipmal	72 42 37	Trombay Masjid	222 50 20
Dhauleshvar, XXVII	91 17 3' 91	Butcher Island Tower	233 54 56
Dhond Hill Pagoda	92 38 48	Uravra Hill Peak	241 57 14
Pátas Hill Pagoda	96 18 19	Chanderi W. Peak	246 48 52
Bábulsár, XXV	134 40 0' 91	Chanderi E. Peak	247 48 27
Dhond Pagoda	139 39 10	Prabul, XXXII	260 49 17' 10
Khánpisura, XXI	202 52 30' 03	Manikgad Hill Fort	281 2 21
Pedgaon Pagoda	218 59 43	Karanja, XXXIV	288 5 26' 72
Kuldharan Hill	223 59 55	Mira Dongar, XXXIII	302 25 22' 93
Chanda Hill Pagoda	230 10 0		
Sedatek Hill Temple	255 7 22		
Alunda, XIX	265 21 21' 08		
Rasin Pagoda	266 34 53		
Burdapur h.s.			
Harangal, VIII	2 48 56		
Wadwál, V	289 4 40		

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Cross Island s.	o' "	Deobet, IX	o' "
Bombay, Dolphin Light	24 17 33	Mahádeoba, XII	62 52 10' 33
" Colába s.	36 28 26	Dharúr, XI	114 52 16' 37
" Castle Flag-staff	37 46 46	Maradi Tomb	124 13 58
" Colába Church	39 15 10	Kasti Pagoda	160 38 58
" St. Andrew's Church	39 24 6	Nitali, X	161 5 55' 00
" Mint	40 18 35	Ausa	h.s. 202 31 44
" Palm Tree	40 24 43	Makni Pagoda	204 36 58
" Fort House	41 36 45	Karasgaon, VI	209 40 2' 99
" St. Thomas's Cathedral	47 26 10	Atka Hill	215 2 47
" Marine Lines Flag-staff	58 54 37	Lamjan Hill Tree	218 17 7
" Gosain's Mat	64 25 35	Chincholi Garhi	227 32 58
" Sailors' Home	83 12 9	Sastúr Tomb	232 33 58
" Free Church	84 52 33	Udalpur	248 15 58
" Jakria Masjid	93 19 44	Toramba Pagoda	" 271 6 58
" Kálbádevi Road	98 31 0	Dáud Malik, VII	278 12 32' 53
" Malabár h.s.	98 54 42	Honali Hill	290 31 59
" Khambála Flag-staff	121 25 4		
" Elphinstone Press	132 33 20	Deobet h.s.	
" Vári Bandar	136 8 4	Vadgaon	h.s. 92 54 15
" Mázgaon Church	163 33 3	Dáud Malik, VII	278 11 6
" Tank Bandar Magazine	175 49 17	Allúr	" 346 39 23
Butcher Island s.	253 45 16	Achaler	" 355 12 15
Elephanta h.s.	257 16 23		
Uran	303 47 16		
Karanja, XXXIV	317 28 53		
Dáhitna h.s.		Dharúr, XI	
Sálotgi h.s.	18 19 23	Mahádeoba, XII	4 18 31' 23
Lachan s.	28 45 27	Ghaibi Sahib's Dipmal	14 50 33
Valsung h.s.	96 36 38	Khadki Hill Temple	20 17 32
Mahádeoba, XII	172 23 17	Sáwargaon, XIII	57 15 58' 68
Nilagaon	195 39 23	Dháráshev Hill Pagoda	133 28 40
Achaler	238 59 57	Dháráshev Hill Temple	133 30 28
Ganeshvádi	274 7 35	Dháráshev Mosque	140 27 35
Ambevád	283 26 1	Garh Dáud, XIV	144 39 26' 31
Badadol	311 40 4	Singoli Pile	156 8 56
Akalkot s.	317 47 51	Govargaon Hill Dargah	181 30 23
Balurgi Hill Pagoda	325 3 39	Nitali, X	207 37 47' 25
Karaji	349 20 8	Jaiphal Tree	219 0 49
		Deobet, IX	294 47 36' 13
Dapka h.s.			
Udgir, I	69 8 29		
Kallur h.s.	77 58 6	Dhauleshvar, XXVII	
Guti Hill Pagoda	97 12 39	Hareli	h.s. 17 3 3
Mungíal	199 24 19	Purandhar Fort	s. 50 19 23
Baktápur, XXXVIII	270 11 29	Sinbgad	h.s. 80 49 6
		Aglamba	" 93 9 56
Dáud Malik, VII		Parvati Pagoda No. 2	102 39 17
Allúr h.s.	57 47 3	Parvati Pagoda No. 1	102 52 1
Deobet	98 17 13	Phursangi Pagoda	104 22 15
Deobet, IX	98 18 47' 88	Poona Observatory	s. 109 21 33
Sángvi Hill Dargah	107 3 18	Banera Hill Pagoda	110 0 42
Atka Hill	149 47 27	Kirkee Mess House (helio.)	112 56 48
Lamjan Hill Tree	151 41 6	Kirkee Fives Court	113 27 33
Karasgaon, VI	153 8 42' 23	Kirkee Refuse Kiln (helio.)	114 58 34
Rámgaon Hill Tree	163 7 51	Dighi, XXVIII	126 22 39' 48
Jájnúr Hill Tree	196 46 5	Kondhápuri Pagoda	187 11 51
Jájnúr Hill Tomb	196 47 38	Bábulsár, XXV	198 21 26' 31
Sindkhed Hill	199 54 17	Bhuleshvar Hill Pagoda	264 44 20
Achola, IV	214 16 1' 82	Pátas Hill Pagoda	269 10 43
Guti Hill Mark (helio.)	250 0 30	Bori, XXII	271 8 13' 09
Honali Hill	330 49 48	Kurkumb Dipmal	275 24 33
		Palvau	h.s. 336 31 15

NOTE.—Station Baktápur, XXXVIII appertains to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Dhonegaon h.s.		Elephanta h.s.—(Contd.)	
Kotagjil Fort	o ' "	Bombay, Dockyard Clock Tower	68 29 17
Dongargaon No. 1	h.s. 56 34 13	Cross Island	s. 77 18 2
Manganal, XL	287 51 1	Bombay, Carnac Bandar	" 78 2 57
		" Akbar Cotton Press	" 79 39 10
Dighi, XXVIII		Butcher Island	" 82 14 41
Poona Church	0 10 23	Bombay, Chimney No. 2	" 99 50 28
Poona Observatory	s. 1 6 2	" Golangi	h.s. 112 41 58
Poona Old Observatory	1 46 35	" Siwri Fort	" 115 9 34
Yaravda Hill	2 0 21	" Mátunga R. C. Church	" 124 15 1
Parvati Pagoda No. 1	15 47 35	Trombay, XXXV	163 5 13
Parvati Pagoda No. 2	16 2 22	Trombay Palm Tree	184 4 1
Kirkee Mess House (helio.)	22 47 17	Karanja, XXXIV	359 20 37
Kirkee Refuse Kiln (helio.)	24 4 22		
Sinbgad	h.s. 25 39 56	Ganeshvádi h.s.	
Kirkee House	26 7 29	Dáhitna	h.s. 94 10 20
Kirkee Pines Court	28 23 29	Maháleooba, XII	144 13 4
Kirkee Idgah	32 11 9	Kiranhalli Hill Pagoda	204 58 58
Ganesh Khind Hill	33 47 22		
Aglauba	" 49 11 50	Garh Dáud, XIV	
Dáपुरi Wind-mill	51 50 14	Sáwargaon, XIII	6 36 21 23
Banera White Pagoda	53 29 9	Wardal Hill Tomb	16 10 18
Banera Hill Pagoda	54 25 30	Pángaon, XV	61 27 25 56
Poona Base-line E. End	s. 57 19 21	Pángaon Hill Tree	64 9 3
Poona Base-line W. End	" 87 47 27	Patri Hill Tree	93 26 52
Mándvi, XXXI	h.s. 91 21 47 78	Chara Hill Dipmal	117 38 33
Bhatras	105 53 47	Kalambvádi South Peak	117 46 33
Umra	" 135 28 23	Kalambvádi North Peak	118 1 33
Singi, XXX	140 38 33 62	Kadaknáthvádi Hill Temple	130 2 56
Sauringi Hill Tree	181 55 47	Kanheri, XVIII	132 4 57 43
Vakalvádi	" 199 9 29	Yeria Dipmal No. 2	136 21 43
Wáfzgaon, XXI	201 23 48 00	Yeria Dipmal No. 1	137 17 23
Jinjaria	" 224 30 55	Chornkali	h.s. 140 18 33
Kanhúr Hill Mark	229 25 16	Dhoki Idgah	223 48 45
Bábulsár, XXV	250 55 5 24	Nitali, X	265 9 32 38
Bhuleshvar Hill Pagoda	298 54 17	Jajphal Tree	275 28 28
Dhauleshvar, XXVII	306 17 21 38	Singoli Pile	295 41 37
Phursangi Pagoda	329 21 28	Dharúr, XI	324 36 30 24
Purandhar Fort	s. 346 37 29	Dháráshev Hill Temple	348 2 24
Vanandi Bungalow	354 19 50	Dháráshev Hill Pagoda	348 7 22
Bápdvegghát Hill Pagoda	354 20 58		
Dongargaon No. 1 h.s.		Harangal, VIII	
Torna Pagoda	52 6 33	Shur Tower	7 30 8
Dhonegaon	h.s. 76 19 38	Dáud Malik Tree	10 1 29
Achola, IV	83 54 22	Viroda Tree	24 52 52
Udgir, I	128 39 18	Nitali, X	59 26 41 46
Aurád Tower	288 43 3	Murad Hill Mark	95 25 23
Manganal, XL	322 17 3	Burdapur	h.s. 182 48 42
Ipalgaon Tree No. 1	350 52 43	Jánval Hill	241 26 54
		Jánval Hill Tree	243 3 5
		Wadwál, V	244 56 27 55
Dongargaon No. 2 h.s.		Látur Idgah	264 27 47
Sáwarkhed Hill Temple	2 17 19	Kalambgaon Hill Tree	278 33 49
Khánpisura, XXI	54 11 24	Hari Hill Pagoda	279 11 31
Chíncholi, XXIII	274 5 43	Hari Hill	279 14 12
Bálegghát	h.s. 286 35 3	Hasagaon Pile	297 25 21
Karul Hill Pagoda	301 53 43	Hasagaon Hill Peak No. 1	303 48 29
Karikada Pagoda	322 42 53	Hasagaon Hill Peak No. 2	305 30 2
		Karagaon, VI	330 55 7 50
Elephanta h.s.		Karagaon Hill Pagoda	330 55 42
Uran	h.s. 10 32 6	Ausa Hill Tree	341 39 22
Bombay, Pronga Light-house	56 23 56	Ausa	h.s. 341 39 58
" Colába	s. 59 57 44	Ausa Tomb No. 1	343 39 43

NOTE.—Station Manganal, XL appertains to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Harangal, VIII—(Contd.)		Kanheri, XVIII	
Ausa Fort 346 4 27	134	Pángaon, XV 3 36 59 44	19
Ausa Tomb No. 3 348 12 16	136	Kem, XVII 51 51 48 16	20
		Kem Hill Pagoda 54 32 43	231
Hareli h.s.		Alsunda, XIX 86 24 19 38	23
Purandhar Fort s. 168 31 12	290	Bhaváni Hill Temple 92 1 39	233
Dhauleshvar, XXVII 197 0 30	290	Sautára, XX 131 10 37 78	24
Palvan h.s. 292 58 16	291	Chorakalli h.s. 307 10 28	220
		Garh Dáud, XIV 311 59 54 95	19
		Kadaknáthvádi Hill Temple 316 20 28	226
Hattibötta h.s.		Kaplapur h.s.	
Hissámnagar Tower 34 58 31	104	Boral h.s. 61 12 51	60
Mamdapur Tomb 41 9 10	102	Boral Hill Pagoda 63 14 6	61
Mamdapur Tower 44 18 31	101	Godavádi Hill Tree 66 31 51	62
Hattibötta Hill Tree 71 3 31	100	Achola, IV 148 15 9	58
Achola, IV 342 3 31	100	Batamra Palace 173 35 54	71
Chaunhipparga Tower 357 40 31	103	Bhalki Hill Tree 194 37 55	67
		Bhalki Palace 202 23 53	70
Hiraj s.		Bhalki Idgah 206 16 52	69
Kurul h.s. 73 21 28	197	Bhalki Hill Dipmal 206 30 33	65
Mardi s. 203 24 37	196	Bhalki Hill Pagoda 206 31 48	63
Sholápur Fort „ 281 23 55	196	Manganál, XL 215 48 56	58
		Halbarga Hill Pagoda 260 56 16	59
Jalihál s.		Kapria h.s.	
Anavli h.s. 169 38 40	170	Mira Dongar, XXXIII 30 58 33	330
Kurul „ 216 52 17	169	Karanja, XXXIV 86 5 18	330
Kandalgaon „ 243 43 39	168	Sondavádi Hill Peak 190 22 10	343
Hálhalli Tower 281 25 38	192	Aupa h.s. 220 2 31	331
Sivangi „ 307 46 8	190	Rájmáchi Hill Fort 206 12 16	334
Sátalgaon „ 308 45 27	168	Pangoli „ 310 46 5	332
		Nághláni Hill Mark 333 26 26	335
Jevra h.s.		Karaji s.	
Pála h.s. 242 37 49	323	Dáhitna h.s. 169 21 13	183
Kárlí Base-line E. End s. 289 48 57	326	Ambevád „ 220 59 12	181
Bhatras h.s. 310 58 48	322	Badadol „ 254 56 13	183
Mándvi, XXXI 327 19 47	322		
Kárlí Base-line W. End s. 350 34 20	324		
Jinjaria h.s.		Karanja, XXXIV	
Dighi, XXVIII 44 35 38	296	Bombay, Colába Light-house 107 25 20	358
Wáfgaon, XXIX 123 59 14	296	Colába Observatory, Bombay, XXXVI 108 7 53 79	45
Bábulsár, XXV 307 20 6	297	Bombay, Colába s. 108 28 8	411
		Cross Island „ 137 30 34	413
Kallur h.s.		Bombay, Sion Fort 160 15 43	357
Mungál h.s. 229 13 50	86	Trombay Masjid 170 5 14	354
Dapka „ 257 54 35	87	Trombay, XXXV 173 9 58 20	46
Udgir, I 281 6 9	86	Elephanta h.s. 179 20 39	412
		Malangad Hill No. 1 222 5 40	351
Kandalgaon h.s.		Uravra Hill Peak 227 8 29	349
Sátalgaon h.s. 4 14 46	167	Chanderi W. Peak 233 17 14	346
Sivangi „ 36 2 33	190	Chanderi E. Peak 234 37 59	344
Jalihál s. 63 49 11	168	Aupa „ 241 17 58	328
Kurul h.s. 141 24 8	157	Prabal, XXXII 249 29 38 43	43
Mardi s. 202 0 43	156	Jinkhor Hill Peak 254 31 11	342
Valung h.s. 259 35 42	156	Karnála Hill Fort 262 2 1	340
Lachan s. 319 6 28	166	Singi, XXX 262 29 50 69	40
		Kapria „ 265 58 35	330
		Nalauda „ 269 18 3	336

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Karanja, XXXIV—(Contd.)		Khánpisura, XXI	
Pangoli h.s. 279 7 40	332	Sedatek Hill Temple 9 9 49	281
Mándvi, XXXI 291 29 6.38	40	Pedgaon Pagoda 15 33 56	280
Mira Dongar, XXXIII 309 0 9.84	43	Bori, XXII 22 55 22.72	26
		Dhond Hill Pagoda 30 26 20	283
Karasgaon, VI		Dhond Pagoda 32 12 11	282
Udalpur h.s. 18 39 11	143	Bábulsár, XXV 89 16 6.90	27
Deobet, IX 29 43 8.69	10	Párner, XXVI 128 42 41.45	35
Ausa Hill Tree 97 32 51	133	Raitala h.s. 135 37 25	263
Ausa " 97 39 30	124	Kambargaon Hill Tree 145 51 21	275
Nitali, X 103 40 22.74	9	Nimbadera " 172 46 0	257
Borphal Dargah 107 56 28	137	Dongarganj Hill Tower 176 35 29	260
Shur Tower 135 12 35	123	Ahmednagar Bhingár Tomb 178 42 26	268
Harangal, VIII 150 57 1.94	8	Koparvádi Hill Temple 181 6 18	261
Látur Idgah 184 51 53	113	Ahmednagar " 189 47 11	249
Yérandi Tower 197 29 30	129	Agargaon, XXIV 191 14 45.70	34
Hasagaon Pile 205 51 24	119	Pimpalgaon Hill Pagoda 191 31 14	254
Sarola Tower 211 25 30	128	Roragiri Hill Mosque 230 33 16	255
Wadwál, V 213 18 18.82	7	Dongargaon No. 2 " 234 6 19	244
Kanheri Tower 215 9 30	130	Sáwarkhed Hill Temple 241 8 13	242
Hasagaon Hill Peak No. 1 222 44 34	121	Chincholi, XXIII 250 25 45.67	33
Hasagaon Hill Peak No. 2 224 28 24	122	Mugnon s. 258 23 26	241
Kalambgaon Hill Tree 237 40 59	115	Sautára, XX 268 26 27.77	32
Hari Hill 241 25 50	116	Chauda Hill Pagoda 310 15 44	277
Hattibétta Hill Tree 256 46 37	98	Alsunda, XIX 324 49 54.02	26
Achola, IV 265 54 32.79	7	Rasin Pagoda 337 18 12	239
Jájnúr Hill Tree 283 10 19	110	Kuldharan Hill 339 49 21	278
Jájnúr Hill Tomb 283 13 33	107		
Rámagaon Hill Tree 288 39 18	138	Kotagial Fort s.	
Dáud Malik, VII 333 5 29.52	11	Dhonaegaon h.s. 236 33 38	53
Sáugvi Hill Dargah 359 30 30	141	Manganál, XL 276 45 42	53
Kárlí Base-line E. End s.		Kundrá, II	
Kárlí Base-line W. End s. 64 20 7	325	Udgir, I 51 25 27.84	4
Jevra h.s. 109 50 11	326	Wanjárvádi, III 105 3 34.56	5
Bhatras " 337 55 0	325	Baktápur, XXXVIII 300 8 10.67	4
Kárlí Base-line W. End s.		Kuranur h.s.	
Jevra h.s. 170 34 30	324	Mahádeoba, XII 145 4 7	171
Kárlí Base-line E. End s. 244 19 3	325	Naldurg Cavalier 190 23 54	173
Bhatras h.s. 287 8 6	324	Achaler h.s. 239 8 27	171
		Ambevád " 306 17 16	172
Kem, XVII		Kurla h.s.	
Kem Hill Pagoda 100 51 7	231	Bombay Mátunga h.s. 15 4 4	426
Alsunda, XIX 133 23 30.68	23	" Golangi " 23 38 37	428
Khorthi Hill Mark (heliotrope) 134 23 54	236	" Malmála s. 48 53 38	426
Karmálá Hill Temple 157 39 12	235	" Warli h.s. 51 47 47	584
Sautára, XX 187 1 19.29	24	" Warli Fort 59 5 52	609
Kanheri, XVIII 231 43 58.54	20	Bándra, Santa Monte Church 78 5 40	615
Pángaon, XV 280 32 57.13	20	Bándra, Protestant Church 81 3 2	618
Maheshgaon Hill Pagoda 293 22 3	230	Bándra, Santa Andre Church 87 22 25	620
Wápá, XVI 322 2 30.75	22	Kalani Church 163 5 15	625
		Trombay, XXXV 304 34 8	427
Kbandáli s.		Kurul h.s.	
Anavli h.s. 16 20 16	160	Jalihal s. 36 56 1	160
Pokhrapur s. 320 30 45	160	Anavli h.s. 85 26 58	159

NOTE.—Stations Baktápur, XXXVIII and Manganál, XL appertain to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Kurul h.s.—(Contd.)		Mándvi, XXXI—(Contd.)	
Pokhrapur s. 149 36 43	158	Jevra h.s. 147 21 54	322
Mardi " 232 26 10	157	Bhatras " 165 41 34	315
Hiraj " 253 18 27	197	Pála " 178 23 29	316
Sholápur Fort " 262 40 36	195	Bhimáshankar Hill Tree " 179 7 8	327
Kandalgaon h.s. 321 22 20	157	Aupa " 180 30 41	329
		Singi, XXX " 200 18 29.15	39
Lachan s.		Umra " 213 16 15	320
Nimbál h.s. 40 2 17	189	Shelárvádi " 250 8 55	318
Sátalgaon " 69 3 43	167	Dighi, XXVIII " 271 15 9.92	39
Kandalgaon " 139 10 46	166	Poona Base-line W. End s. 274 30 38	359
Suler Javalga s. 186 45 10	187	Poona Church " 290 32 35	385
Valsung h.s. 194 48 20	165	Parvati Pagoda No. 1 " 294 27 27	388
Dáhitna " 208 42 18	165	Bápdévghát Hill Pagoda " 302 21 45	305
Udagi " 231 20 33	187	Purandhar Fort " 310 36 30	288
		Sinhgad h.s. 322 13 6	306
		Aglamba " 322 54 55	309
Mahádeoba, XII		Manganál, XL	
Valsung h.s. 13 5 27	154	Chalkapur Hill Pagoda " 17 28 31	57
Sholápur Fort (heliotrope) s. 57 55 44	198	Halbarga Hill Pagoda " 18 21 40	59
Sholápur Fort " 58 4 2	194	Ipalgaon Tree No. 1 " 23 52 15	55
Khadki Hill Temple " 64 52 10	200	Kaplapur h.s. 35 52 43	58
Mardi " 88 38 31	155	Bhalki Hill Dipmal " 41 48 45	64
Sáwargaon, XIII " 126 2 54.48	17	Bhalki Hill Tower " 42 1 32	66
Ghaibi Sahib's Dipmal " 175 38 6	202	Bhalki Hill Tree " 47 17 24	67
Dharúr, XI " 184 18 9.84	16	Batamra Palace " 52 29 52	71
Vadgaon h.s. 234 5 20	161	Torna Pagoda " 91 39 12	56
Deobet, IX " 242 47 10.12	16	Achola, IV " 92 55 17.28	2
Naldurg Cavalier " 265 21 9	173	Kotagal Fort s. 96 48 31	53
Naldurg Idgah " 266 10 48	174	Dhonegaon h.s. 107 53 15	52
Andura Hill Pagoda " 270 30 55	175	Udgir Hill Masjid " 121 24 15	82
Achalar " 287 12 23	158	Udgir Idgah " 122 56 20	80
Kiranhalli Hill Pagoda " 302 35 17	179	Udgir Hill Tomb No. 1 " 128 25 17	76
Nilgaon " 311 51 50	176	Udgir, I " 131 26 46.62	1
Ganeshvádi " 324 9 43	178	Dongargaon No. 1 " 142 17 52	50
Kuranur " 325 1 47	171	Baktápur, XXXVIII " 216 23 36.64	1
Dáhitna " 352 22 41	153	Aurád Tower " 232 40 52	54
		Bidar Minaret " 334 48 20	49
Mahalunga s.		Mardi s.	
Sus Pagoda " 46 27 50	397	Kandalgaon h.s. 22 2 50	156
Sus h.s. 88 27 34	370	Hiraj s. 23 25 31	196
Poona Base-line No. 1 s. 160 28 0	369	Kurul h.s. 52 30 5	157
Mahalunga Pagoda " 187 37 42	373	Pokhrapur s. 82 14 56	158
Poona Base-line No. 2 " 223 15 41	367	Mahádeoba, XII " 268 33 47	155
Poona Base-line No. 3 " 241 28 50	366	Valsung h.s. 318 19 27	155
Pimpla Nilakh " 256 2 20	366	Sholápur Fort s. 345 0 52	194
Kirkee Church " 274 54 56	380		
Mándvi, XXXI		Márunji h.s.	
Chandár h.s. 1 27 17	310	Poona Base-line No. 1 s. 262 33 13	372
Bhoja " 75 12 9	333	Sus h.s. 324 25 17	372
Mira Dongar, XXXIII " 98 28 1.19	42		
Morgiri Fort s. 106 33 28	313	Mira Dongar, XXXIII	
Tung Fort " 111 26 52	312	Colába Observatory, Bombay, XXXVI " 122 32 9.29	45
Karanja, XXXIV " 111 40 40.43	40	Karanja, XXXIV " 129 4 29.51	43
Jinkhor Hill Peak " 136 9 25	341	Karnála Hill Fort " 167 50 36	339
Prabal, XXXII " 138 4 40.98	41	Malangad Hill No. 2 " 181 49 46	352
Pangoli h.s. 139 46 2	333	Uravra Hill Peak " 186 32 53	348
Malangad Hill No. 2 " 144 17 23	352		
Malangad Hill No. 1 " 144 23 45	350		

NOTE.—Stations Baktápur, XXXVIII and Manganál, XL pertain to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of Triangle giving Distance	Name of station with azimuths of surrounding points	No. of Triangle giving Distance
Mira Dongar, XXXIII—(Ctd.) ° ' "		Nitali, X ° ' "	
Prabal, XXXII 192 40 22·34	42	Dharúr, XI 27 40 11·37	13
Jinkhor Hill Peak 194 47 48	841	Singoli Pile 74 4 29	209
Nalanda h.s. 207 31 37	336	Garh Dáud, XIV 85 14 54·48	14
Kapria " 210 56 10	380	Dhoki Idgah 118 1 45	207
Mándvi, XXXI 278 20 48·41	42	Govargaon Hill Dargah 141 53 31	206
		Murad Hill mark 178 54 4	205
		Harangal, VIII 239 23 7·33	9
Morgiri Fort s.		Hari Hill Pagoda 264 24 3	117
Singi, XXX 219 7 50	813	Hasgaon Hill Peak No. 1 269 54 57	120
Mándvi, XXXI 286 31 12	813	Karasaon, VI 283 34 55·47	9
		Karasaon Hill Pagoda 283 35 33	131
		Dáud Malik Tree 292 1 7	127
Mugaon s.		Viroda Tree 295 41 38	126
Khánpisura, XXI 78 32 47	241	Jaiphal Tree 333 55 27	203
Sautára, XX 305 14 18	241	Deobet, IX 341 3 36·17	10
Mungfál h.s.		Pála h.s.	
Dapka h.s. 19 25 28	72	Bhatras h.s. 8 17 52	317
Guti Hill Pagoda 32 11 14	75	Jevra " 62 39 48	323
Udgir, I 40 51 55	72	Singi, XXX 230 22 8	316
Kállur " 49 18 30	86	Shelárvádi " 312 59 26	319
Baktápur, XXXVIII 302 4 42	73	Mándvi, XXXI 358 23 21	316
Nalanda h.s.		Palvan h.s.	
Mira Dongar, XXXIII 27 33 31	396	Haveli h.s. 113 5 58	291
Karanja, XXXIV 89 24 17	396	Dhauleshvar, XXVII 156 36 24	287
Prabal, XXXII 163 12 47	337	Bori, XXII 198 37 48	287
Netjai h.s.		Pángaon, XV	
Ágargaon, XXIV 104 58 35	251	Wápla, XVI 45 23 22·21	21
Chincholi, XXIII 322 30 2	251	Maheshgaon Hill Pagoda 89 57 29	230
		Ken, XVII 100 40 13·76	20
Nilagaon h.s.		Kanheri, XVIII 183 36 30·94	19
Dáhitra h.s. 15 40 16	176	Kadaknáthvádi Hill Temple 198 14 54	225
Mahádeoba, XII 131 53 19	176	Chorakalli h.s. 218 13 15	220
Ambevád " 317 34 3	177	Garh Dáud, XIV 241 21 57·79	18
		Dháráshev Mosque 259 28 37	210
Nimbadera h.s.		Warvati Hill Peak 271 20 7	215
Párner, XXVI 55 29 28	257	Tuljapur Hill Temple 286 20 24	216
Dhoki Hill Pagoda 76 31 47	271	Vairág Pagoda No. 1 294 53 45	218
Dhoki Hill 76 55 29	273	Sáwargaon, XIII 306 54 4·98	18
Ágargaon, XXIV 294 48 13	258		
Ahmednagar h.s. 321 55 37	259	Pangoli h.s.	
Ahmednagar Bhingár Tomb 339 54 24	267	Bhoja h.s. 15 52 10	333
Ahmednagar Masjid 342 59 35	265	Karanja, XXXIV 99 16 37	332
Ahmednagar Fort 345 32 37	266	Kapria " 130 48 19	332
Ahmednagar Fara Bágh 348 38 10	270	Sondavádi Hill Peak 149 58 30	343
Khánpisura, XXI 352 44 48	257	Rájmáchi Hill Fort 178 27 55	334
		Mándvi, XXXI 319 43 23	333
Nimbál h.s.			
Sátalgaon h.s. 134 29 39	189	Párner, XXVI	
Lachan s. 219 59 23	180	Bábulsár, XXV 23 7 57·43	36
		Wáfgaon, XXIX 73 43 3·80	37
		Singi, XXX 82 19 56·45	38
		Varoda h.s. 115 15 5	299
		Korthan Hill Dipmal 118 14 36	298
		Dhoki Hill Pagoda 179 19 9	272

NOTE.—Station Baktápur, XXXVIII appertains to the Great Arc Meridional Series, Section 16° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Párner, XXVI—(Contd.)		Poona Base-line No. 2 s.—(Ctd.)	
Dhoki Hill	182 43 41	Sus Rock	46 35 8
Nimbadera h.s.	235 23 25	Sus	h.s. 61 55 16
Ágargnon, XXIV	252 49 36.68	Sus Hill No. 2	62 18 8
Koparvádi Hill Temple	253 44 57	Poona Base-line No. 1	s. 116 1 50
Ahmednagar Church	262 8 20	Poona Base-line No. 3	" 296 1 49
Ahmednagar	" 263 4 56	Pimpla Nilakh	" 333 24 0
Raitala	" 300 12 43		
Supa Hill Idgah	305 32 54	Poona Base-line No. 3 s.	
Khánpisura, XXI	308 35 25.62	Banera White Pagoda	16 12 20
		Pimpla Nilakh	s. 16 24 30
		Pimpla Nilakh Pagoda	32 55 36
Pimpla Nilakh s.		Mahalunga	" 61 29 28
Mahalunga	s. 76 2 54	Poona Base-line No. 2	" 116 2 2
Pimpla Nilakh Pagoda	95 27 56	Poona Base-line No. 1	" 116 2 3
Bálevádi House	111 32 1	Kirkee Church	295 34 15
Poona Base-line No. 2	" 153 24 9	Poona Base-line E. End	" 296 2 3
Poona Base-line No. 3	" 196 24 26	Aundh Pagoda	319 41 59
Poona Base-line E. End	" 242 59 6	Ganesh Khind Pagoda	323 54 49
Pokhrapur s.		Poona Base-line W. End s.	
Anavli	h.s. 50 32 24	Aglamba	h.s. 13 6 16
Khandáli	s. 140 32 34	Márunji Chauri	33 38 34
Mardi	" 262 9 40	Márunji Hill Peak	50 59 59
Kurul	h.s. 329 35 22	Mándvi, XXXI	94 34 6
		Kevla Well	191 48 34
		Kevla Bridge	192 3 34
Poona Base-line E. End s.		Punaula Bungalow	228 6 10
Banera White Pagoda	39 19 45	Akurdi Temple	232 31 28
Aglamba	h.s. 44 50 25	Chinchvad Pagoda	263 32 53
Pimpla Nilakh	s. 62 59 20	Dighi, XXVIII	267 44 17
Pimpla Nilakh Pagoda	69 30 56	Poona Base-line No. 1	s. 296 0 16
Márunji Hill Peak	104 36 49	Poona Base-line E. End	" 296 0 34
Poona Base-line No. 3	s. 116 2 13	Hinjaura Hill	331 32 2
Poona Base-line W. End	" 116 2 15	Sus Hill No. 1	h.s. 336 43 41
Dighi, XXVIII	237 17 52	Sus	h.s. 338 13 9
Dápurí Wind-mill	269 25 45		
Kirkee Idgah	279 26 47	Poona Observatory s.	
Kirkee House	279 29 45	Dighi, XXVIII	181 6 0
Yaravda Hill	293 42 52	Dhauleshvar, XXVII	289 16 13
Poona Church	313 22 7		
Ganesh Khind Pagoda	330 7 15	Prabal, XXXII	
Aundh Pagoda	341 18 16	Mira Dongar, XXXIII	12 41 38.08
Ganesh Khind Hill	351 34 13	Manikgad Hill Fort	13 40 14
		Karnála Hill Fort	52 57 18
Poona Base-line No. 1 s.		Karanja, XXXIV	69 35 16.01
Sus Rock	9 33 32	Colába Observatory, Bombay, XXXVI	80 57 22.48
Sus	h.s. 11 14 13	Trombay Masjid	97 30 41
Sus Hill No. 2	18 27 47	Trombay, XXXV	103 19 2.21
Laula Hill Pagoda	29 26 50	Singi, XXX	271 49 11.38
Hinjaura Hill	46 39 54	Mándvi, XXXI	317 58 40.74
Márunji	h.s. 82 33 53	Nalanda	h.s. 343 12 10
Poona Base-line W. End	s. 116 0 49		
Poona Base-line No. 2	" 296 1 8	Purandhar Fort s.	
Poona Base-line No. 3	" 296 1 8	Chandúr	h.s. 92 44 16
Mahalunga Pagoda	327 8 15	Mándvi, XXXI	130 44 48
Mahalunga	" 340 27 43	Dighi, XXVIII	166 39 9
Sus Hill No. 1	355 16 34	Dhauleshvar, XXVII	230 15 46
		Bareli	" 348 30 8
Poona Base-line No 2 s.			
Bálevádi House	37 40 3		
Mahalunga	s. 43 16 6		

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Raitala h.s.	° ' "	Singi, XXX	° ' "
Supa Hill Idgah	107 35 19	Mándvi, XXXI	20 20 51·32
Párner, XXVI	120 16 24	Bhatras	h.s. 32 16 18
Almednagar Church	226 46 38	Morgiri Fort	s. 39 12 28
Chincholi, XXIII	271 11 40	Pála	h.s. 50 24 38
Khánpisura, XXI	315 33 51	Karanja, XXXIV	82 43 53·36
		Prabal, XXXII	91 57 37·89
Sátotgi h.s.		Chauderi E. Peak	106 37 46
Dáhitna	h.s. 198 16 57	Chauderi W. Peak	107 6 11
Udagi	" 213 19 46	Malangad Hill No. 2	109 31 1
Badadol	" 245 54 46	Malangad Hill No. 1	109 35 47
		Bhímashankar Hill Tree	133 2 11
Sátalgaon h.s.		Aupa	h.s. 153 33 58
Gudápur Hill Pagoda	88 10 54	Varoda	" 210 4 31
Jalihal	s. 128 50 40	Naráyngad Hill Pagoda	244 4 29
Sivangi	h.s. 129 38 14	Párner, XXVI	262 5 23·76
Kandalgaon	" 184 14 27	Wáfgaon, XXIX	272 10 1·59
Lachan	s. 248 59 6	Sauringi Hill Tree	275 15 50
Nimbál	h.s. 314 27 56	Kanhír Hill Mark	280 37 3
		Vakalvádi	h.s. 287 30 40
Sautára, XX		Dighi, XXVIII	326 34 14·66
Kem, XVII	7 2 46·77	Umbra	" 354 11 40
Karmálá Hill Temple	24 6 42		
Khorti Hill Mark (heliotrope)	41 20 38	Sinbgad h.s.	
Alsunda, XIX	47 39 12·73	Mándvi, XXXI	142 17 15
Alsunda Hill Pagoda	51 6 21	Dighi, XXVIII	205 37 27
Khánpisura, XXI	88 38 5·91	Dhauleshvar, XXVII	260 41 20
Sáwarkhed Hill Temple	110 36 41		
Mugaon	s. 125 16 35	Sivangi h.s.	
Chincholi, XXIII	144 32 21·71	Gudápur Hill Pagoda	53 38 14
Kauheri, XVIII	311 4 9·04	Jalihal	s. 127 48 21
Bhaváni Hill Temple	329 49 35	Kandalgaon	h.s. 215 59 14
		Háhbhalli Tower	219 49 21
Sáwargaon, XIII		Sátalgaon	" 309 35 14
Sholápur Fort (heliotrope)	9 23 37		
Wardal Hill Tomb	51 27 24	Sulcr Javalga s.	
Wápla, XVI	90 31 5·10	Lachan	s. 6 45 34
Pángaon, XV	126 58 45·01	Valsung	h.s. 205 30 7
Pángaon Hill Tree	131 33 28	Udagi	" 274 56 0
Vairág Pagoda No. 1	134 11 1		
Yéria Dipnal No. 2	172 2 0	Sus h.s.	
Garh Dáud, XIV	186 35 36·20	Laula Hill Pagoda	42 49 23
Dháráshov Hill Pagoda	192 56 57	Márunji	h.s. 144 25 48
Dháráshov Mosque	200 14 20	Márunji Chauri	151 28 53
Warrati Hill Peak	209 30 17	Poona Base-line W. End	s. 158 13 36
Tuljapur Hill Temple	230 57 20	Kevla Well	173 2 57
Dharúr, XI	237 12 19·40	Kevla Bridge	173 10 4
Ghaibi Sahib's Dipnal	205 30 40	Punaula Buogalov	181 33 14
Mahádeoba, XII	305 59 37·96	Poona Base-line No. 1	" 191 14 4
Khadki Hill Temple	333 15 4	Akurdi Temple	201 40 2
		Chinchrad Pagoda	201 44 20
Shelárvádi h.s.		Poona Base-line No. 2	" 241 54 25
Mándvi, XXXI	70 12 9	Mahalunga	" 268 27 8
Bhatras	h.s. 100 40 59	Sus Pagoda	310 54 43
Pála	" 133 2 48		
		Trombay, XXXV	
Sholápur Fort s.		Butcher Island Tower	10 33 51
Kurul	h.s. 82 45 10	Butcher Island	s. 12 22 34
Hiraj	s. 101 25 28		
Mardi	" 165 1 31		
Mahádeoba, XII	237 59 57		

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Trombay, XXXV—(Contd.)		Udgir, I—(Contd.)	
Colába Observatory, Bombay, XXXVI	36 45 40' 49	Dapka	h.s. 249 6 3
Bombay, Colába Light-house	36 46 25	Baktápur, XXXVIII	263 59 39' 11
" Colába	s. 36 48 37	Dongargaon No. 1	" 308 35 14
" Dockyard Clock Tower	37 32 51	Manganál, XL	311 21 51' 35
" Akbar Cotton Press	42 16 19	Udgir Hill Tomb No. 2	331 25 51
" Imperial Press	43 5 5	Udgir Hill Tomb No. 1	334 6 13
" Tank Bandar Saw Mills No. 2	51 35 14		
" Tank Bandar Saw Mills No. 1	52 5 22		
" Chimney No. 2	58 47 39	Umbra h.s.	
" Mázgaon Oil Press	58 49 42	Mándvi, XXXI	33 18 52
" Golangi	h.s. 65 26 30	Singi, XXX	174 11 55
" Mátunga	" 78 38 28	Dighi, XXVIII	315 24 22
" Warli Fort	86 3 47		
Bándra Protestant Church	101 56 4	Uran h.s.	
Bándra Santa Andre Church	105 46 55	Bombay, Frongs Light-house	79 24 11
Bombay, Sion Fort	109 9 48	" Colába	s. 87 58 35
Kurla	" 124 34 56	" Oyster Rock	90 35 8
Kurla Chimney	125 50 28	" Dolphin Light	98 36 13
Kalani Church	136 35 42	" Dockyard Clock Tower	106 47 18
Trombay Palm Tree	256 36 9	" Carnac Bandar	" 121 32 58
Prabal, XXXII	283 12 57' 67	" Imperial Press	121 43 53
Elephanta	" 343 4 50	Cross Island	" 123 48 40
Karanja, XXXIV	353 9 32' 79	Bombay, Golangi	h.s. 144 28 22
		Butcher Island	s. 159 31 52
		Elephanta	h.s. 190 31 51
Udagi h.s.			
Sálotgi	h.s. 33 23 4	Vadgaon h.s.	
Lachan	s. 51 24 31	Naldurg Idgah	21 49 53
Suler Javalga	" 94 59 34	Andura Hill Pagoda	29 22 27
Ambevád	h.s. 250 14 14	Mahádeoaba, XII	54 8 59
Badadol	" 294 24 48	Deobet	h.s. 272 52 53
		Achaler	" 338 13 3
Udalpur h.s.			
Toramba Pagoda	33 19 25	Vakalvádi h.s.	
Deobet, IX	68 17 25	Dighi, XXVIII	19 11 6
Maradi Tomb	102 13 25	Singi, XXX	107 36 36
Kasti Pagoda	121 40 25		
Makni Pagoda	147 28 25	Valsung h.s.	
Chincholi Garhi	157 24 25	Lachan	s. 14 49 53
Karasgaon, VI	198 37 32	Suler Javalga	" 25 31 16
Sastúr Tomb	205 56 25	Kandalgaon	h.s. 79 41 33
		Mardi	s. 138 23 11
Udgir, I		Mahádeoaba, XII	193 4 27
Udgir Bungalow (heliotrope)	1 34 6	Dáhitna	h.s. 276 35 2
Udgir Idgah	3 9 26		
Udgir Hill Tomb No. 3	6 41 50	Varoda h.s.	
Nágara Hill Dargah	24 10 25	Singi, XXX	30 8 30
Achola, IV	31 14 25' 00	Párner, XXXVI	295 4 33
Lohára Hill	64 46 18	Naráyangad Hill Pagoda	317 23 2
Loni Hill Tree	96 17 53	Wásgaon, XXIX	338 29 44
Kallur	h.s. 101 7 14		
Wadwál, V	105 8 17' 98	Wadwál, V	
Malia Hill Temple	115 32 42	Kalambgaon Hill Tree	1 22 49
Malia Hill No. 1	122 39 18	Karasgaon, VI	33 22 25' 84
Malia Hill No. 2	123 3 18	Hasgaon Pile	36 24 10
Rájuri Hill Mark (heliotrope)	145 1 18		
Wanjarvádi, III	188 55 31' 69		
Mungúil	h.s. 220 48 20		
Kundrá, II	231 21 2' 97		
Guti Hill Pagoda	237 27 7		

NOTE.—Stations Dakápur, XXXVIII and Manganál, XL appertain to the Great Arc Meridional Series, Section 18° to 24°.

Name of station with azimuths of surrounding points	No. of triangle giving distance	Name of station with azimuths of surrounding points	No. of triangle giving distance
Wadwál, V—(Contd.)		Wáfgaon, XXIX	
Ausa Hill Tree	38 43 37	Dighi, XXVIII	30
Ausa Tomb No. 1	42 50 34	Singl, XXX	31
Harangal, VIII	65 2 31' 10	Varoda	299
Jánval Hill Tree	94 52 4	Párner, XXVI	37
Burdapur	h.s. 109 10 29	Jinjaria	296
Jánval Hill	153 34 31	Bábulsár, XXV	30
Rájuri Hill Mark (heliotrope)	230 12 26		
Wanjarvádi, III	248 28 49' 27		
Malia Hill No. 2	276 55 55	Wanjarvádi, III	
Malia Hill No. 1	277 9 55	Udgir, I	5
Chákúr Hill Temple	278 48 25	Wadwál, V	6
Malia Hill Temple	280 23 12	Kundrál, II	5
Udgir, I	285 1 54' 89		
Loni Hill Tree	286 36 32	Wápla, XVI	
Lohára Hill	299 16 53	Kem, XVII	22
Digol Hill Dargah	317 30 12	Pángaon, XV	21
Hattibétta Hill Tree	321 47 46	Sáwargaon, XIII	21
Achola, IV	325 19 8' 80		

January, 1892.

J. ECCLES,

In charge of Computing Office.

BOMBAY LONGITUDINAL SERIES.

CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

The following table gives the co-ordinates of all stations and other fixed points, arranged in alphabetical order, also the descriptions of the secondary and intersected (or unvisited) points, and references to the preceding pages where the descriptions of the principal stations are given.

NOTE.—Principal stations are followed by the Roman numerals I, II, &c., secondary stations by the letters h.s., s. and t.s. Wherever the spelling and designation of stations and points have been altered from the old nomenclature, the latter is given in italics where necessary, immediately below the former. The year or season in which a station or point was originally fixed is usually given after its description.

For visited stations and points of superior accuracy, the values of latitude and longitude are given to two places of decimals, for well determined objects to one place, and for the remaining points to the nearest second.

The Trigonometrical heights in general refer to the upper surface of the pillar or to the mark engraved on top of pillar, building, &c.; but in exceptional cases, where the information is forthcoming in the field books, the surfaces to which the heights refer are specified in footnotes. The spirit-levelled heights are given to two places of decimals of a foot, and the surfaces to which they refer are also indicated in footnotes. In a few cases, where Trigonometrical heights do not exist, but values have been found on the Topographical Survey maps, these values have been reduced to the same terms as the Trigonometrical heights and enclosed in brackets, thus [1960]; the surface to which they refer may be assumed to be the ground level. In the column of heights, the upper numeral gives the height of the station above mean sea-level and the lower is that of the structure itself above ground level.

The numerals in the last column indicate the triangles given on pages 13—B, to 40—B, by which the station or point has been fixed; when these numerals are omitted it is to be understood that no triangles are given.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Achaler h.s. ... <i>Achulair S.</i>	Nizam's Territory	On high ground, about a mile E.S.E. of Achaler, and 1½ miles N. by W. of Allūr. 1819-20.	17 43 9·07	76 27 26·37	feet [1960]	152
Achola, IV ...	"	<i>vide page 4—B.</i>	18 14 48·12	77 1 47·69	2274 4·4	2
Achola Hill Dipmal ...	"	Close to and on the same hill as the principal station. 1840-41.	18 14 48·3	77 1 47·7	...	...
Āgargaon, XXIV ...	Ahmednagar (Ahmadnagar)	<i>vide page 8—B.</i>	19 10 40·52	74 54 32·98	* 3153·95 12·0	34
Aglamba h.s. ... <i>Aglamba Station</i>	Poona (Puna)	On the peak of the high hill called Banboa, about 3 miles N.W. of Aglamba village, and 8 miles N.W. of the well-known hill of Sinhgad: taluka Haveli. Denoted by a mark-stone about 3 feet deep. 1829-30.	18 27 11·26	73 43 15·56	3761	308 309

* To mark-stone on top of mound, 12·0 feet above bench-mark at foot of station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ahmednagar Bhingár Tomb <i>Bengar k. tb.</i>	Ahmednagar	On a small hill immediately S. of Bhingár town: táluka Ahmednagar. 1832.	19 5 49' 2	74 48 48' 1	feet ...	267 268
Ahmednagar Bhishti Bâgh	"	Also known as Sheri Bhishti Bâgh. About 2½ miles N. of Ahmednagar city: táluka Ahmednagar. 1820-30.	19 7 59	74 46 50	...	...
Ahmednagar Church	"	Between the fort and the European Infantry Barracks, about ½ of a mile E.S.E. of the former and 1 furlong W. by N. of the latter: táluka Ahmednagar. 1829-30.	19 5 22' 8	74 48 21' 3	...	269
Ahmednagar Fara Bâgh	"	Known as Sheri Fara Bâgh. About 2 miles S.E. by E. of Ahmednagar city, 1 mile S.W. by S. of the Artillery Barracks, and 1¼ miles W.N.W. of Dúrevádi village: táluka Ahmednagar. 1829-30.	19 4 3	74 47 38	...	270
Ahmednagar Fort	"	Gateway of the fort midway between Ahmednagar city and Bhingár town, being 1 mile E. and W. respectively from either: táluka Ahmednagar. 1829-30.	19 5 40' 8	74 47 49' 8	...	266
Ahmednagar h.s. <i>Chandbibi Towser s.</i>	"	On the centre of the dome of an octagonal building on a hill, known by the Europeans as Sulábat Khán's and by the natives as Chandbibi's tomb, about 6 miles E. of Ahmednagar City, 2 miles W.S.W. of Mehekari village, and the same distance N.N.W. of Kalhevádi village: táluka Ahmednagar. 1829-30.	19 5 33' 29	74 52 55' 20	...	240 250
Ahmednagar Masjid	"	Known as Dumri Masjid. About ¼ of a mile N.N.E. of Ahmednagar Fort, 1 mile N.W. of Bhingár town, and the same distance W. by S. of Nagardeolo village: táluka Ahmednagar. 1830-31.	19 6 10' 7	74 48 7' 6	...	265
Akalkot s. <i>Unkulcote</i>	Sholápur (Solápur)	About 1¼ miles W. of the town of the same name. 1819-20.	17 31 14' 20	76 13 47' 28	...	180
Akurdi Temple <i>Akurdi</i>	Poona	Highest temple N.W. of the village of the same name, about 1 mile in the same direction of Chinchvad Station of the G.I.P. Railway, ¾ of a mile S. by E. of Nigri village, and 2¼ miles E.N.E. of Ravet: táluka Haveli. 1829-30.	18 39 54' 5	73 49 36' 0	...	408
Allúr h.s. <i>Aloor S.</i>	Nizam's Territory	On high ground, about 2¼ miles N.E. of the village so called, 3¼ miles E. by S. of Achaler village, and 2 miles S.W. of Bilam village. 1819-20.	17 43 12' 22	76 29 32' 26	[1955]	169
Alsunda, XIX	Ahmednagar	<i>Fide page 7—B.</i>	18 26 52' 37	75 3 2' 29	$\frac{2165 \cdot 21}{\dagger}$	23, 25
Alsunda Hill Pagoda	"	About 1¼ miles N.W. of the village so called, 3 miles E. of Danori village, and 4 miles W. of Ambajalgaon: táluka Karjat. 1819-20. It was refixed in 1832.	18 29 16' 1	75 3 14' 2	...	238
Alsunda Hill Tree	"	About a mile S.E. by S. of the principal station of the same name: táluka Karjat. 1838.	18 26 12	75 3 31	...	...
Ambarga Hill Temple <i>Umberga H. Temple</i>	Nizam's Territory	About 5 miles E.N.E. of the large village of Bhum, 1¼ miles N.E. by N. of Hadangiri village, and the same distance N.N.W. of Hevori village. 1863.	18 28 48' 4	75 45 50' 4	...	...

* To top of rectangular protecting pillar 2 feet high, built over circular pillar: over this rectangular protecting pillar is a cylindrical stone 17 inches high with circle and dot cut on top and enclosed by a loose stone pillar.

† See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ambevád h.s. ... <i>Umbewad</i>	Nizam's Territory	On a flat hill, about 1½ miles S. by E. of the village of the same name, 3 miles S.E. of Kannoli village, and 1½ miles W. by S. of the large village of Muga. 1819-20.	0 1 " 17 30 36' 41"	0 1 " 76 27 45' 60"	feet [1887]	151
Anavli h.s. <i>Annawulli S.</i>	Sholápúr	On a flat-topped range of hills, about 1½ miles E. by S. of the village so called on the road from Pandharpur to Mangalvedha, 1½ miles W.S.W. of Ránjni, and 2 miles N.N.W. of Shirgaon: táluca Pandharpur. 1819-20.	17 37 22' 05"	75 26 39' 39"	[1614]	159
Andura Hill Pagoda <i>Udoor H. P.</i>	Nizam's Territory	About ½ a mile S. of the village so called on the main road from Sholápúr to Naldurg, and 2½ miles W. by S. of the latter. 1819-20.	17 48 17' 0"	76 16 58' 9"	...	175
Arjuni Pagoda ... <i>Arjunooz Pag.</i>	Ahmednagar	About ¼ a mile S. of the village of the same name on the Bhima river, and 5 miles E.N.E. of Dhond village and bungalow: táluca Shirgonda. 1819-20.	18 29 30' 4"	74 42 3' 0"	...	...
Atka Hill ... <i>Utka Hill Pile</i>	Nizam's Territory	Pile of stones on a hill, about 1½ miles N.N.E. of Atka village, and 15 miles W.N.W. of Nilanga large village. 1840.	18 10 13	76 36 27	...	140
Aundh Pagoda ... <i>Awand Pagoda</i>	Poona	Highest temple in Aundh village on the right bank of and where Poona-Bombay road crosses the Mula river, about a mile S.W. of Sángrí village, and 1½ miles E. by S. of Pimpá Nilakh village: táluca Haveli. 1829-30.	18 33 58' 7"	73 51 9' 5"	...	400
Aupa h.s. ... <i>Ahupa</i>	"	On a hill, about 2 miles W. by S. of the village so called, and ½ a mile E. of Sakarnasvádi: táluca Khed. 1829.	19 10 14' 57"	73 35 7' 14"	...	328 329
Aurád Tower ... <i>Awrad Burj</i>	Nizam's Territory	Highest tower or burj in the village of the same name, about 3½ miles N. by E. of Manganal village, 3 miles W. of Allapur village, and the same distance S.E. of Dodakanal village. 1841.	18 15 20' 7"	77 27 21' 8"	...	54
Ausa Fort ... <i>Awsa Flag-staff</i>	"	Flag-staff on the S.E. bastion of the fort immediately S. of the town of the same name. 1840.	18 14 28' 2"	76 32 32' 0"	...	134
Ausa h.s. ... <i>Awsa H. Masjid Station</i>	"	On a ruined masjid on the summit of the hill locally known as Sultan Tekri, about 2 miles W. by N. of Karaskhed village, 2½ miles S.E. of Ausa town, and 3½ miles E. by N. of Borphal village. 1841.	18 13 24' 90"	76 33 41' 36"	...	124 125
Ausa Hill Tree ... <i>Awsa H. Tree</i>	"	Highest tamarind tree S. of the ruined masjid on the well-known Sultan Tekri hill. 1840.	18 13 25	76 33 42	...	132 133
Ausa Tomb No. 1 ... <i>Awsa White Tomb</i>	"	White tomb at the N.E. corner of the town. 1840.	18 15 0' 4"	76 32 47' 8"	...	135
Ausa Tomb No. 2 ... <i>Awsa Tomb N.E.</i>	"	North of town, and close to its N.W. corner. 1840.	18 15 10' 4"	76 32 27' 5"	...	...
Ausa Tomb No. 3 ... <i>Awsa Tomb W.</i>	"	At the N.W. corner of the town. 1840.	18 14 55' 9"	76 32 3' 7"	...	136

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bábulsár, XXV	Poona	<i>Vide page 8—B.</i>	18 45 6.12	74 19 1.33	$\frac{2144}{3}$ feet	27, 86
Badadol h.s. <i>Buddadal S.</i>	Nizam's Territory	On a low hill, about 2 miles N.E. by N. of the village of the same name, $3\frac{1}{2}$ miles E.S.E. of Dudhni Station of the G.I.P. Railway, and $1\frac{1}{2}$ miles S.W. by W. of Kallhali village. 1819-20.	17 20 14.89	76 28 18.42	[1718]	•
Baktápur, XXXVIII†	"	<i>Vide page 3—B.</i>	18 29 38.00	77 37 24.81	$\frac{1557}{4}$	1
Báleghát h.s. <i>Balaghat h.s.</i>	Ahmednagar	On the boundary between the tálukas of Jámkhed and Pátoda, at the edge of a plateau, about 2 miles W. by N. of Antapur, and the same distance S.W. of Chikhli and E. by S. of Birángvi: táluca Ahmednagar. 1845.	18 52 56.39	75 17 5.40	...	246
Bálevádi House <i>Balawri House</i>	Poona	Highest house in the village of Bálevádi on the right bank of the Mula river, about $1\frac{1}{2}$ miles S.E. of Vákad, and the same distance E. of Mahalunga and N.N.W. of Banera: táluca Haveli. 1841.	18 34 34	73 49 17	...	374
Balurgi Hill Pagoda <i>Bulloorgi H. P.</i>	Nizam's Territory	At the W. end of a low hill, about $2\frac{1}{2}$ miles N.W. by N. of the village of the same name, and $2\frac{1}{2}$ miles E.N.E. of Nandargi village on the Bori river. 1819-20.	17 18 46.1	76 23 12.0	...	181 182
Bándra Protestant Church <i>Bandara Protestant Ch.</i>	Thána	Belfry. About $1\frac{1}{2}$ miles W.S.W. of Bándra (Vándra) Railway Station, $\frac{1}{2}$ a mile S. by W. of Bándra Santa Andre Church, and $1\frac{1}{2}$ miles N.W. by W. of Mangalváda village. 1865-66.	19 2 54.4	72 51 50.4	...	617 618
Bándra Santa Andre Church <i>Bandara Santa Andre Ch.</i>	"	Cross. About 1 mile W. of Bándra Railway Station, and 2 miles S. of Dhanda village. 1865-66.	19 3 15.2	72 51 58.9	...	619 620
Bándra Santa Monte Church <i>Bandara Santa Monte Ch.</i>	"	Pinnacle of church, about $1\frac{1}{2}$ miles S.W. by W. of Bándra Railway Station, and the same distance W. by N. of Máhim Fort. 1865-66.	19 2 44.7	72 51 50.5	...	615 616
Banera Hill Pagoda	Poona	Top of pagoda on a conical hill close to and S.E. of the village so called, about $1\frac{1}{2}$ miles W. by S. of Aundli village on the high road from Poona to the Shelárrádi Caves, and $2\frac{1}{2}$ miles E. by N. of Sus: táluca Haveli. 1829-30.	18 33 28.1	73 49 48.8	...	399
Banera White Pagoda	"	At the foot of a hill, about $\frac{1}{2}$ of a mile S.E. of the village of the same name, and 3 miles W. by S. of Kirkee (Khadki) Railway Station: táluca Haveli. 1829-30.	18 33 27.5	73 49 59.7	...	363
Bápdewghát Hill Pagoda <i>Bapdew Ghat Pag.</i>	"	Top of temple on a hill about 9 miles S. by E. of Poona, whence there is a good road to the temple, and $3\frac{1}{2}$ miles S. by E. of Khondra village: tálukas Haveli and Purandhar. 1838.	18 24 27.7	73 56 55.0	[3260]	305
Barágnon Fort <i>Burraon Fort</i>	Nizam's Territory	S.E. angle of fort, about 8 miles N.N.W. of Karámungi and close to the source of a stream which falls into the Manjira between the villages of Kosánúrand Konápur. 1822-23.	18 7 48.5	77 33 57.5	...	‡
Batamra Palace <i>Batumbra Palace</i>	"	Projecting staircase on the roof, about 3 miles N.W. of Bhalki town, and $2\frac{1}{2}$ miles S.W. of Jayagan village. 1841.	18 4 11.7	77 12 9.8	...	71

* For triangle fixing this point, see Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°. Section 18° to 24°.

† Of the Great Arc Meridional Series, Section 18° to 24°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bhalki Hill Dipmal <i>Balki Hill Dipmal</i>	Nizam's Territory	Immediately south of Bhalki Hill Tower, about 3 miles N.E. by N. of Bhalki Palace, 2½ miles W.N.W. of Ambasing village, and 2 miles S.S.W. of Kalasdal village. 1841.	18 4 35' 2	77 16 34' 8	feet ...	64, 65
Bhalki Hill Pagoda <i>Balki H. Pag.</i>	"	About 3 miles N.E. by N. of the large village of the same name, 1½ miles W.S.W. of Bhagavanvadi village, and 5 miles E. by N. of Batamra village. 1841.	18 4 52' 1	77 16 43' 8	...	63
Bhalki Hill Tower <i>Balki Hill Tower</i>	"	Round tower about 3 miles N.E. by N. of Bhalki Palace, 2½ miles W.N.W. of Ambasing village, and 2 miles S.S.W. of Kalasdal village. 1841.	18 4 38' 4	77 16 34' 0	2088	66
Bhalki Hill Tree ... <i>Balki Hill Tree</i>	"	On a conical knoll, about 2½ miles N. of Bhalki Palace, 2½ miles E.N.E. of Batamra Fort, and 1½ miles S.S.E. of Jaysagon village. 1840.	18 4 39	77 14 52	...	67, 68
Bhalki Idgah ... <i>Balki Idga</i>	"	At the S.E. corner of the town and palace of Bhalki. 1841.	18 2 24' 7	77 15 25' 2	...	69
Bhalki Palace ... <i>Balki Palace</i>	"	Projecting staircase on the roof of the palace E. of town, about 3 miles S.E. of Batamra Fort, 3½ miles S. by E. of Jaysagon village, and 4 miles W.S.W. of Ambasing village. 1841.	18 2 35' 7	77 15 5' 3	...	70
Bhatras h.s. ... <i>Bhatras</i>	Poona	On the peak of the hill so called, about 2 miles W. by N. of the Bedas Carea, 1½ miles S.W. of Pimploli village, 1½ miles N. by E. of Malhagon, and 2½ miles S.E. by E. of Kurla Railway Station: taluka Maval. The station is denoted by a mark-stone with two circles and cross diameters, about 2 feet below the surface and having over it a pile of stones. 1829-30.	18 43 24' 90	73 33 19' 54	3621	314 315
Bhavani Hill Temple <i>Bhowani H. Temple</i>	Nizam's Territory	Dipmal, about 1½ miles E.N.E. of Hevarda village, 2½ miles N. by W. of Chumbli village, and 2½ miles W. by N. of Warrud village. 1863.	18 29 51' 2	75 35 31' 7	...	293
Bhimshankar Hill Tree <i>Bhima Shankur</i>	Poona	On top of hill, about a mile S.S.W. of Bhimshankar Temple near the source of the Bhima river, and 2½ miles N.W. by W. of Bhorgiri village: taluka Khed. 1829-30.	19 3 40	73 34 24	...	327
Bhingár Tomb ...	...	See Ahmednagar. ...	...	...	...	...
Bhoja h.s. ... <i>Bhoja Station</i>	Poona	On a peak of the Gháts, about a mile W. of the village of Saltar, 1½ miles N.E. of the Vagjai ghát, 1½ miles N. by E. of Teilbala and 3½ miles S.W. of Alhanna close W. of a road leading to Aulas village. The station is 23 yards from the face of the precipice: taluka Haveli. Denoted by a mark-stone and a pile of stones. 1828-29.	18 34 50' 66	73 22 54' 02	[3322]	*
Bhuleshvar ...	...	See Dombay. ...	...	...	...	...
Bhuleshvar Hill Pagoda <i>Bholeswar H. P.</i>	Poona	Centre of the pagoda or the middle point between the two spires, about 2 miles N. by E. of Malisins village, the same distance S.E. of Bhanalgaon, and 3½ miles S.W. by S. of Yeratgaon village: talukas Purandhar and Bhimthadi. 1829-30.	18 26 6' 4	74 16 58' 1	2770	292 293

* For triangle fixing this point, see Synoptical Volume of the South Konkan Coast Series.

BOMBAY LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure <i>feet</i>	No. of Triangle
Bidar Minaret	Nizam's Territory	Minaret of idgah near the centre of the fort. 1822-23.	17 54 50.6	77 34 21.1	2336*	49
Bombay, Akbar Cotton Press ...	Bombay	Top of chimney. About $\frac{1}{2}$ a mile N. by E. of Victoria Terminus Railway Station, $\frac{1}{2}$ of a mile E. of the Jamma Masjid, and close to the Nicol and Carnac Basins. 1865-66.	18 56 54.8	72 52 52.6	...	501 502
" A s.	"	On the Byculla (Bháykhala) flats, about 200 yards E. of the B. B. & C. I. Railway Line, and close to a chauki at the junction of the new roads. The station is denoted by an isolated masonry pillar, 5 feet high, surrounded by a platform of earth. 1865-66.	18 58 49.14	72 52 3.37	7	536 537
" Band Stand	"	Top of Band Stand on the Esplanade, about 3 furlongs W. by S. of the Scotch Kirk, immediately S. of the Secretariat, and 2 furlongs N.N.E. of the Government Cooperage. 1865-66.	18 55 32.2	72 52 17.6	...	470
" Bhuleshvar Church ... Boleshwar ch.	"	Cross of St. Esperance Church about 3 furlongs S.S.W. of the Fruit Market, the same distance N.W. of the Jamma Masjid, and 100 yards S.W. of Bhuleshvar Temple. 1865-66.	18 57 6.1	72 52 8.0	...	511 512
" Bhuleshvar Temple ... Boleshwar t.	"	Kalas of the large temple about 3 furlongs N.E. of the Jamma Masjid, the same distance S. of the Fruit Market, and 6 furlongs E. of Chani Road Railway Station. 1865-66.	18 57 8.1	72 52 12.2	...	513 514
" B s.	"	On the flats on the E side of the main drain, about 400 yards from the main road leading from Mahalakshmi across the flats to Múzgaon. The station is denoted by an isolated masonry pillar, 5 feet high, surrounded by a platform of earth. 1865-66.	18 59 5.65	72 51 40.88	6	547 548
" Byculla Church	"	Spire of Christ Church. 1834. Refixed in 1865-66. ...	18 58 6.8	72 52 22.9	...	543 544
" Byculla Hospital	"	N.W. tower of Jansetjee Jejeebhoy Hospital, about 6 furlongs S. of Byculla Railway Station, 2 furlongs N.W. of the Bombay Jail, and 3 furlongs S.E. by S. of the Synagogue. 1865-66.	18 57 43.8	72 52 26.6	...	527 528
" Byculla Press	"	Top of chimney of Messrs. Rogers & Co's Oil Press, about 1 furlong S.S.W. of the Byculla Club, 6 furlongs W. of the Synagogue, and 3 furlongs N. by E. of the Grant Road Theatre. 1865-66.	18 57 58.7	72 51 51.1	...	541 542
" Byculla Race Stand	"	Flag-staff about 50 yards N. of the Byculla Club, in the S.W. corner of the course, and 4 furlongs W. of Christ Church. 1865-66.	18 58 9.9	72 51 56.7	...	549 550
" Byculla Synagogue	"	Spire of clock tower, about 1 furlong S. of Christ Church, 2 furlongs N. by W. of the Grant Medical College, and 6 furlongs E. by S. of the Byculla Club. 1865-66.	18 57 58.3	72 52 25.4	...	539 540
" Byculla Temple No. 1	"	Spire of Maháder Temple near the Byculla Bridge, 100 yards N. of Byculla Railway Station, about 1 furlong E. of the Race Course, and close to a small tank. 1865-66.	18 58 17.6	72 52 28.9	...	557 558

* This value is in terms of the stations of the Bidar Dase-line which were connected by Spirit-levelling in 1880.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station Height of Structure	No. of Triangle
Bombay, Byculla Temple No. 2	Bombay	Highest of three red flags on Moteshtar Temple about 1 furlong N.E. of Byculla Railway Station, and 3 furlongs S. of the Victoria Gardens. 1865-66.	0 1 " 18 58 20.3	0 1 " 72 52 38.2	feet ...	559
" Carnac Bandar s. ...	"	1868.	18 56 49.26	72 53 13.41	11	507
" Castle Flag-staff ...	"	In the castle of the fort on the western beach of Bombay Harbour, about 3 furlongs E. of St. Thomas's Cathedral, and 1 mile S. of Victoria Terminus Railway Station. 1829-30. Refixed in 1865-66.	18 55 48.6	72 52 46.3	...	481
" Chepti s. ...	"	At the foot of a small hill called Chepti and to N.E. of Love Grove, and about 100 yards E. of the main road between Mahalakshmi and Mahim and Warli (Varli). The station is denoted by an isolated masonry pillar, 5 feet high, surrounded by a platform of earth. 1865-66.	18 59 36.71	72 51 28.33	8	421
" Chimney No. 1 ...	"	Albert Spinning and Weaving Co's western iron chimney, about $\frac{1}{4}$ a mile N.E. of Chinchpokli Railway Station, and $\frac{1}{4}$ miles N.W. of the Magazine. 1865-66.	18 58 2.9	72 51 17.2	...	552 553
" Chimney No. 2 ...	"	George III Spinning and Weaving Co's chimney, about 3 furlongs S.E. by S. of Chinchpokli Railway Station, 5 furlongs N. by W. of the Victoria Gardens, and 1 mile W. by N. of the Magazine. 1865-66.	18 58 56.6	72 52 36.8	...	573 574
" Chimney No. 3 ...	"	Royal Spinning and Weaving Co's, tall iron chimney about 4 furlongs E. by S. of Parel (Paral) Station of the B. B. & C. I. Railway, and 6 furlongs N. by E. of Chinchpokli Railway Station. 1865-66.	18 59 21.2	72 52 42.0	...	587 588
" Chimney No. 4 ...	"	Top of the Oriental Spinning and Weaving Co's chimney E. of Khambala Hill, about 4 furlongs N.N.W. of Grant Road Railway Station, and 6 furlongs W. of the Byculla Club. 1865-66.	18 59 37.3	72 52 36.6	...	593 594
" Chinchpokli Gas Works <i>Chinchpugli Gas Works</i>	"	Lightning-conductor of chimney, E. of the G. I. P. Railway line, about 2 furlongs N. of Chinchpokli Railway Station, and 5 furlongs S.S.E. of Parel Railway Station. 1865-66.	18 59 21.3	72 52 29.7	...	585 586
" Chinchpokli House ... <i>Chinchpugli h. ho.</i>	"	Pinnacle on porch of Sir J. Jejeebhoy's house on hill, about a mile E.N.E. of Chinchpokli Railway Station, and the same distance N. by W. of the Magazine. 1865-66.	18 59 27.8	72 53 8.1	...	589 590
" Chinchpokli Tower ...	"	Top of clock tower near the Victoria Museum in N.W. corner of the Victoria Gardens, about 6 furlongs S. by E. of Chinchpokli, and the same distance N. by E. of Byculla Railway Station. 1865-66.	18 58 41.7	72 52 32.1	...	566 567
" Colába Church ... <i>Kolaba ch.</i>	"	Spire of the Memorial Church about $2\frac{1}{2}$ furlongs N.N.W. of the Pilot Pier, 6 miles N.N.E. of the Colába (Kulába) Light-house, and the same distance W.N.W. of the Oyster Rock Battery. 1865-66.	18 54 21.0	72 51 28.5	...	444 445
" Colába Cotton Press ...	"	Chimney. About 1 furlong N.E. of Colába Railway Station, and 5 furlongs S.W. of Apollo Bandar. 1865-66.	18 55 0.2	72 52 6.9	...	456 457

BOMBAY LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Colába Dharmshála ... <i>Colaba Parsi's Dharamshála</i>	Bombay	Spire of clock tower of the Parsi Dharmshála about $\frac{1}{4}$ of a mile S.W. of Colába Railway Station, and 3 furlongs N. by E. of the Colába Monument. 1865-66.	18 54 45' 8"	72 51 47' 9"	feet ...	448 449
" Colába Fort Press ...	"	Chimney. On the beach about 1 furlong E. of Colába Railway Station, and 3 furlongs N.W. of the Dolphin Light in Bombay Harbour. 1865-66.	18 55 0' 1"	72 52 21' 8"	...	454 455
" Colába Light-house ...	"	At the southern extremity of Colába. The centre of it is a mainmast between which and the exterior wall is the staircase. In the lantern is an iron pillar supporting the reflector, situated on the N.E. side and close to the top of the mast, the centres being about 8 inches apart. 1829-30. Refixed in 1837-38.	18 53 41' 8"	72 51 10' 6"	* 148	358
" Colába Monument ...	"	Spire. E. of the road from the Colába Light-house to Colába Railway Station, about a mile N.N.E. of the former, and $\frac{1}{2}$ of a mile S.W. of the latter. 1863-66.	18 54 33' 4"	72 51 43' 2"	...	446 447
" Colába R. C. Chapel ...	"	Cross. About $\frac{1}{4}$ of a mile N.N.E. of the Colába Light-house, and the same distance S.W. of the Pilot Pier W. of road from the Light-house to Colába Railway Station. 1865-66.	18 53 55' 8"	72 51 17' 6"	...	442 443
" Colába s. ...	"	In the premises of the Bombay Observatory situated at the extremity of a narrow strip of land which extends 2 miles to the south-westwards of the fort of Bombay, and separates the harbour from the Back Bay. The station is on the roof of the square tower, 46 feet high, called the Electrometer Tower at the N.E. corner of and adjoining the large Magnetic Observatory 80 yards north of the Astronomical Observatory which is the largest building in the premises. The mark—circle and dot—is cut on the stone pavement of the lowermost floor, apertures being made through the intervening floors for the purpose of plumbing from the roof of the tower on which the theodolite stood. 1865-66.	18 53 48' 94"	72 51 15' 73"	† 75	411
" Colába Scott Press ...	"	Chimney. Close N.E. of the Bombay Cotton Press, and about a furlong S. of Colába Railway Station. 1865-66.	18 54 51' 0"	72 52 5' 6"	...	452 453
" Cooperage Tree ...	"	Conspicuous tree N.W. of the Government Cooperage, half a mile N. of Colába Railway Station, and the same distance S.W. of the Scotch Kirk. Apollo Bandar is $\frac{1}{4}$ a mile E. by S. 1865-66.	18 55 23 "	72 52 12 "	...	462 463
" Cotton Press ...	"	Chimney. About 1 furlong S.W. of Colába Railway Station, and 2 furlongs E. of the Parsi Dharmshála. 1865-66.	18 54 49' 6"	72 52 2' 7"	...	450 451
" C s. ...	"	On the flats between the B.B. & C.I. and G.I.P. Railway Lines, about $\frac{1}{4}$ of a mile S.W. of the B.B. & C.I. Railway Workshops at Dádar, and $\frac{1}{4}$ of a mile S.W. of the crossing of the B.B. & C.I. Railway Lines, over the new Foras Road between the Bycuulla Bridge and Málim. The station is denoted by an isolated masonry pillar, 5 feet high, surrounded by a platform of earth. 1865-66.	18 59 31' 43"	72 52 17' 56"	7	545 546

* To spire of Light-house.

† To roof of tower.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Dádar House ...	Bombay	Point of roof of the Gate-keeper's house, about 1 furlong N.W. of Dádar Station of the G.I.P. Railway, and 1 mile N.N.E. of Parel Railway Station. 1865-66.	0 1 " 19 1 1'2	0 1 " 72 53 1'3	feet ...	610
" Dádar s. ...	"	About 200 yards N.E. of Dádar Railway Station between the B.B. & C.I. and G.I.P. Railway Lines. The station is denoted by a circular pillar, 3 feet high, built of stone and mortar, and isolated from the surrounding platform which is of clods of earth. 1865-66.	19 1 8'92	72 53 8'96	11'63	423
" Dockyard Clock Tower ...	"	Pinnacle of dome of the tower in fort, N. of the Dockyard, about $\frac{1}{4}$ a mile S.W. by S. of the Grand Arsenal, and 3 furlongs E. of the Secretariat. 1865-66.	18 55 36'3	72 52 32'2	...	471 472
" Dockyard Flag-staff ...	"	South Flag-staff near the beach in Apollo Bandar, about $\frac{1}{2}$ of a mile N.E. of Colába Railway Station, the same distance S. by E. of the Bombay Cathedral, and alongside of the Wellington Basin. 1865-66.	18 55 23'7	72 52 35'1	...	464
" Dolphin Light Inner Light ...	"	Top of lantern of the beacon on a small rock in Bombay Harbour, about $\frac{1}{4}$ a mile S. by E. of Apollo Bandar, and 6 furlongs E. by S. of Colába Railway Station. 1865-66.	18 54 48'6	72 52 38'7	...	460 461
" Dongri Chapel ...	"	Cross of the Roman Catholic Chapel E. of the Bombay Jail, and about 3 furlongs S.W. of the Grant Medical College. 1866-66.	18 57 36'3	72 52 40'7	...	...
" Elphinstone Press ...	"	Centre of chimney, about 2 furlongs E. by S. of the Bombay Jail, the same distance W. of the Prince's Dock, and halfway between the Brculla and Victoria Terminus Railway Stations. 1865-66.	18 57 27'7	72 52 52'9	...	523
" Fort Cotton Press ...	"	Iron chimney. Alongside and W. of the Bombay Cathedral and between it and the High Court, and about 4 furlongs N. of the Sailors' Home. 1865-66.	18 55 49'7	72 52 25'5	...	475 476
" Fort House ...	"	S.W. post of a small pendal on Mr. Shujadin Trabji's house, about 3 furlongs S. by W. of the Bombay Cathedral, 1 furlong E. of the Secretariat, and 2 $\frac{1}{2}$ furlongs N. by W. of the Sailors' Home. 1865-66.	18 55 38'8	72 52 29'9	...	473 474
" Fort Mark (helio.) ...	"	About 100 yards S.E. of Victoria Terminus Railway Station, and 1 mile N. by E. of St. Thomas's Cathedral. 1865-66.	18 56 27'93	72 52 45'24	...	492 493
" Free Church ...	"	Spire of the Free Church of Scotland, about $\frac{1}{4}$ a mile N.W. of Victoria Terminus, and the same distance N.E. of Marine Lines Railway Station, and 3 furlongs S. by W. of the Jamma Masjid. 1865-66.	18 56 43'6	72 52 23'1	...	497 498
" Gandli Hill Mark (helio.) ...	"	On a rock on hill near the beach, about $\frac{1}{4}$ miles W. by N. of Parel Railway Station, and $\frac{1}{4}$ miles N. by E. of Mama Hajuni Temple. 1865-66.	18 59 52'57	72 51 24'64	...	595 596
" Gandli Hill Tree ...	"	About $\frac{1}{4}$ miles W. by N. of Parel Railway Station. 1865-66.	19 0 1	72 51 21	...	597 598

* To upper mark of pillar.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Girgaon Back Bay Works	Bombay	Chimney. About 2 furlongs N.W. by N. of Charni Road Railway Station, 5 furlongs S.S.W. of the Grant Road Theatre, and 6 furlongs E.S.E. of the Towers of Silence. 1865-66.	0 1 " 18 57 15'1	0 1 " 72 51 30'6	feet ...	516
" Girgaon Ice Manufactory	"	Chimney. Immediately west of the B.E. & C.I. Railway Line, about 2 furlongs S. by W. of Grant Road Railway Station, 5 furlongs S.E. of the Grant Road Theatre, and the same distance E. by S. of the Towers of Silence. 1865-66.	18 57 25'8	72 51 21'2	...	517 518
" Golangi h.s. ...	"	On the highest part of the Golangi Hill, about 600 yards W. of the Government House at Parel. It is denoted by an isolated masonry pillar, 12 feet high, surrounded by walls of an old wutch tower. 1865-66.	19 0 1'16	72 53 29'58	$\frac{198}{12}$	422
" Golangi Hill Tree ...	"	Conspicuous palm tree about 1 furlong N.W. of the Siwri (Shivdi) Cemetery, and 4 furlongs E. by N. of the Government House. 1865-66.	19 0 12	72 53 31	...	603
" Gosain's Mat ...	"	Flag on tree just outside Fort St. George and between it and Victoria Terminus Railway Station. The School of Art and Industry is 3 furlongs to N.W. 1865-66.	18 56 25'3	72 52 42'4	...	491
" Gováli Tank Temple ...	"	Kalas of the temple built by Mr. Jugonnáth Sunkersett. 1865-66.	18 57 45'0	72 51 16'9	...	580 531
" Grant Road Temple ...	"	Kalas of Mahádev Temple about 100 yards N. of the Grant Road Theatre, and 3 furlongs S. by W. of the Byculla Club. 1865-66.	18 57 45'7	72 51 47'2	...	532
" Grant Road Theatre s.	"	On roof of the terrace over the stage. The station is denoted by a mark-stone placed in the centre of the terrace. 1865-66.	18 57 40'76	72 51 47'80	35	508 509
" Haj Ali Temple ...	"	Flag-staff on the temple W. of Velard, near the beach, about 4 furlongs N. of Maháalakshmi Temple, and 2 miles S.W. of Parel Railway Station. 1865-66.	18 58 55'0	72 51 1'9	...	562 563
" House No. 1 ...	"	Conspicuous little pondal with green windows on Mr. Behramji Nusserranji's house on the western edge of the fort, about 3 furlongs N.N.E. of the High Court, 2 furlongs N. of St. Thomas's Cathedral, and 4 furlongs E. of Church Gate Railway Station. 1865-66.	18 56 2'0	72 52 29'4	...	484 485
" House No. 2 ...	"	Pointed roof of the small, north house in Mr. Byramji Cama's compound, about 100 yards S.E. of Chinchpokli Railway Station, and 5 furlongs N. by W. of the Victoria Gardens. 1865-66.	18 59 6'0	72 52 29'6	...	575 576
" Hydraulic Press ...	"	Chimney. About 1 furlong E. by N. of Colába Railway Station, immediately S. of the Arthur Basin, and $\frac{1}{2}$ a mile N. W. of the Dolphin Light. 1865-66.	18 55 2'0	72 52 19'6	...	458 459
" Imperial Press ...	"	Centre of chimney. About 2 furlongs W.S.W. of the Masjid Basin, 5 furlongs E.N.E. of the Jamma Masjid, and 1 mile S.E. by S. of the Bombay Jail. 1865-66.	18 57 2'8	72 52 52'4	...	505 506

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Jakria Masjid ...	Bombay	South pinnacle on roof of the Jamma Masjid in city, about $\frac{1}{4}$ of a mile N. by W. of Victoria Terminus Railway Station, and the same distance N.E. of Marine Lines Railway Station. 1865-66.	18 56 53.8	72 52 25.5	... feet	499 500
" Kálbádevi Road s. ...	"	On a small balcony of the building belonging to Gulji Singani, occupied by a branch of the Bombay Bank. The station is denoted by a mark-stone embedded in the centre of the floor of the balcony with the letters "G.T.S. 1866" engraved round the mark. 1865-66.	18 57 1.57	72 52 13.93	85	466 467
" Kálbádevi Temple ...	"	Spire of the highest temple about 2 furlongs S. of the Fruit Market, 3 furlongs N.W. by N. of the Jamma Masjid, and 6 furlongs E.N.E. of Charni Road Railway Station. 1865-66.	18 57 10.9	72 52 19.3	...	515
" Khambála Flag-staff ...	"	Signal Flag-staff on the hill of that name, about 6 furlongs N. by W. of Grant Road Railway Station, the same distance W. by N. of the Byculia Club, and 5 furlongs S.S.E. of Mahálakshmi Temple. 1865-66.	18 58 12.7	72 51 13.6	...	554
" Khambála t.s. ...	"	On the N. extremity of the hill, about 200 yards from the flag-staff. The station is denoted by a perforated masonry pillar, 15 feet high, with an aperture giving access to the lower mark which is engraved on the rock. 1865-66.	18 58 19.69	72 51 12.29	$\frac{164}{15}$	419
" Love Grove Mark (helio.)	"	On a rock S. of Messrs. Nicol and Co's house, about 100 yards N.E. of Mama Hajani Temple, 1 mile N. of Mahálakshmi Temple, and $1\frac{1}{4}$ miles S.W. by W. of Parel Railway Station. 1865-66.	18 59 16.80	72 51 14.40	...	579 580
" Love Grove Temple ...	"	Mahádev Temple with pointed tiled roof on a hill N. of Love Grove, about $1\frac{1}{4}$ miles W.S.W. of Parel Railway Station, and 3 furlongs N. of Mama Hajani Temple. 1865-66.	18 59 29.2	72 51 18.3	...	581 582
" Mahálakshmi Temple	"	Spire of the large temple N. of the Khambála Hill, about 1 mile W. of the S.W. corner of the Hindu Burial ground, and $1\frac{1}{4}$ miles N.W. of Grant Road Railway Station. 1865-66.	18 58 34.1	72 50 54.6	...	560 561
" Máhim Railway Station	"	S. Pinnacle of Máhim Railway Station House, about 4 furlongs N.E. of Mangalváda village, and 3 furlongs S.W. of Dhárávi village. 1865-66.	19 2 23.1	72 53 17.7	...	...
" Máhim Road s. ...	"	On the new road to Máhim from the B.B. & C.I. Railway Workshops at Dádar, and about 100 yards S. of Máhim woods. The station is denoted by a mark-stone embedded in masonry flush with the road. 1865-66.	19 0 22.39	72 52 20.82	11	591 592
" Máhim Tree ...	"	Single palm tree S. of Máhim woods, about $1\frac{1}{4}$ miles E. of Madli Pakhadli, and $1\frac{1}{4}$ miles N.W. of the B.B. & C.I. Railway Workshops. 1865-66.	19 0 13	72 52 3	...	599
" Malabár Hill Flag-staff	"	Flag-staff with weather-cock in Mr. Compton's compound, about 1 mile N.N.E. of the Government House, $1\frac{1}{4}$ miles S.S.W. of the Towers of Silence, and the same distance W. by S. of Charni Road Railway Station. 1865-66.	18 56 55.4	72 50 29.2	...	488

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Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Malabár h.s. ...	Bombay	On a small balcony on the S.W. corner of the building near Breach Candy, belonging to Mr. Cowasjee Jehangier Readymoney. The station is denoted by a masonry pillar, 3 feet high, in the shape of a settee with a marble slab in the centre having the letters "G.T.S. 1866" engraved round the mark. 1865-66.	18 57 14·82	72 50 48·73	feet 206	416
" Malabár Hill Tree ...	"	Conspicuous palm tree N. of Mr. Warden's house, about 1½ miles N.N.E. of the Government House, and 1 mile S.S.W. of the Towers of Silence. 1865-66.	18 57 5	72 50 35	...	489 490
" Malabár Point Flag-staff ...	"	On the Governor's House, ¼ mile S. of Wálkeshwar (Wálkeshvar), and 2 miles S.W. of Churni Road Railway Station. 1829-30. Refixed in 1865-66.	18 56 19·7	72 50 6·9	...	486 487
" Malmala s. ...	"	On the flats, about 200 yards E. of Máhim woods, and 700 yards S.E. of Máhim Railway Station. The station is denoted by a perforated pillar surrounded by a platform of earth. 1865-66.	19 2 5·53	72 53 28·97	7	425
" Mama Hajani Temple ...	"	Highest pinnacle of the shrine N. of Velard, on the S. end of a hill near the beach, about 1 mile N. of Mahá-lakshmi Temple, and 1½ miles W. of Chinchpokli Railway Station. 1865-66.	18 59 13·1	72 51 11·5	...	577 578
" Marine Lines Flag-staff ...	"	Commodore's Flag-staff about 1 furlong N.E. of Church Gate Railway Station, and 3 furlongs N.W. by N. of the High Court. 1865-66.	18 56 1·3	72 52 11·6	...	479 480
" Mátunga h.s. ...	"	On a hill, about ¼ a mile E. of the village of the same name overlooking the Government Salt Pans. The station is denoted by an isolated masonry pillar, 3 feet high, surrounded by a platform of rubble. 1865-66.	19 1 10·53	72 54 25·01	$\frac{128}{3}$	424
" Mátunga R. C. Church ...	"	Cross. About 1 mile N.E. by E. of Dádár Railway Station, 2 furlongs N. of Vadála village, and 2½ furlongs S. of Khára village. 1865-66.	19 1 5·3	72 53 51·9	...	611 612
" Mázgaon Church ...	"	White point of heltry. About 2 furlongs S.W. of the P. & O. Co's Dockyard, and about 1 mile E. by N. of the Grant Medical College. 1865-66.	18 57 50·8	72 53 17·3	...	533 534
" Mázgaon Flag-staff ...	"	Of the P. & O. Co's Dockyard about 1½ miles E. by S. of Byculla Railway Station, and 1 mile E.N.E. of the Grant Medical College. 1865-66.	18 58 1·1	72 53 22·1	...	535
" Mázgaon House ...	"	S.W. post of pendal on the terrace of Mr. Framji's house, about 4 furlongs E. of Byculla Railway Station, and 3 furlongs S. of the S.E. corner of the Victoria Gardens. 1865-66.	18 58 16·1	72 52 52·4	...	539
" Mázgaon Oil Press ...	"	Centre of chimney, about 5 furlongs E. of Chinchpokli Railway Station, and 6 furlongs N.W. of the Magazine. 1865-66.	18 59 8·9	72 52 57·8	...	583

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangl-
Bombay Mint	Bombay	Square white chimney of the Mint in the castle of the fort 3 furlongs E. by N. of St. Thomas's Cathedral, and 1 mile S. of Victoria Terminus Railway Station. 1865-66.	0 1 " 18 55 56.2	" 1 " 72 52 48.4	feet ...	488
" Mughal's Imámbára ...	"	S.W. minaret of the gateway of Mughal's Imámbár on the Bábula Tank Road, about 2 furlongs E. by N. of the Fruit Market, 4 furlongs S. of the Grant Medical College, and 6 furlongs N. of the Jamma Masjid. 1865-66.	18 57 31.2	72 52 30.7	...	521 522
" Mughal's Imámbára Mosque	"	Gilt kalas of the mosque on the Bábula Tank Road, about 190 yards S.W. of the preceding point. 1865-66.	18 57 26.2	72 52 33.4	...	519 520
" Náygaon Hill Tree ...	"	Small date tree on the hill S. of Náygaon village, about 4 furlongs N. by W. of the Siwri Cemetery, and 6 furlongs S.E. of Dádar Railway Station. 1865-66.	19 0 26	72 53 27	...	604
" Náygaon House ...	"	Pointed zinc roof of Mr. Dunji Mulji's house about $\frac{1}{4}$ a mile E.S.E. of Dádar Railway Station. 1865-66.	19 0 38.3	72 53 26.2	...	613 614
" Nesbit Lane s. ...	"	On top of terrace of the two-storied house belonging to the Nawab of Surat. The house is on the N. side of the lane and E. of the point at which the Railway Line crosses the lane. A marble slab with the letters "G.T.S. 1866" engraved round the mark, has been embedded in centre of the terrace. 1865-66.	18 58 10.58	72 52 32.57	67	525 526
" Oyster Rock ...	"	Pillar on high part of the fortified island in Bombay Harbour, about 1 mile E.N.E. of the Colíba Light-house, the same distance S. of Colíba Railway Station, and S.W. by S. of the Dolphin Light. 1865-66.	18 54 5.9	72 52 8.8	...	438 439
" Palm Tree ...	"	Centre one of the three palm trees near B.B. & C.I. Railway Workshops, about 3 furlongs W.N.W. of Parcel Railway Station, and $1\frac{1}{4}$ miles W. of Parel village. 1865-66.	18 55 51	72 52 44	...	482
" Parel Flag-staff ...	"	On the tower of the Governor's House about 6 furlongs W. of the Siwri Cemetery, and 2 furlongs S.W. of Bhoiváda. 1865-66.	19 0 7.3	72 53 8.3	...	602
" Parel Paper Mills ...	"	Top of iron chimney of the Oriental Paper Mills, about 4 furlongs W. by N. of the Government House, and the same distance N. by W. of the Railway Workshops. 1865-66.	19 0 12.5	72 52 47.4	...	600 601
" Prongs Light-house ...	"	1874.	18 52 42.3	72 50 28.7	...	436 437
" Rock s. ...	"	On a slight rocky elevation near Tank Dandar, in the premises and 15 yards N.W. of a dwelling house called "The Rock" and belonging to the Frere Land and Reclamation Company. The station is denoted by an isolated masonry pillar, 3 feet high, surrounded by a platform of earth and rubble. 1865-66.	18 58 46.10	72 52 59.55	$\frac{80}{3}$	420
" Sailors' Home ...	"	Flag-staff, about 3 furlongs E.N.E. of Marine Lines Railway Station, and $\frac{1}{4}$ a mile W.N.W. of Victoria Terminus Railway Station. 1865-66.	18 56 41.3	72 52 20.7	...	494 495

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Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Sion Fort <i>Sion Fort Flag-staff</i> ...	Bombay	Flag-staff on Sion (Sbiv) Fort at the N. end of the island, about 2 miles E.N.E. of Máhim Railway Station, and 1½ miles S.W. by S. of Kurla Railway Station. 1829-30.	19 2 45' 0"	72 54 32' 5"	feet ...	357
" Sion Hill Tree No. 1	"	Highest palm trees on the hill, about 1 mile S. of Sion Fort, and 1½ miles N.N.E. of Govári village. 1865-66.	19 2 2	72 54 35	...	621
" Sion Hill Tree No. 2	"	On a ruined tower E. of the G.I.P. Railway Line, about 2 furlongs W.N.W. of Sion Fort, and 3 furlongs E.S.E. of Ríva Fort. 1865-66.	19 2 46	72 54 22	...	622
" Siwri Fort ...	"	Highest flag-staff of the fort on a small hill, about ¼ a mile E. of the Siwri Cemetery, and 1½ miles S.S.E. of Vadála village. 1865-66.	19 0 0' 1"	72 54 6' 4"	...	605 606
" Sonápur Dead House	"	Pointed roof at the N.W. corner of the house immediately W. of the B.B. & C.I. Railway, about 1½ miles S.S.W. of Parel Railway Station, and 7 furlongs W. of the Byculla Club. 1865-66.	18 58 50' 1"	72 51 49' 4"	...	564 565
" Sonápur Tomb ...	"	Point of dome of a small tomb in grave-yard, about 5 furlongs W. of the Grant Medical College, 2 furlongs E. of the Grant Road Theatre, and 4 furlongs S. by E. of the Byculla Club. 1865-66.	18 57 40' 9"	72 52 0' 3"	...	524
" St. Andrew's Church ...	"	Spire of the church in fort, about 3 furlongs E. of the Secretariat, 4 furlongs S. of the Cathedral, and 5 furlongs S.W. by S. of the Grand Arsenal. 1865-66.	18 55 34' 3"	72 52 31' 1"	...	468 469
" St. Thomas's Cathedral S.	"	On top of the tower of the Cathedral in the centre of the fort, about 3 furlongs W. of the Grand Arsenal, and 1 furlong E. of the High Court. The station is denoted by a mark-stone let into roof of the tower, the mark is towards N.E. of the centre of the roof. 1865-66.	18 55 52' 05"	72 52 30' 10"	145	417
" Tank Bandar Magazine	"	Flag-staff of the gun-powder magazine on the W. coast of Bombay Harbour, about 1 mile N. of the P. & O. Co's Dockyard, 6 furlongs E. of the E. end of the Victoria Gardens, and 1½ miles N.E. of Byculla Railway Station. 1865-66.	18 58 46' 7"	72 53 27' 3"	...	572
" Tank Bandar Saw Mills No. 1	"	On the W. coast of Bombay Harbour, about 1 furlong S.W. of the Magazine, 6 furlongs E. of the E. end of the Victoria Gardens, and 1½ miles N. of the P. & O. Co's Dockyard. 1865-66.	18 58 43' 5"	72 53 24' 4"	...	568 569
" Tank Bandar Saw Mills No. 2	"	Close S. of the preceding point. 1865-66.	18 58 40' 0"	72 53 24' 2"	...	570 571
" Tárdeo Alliance Co's Works	"	Lightning-conductor on the chimney of Tárdeo (Tádader) Alliance Spinning and Weaving Co's Works to E. and at the foot of Khambála Hill, about 7 furlongs N. by W. of Grant Road Railway Station, and 5 furlongs W. by N. of the Byculla Club. 1865-66.	18 58 15' 0"	72 51 22' 9"	...	555 556

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Bombay, Tárdeo Factory	Bombay	Lightning-conductor on the large chimney of Manikji Petit's Spinning and Weaving Factory at the foot and E. of Khambála Hill, about 6 furlongs W. of the Byculla Club. 1865-66.	18 58 7'5	72 51 17'8	... feet	551
„ “Times of India” Press	„	Small iron chimney of the Press in the fort, about 1½ furlongs N.W. of the Bombay Cathedral, and 3 furlongs E. of Church Gate Railway Station. 1865-66.	18 55 52'4	72 52 28'2	...	477 478
„ Vári Bandar h.s. ...	„	On the hill of that name. The station is marked by an isolated pillar of masonry, 3 feet high, surrounded by a platform of rubble. 1865-66.	18 57 36'74	72 52 48'87	$\frac{115}{3}$	418
„ Wálkeshwar h.s. ...	„	On the premises of the Governor's House, to the extreme west of Malabár Hill. The station is marked by an isolated pillar of masonry, 4 feet high, surrounded by a platform of rubble. 1865-66.	18 56 29'21	72 50 9'91	$\frac{89}{4}$	440 441
„ Warli Fort ...	„	Point of the dome of a small watch-tower in the fort on a small hill N. by W. of the village of the same name, and about 2 miles W.N.W. of Dádar Railway Station. 1865-66.	19 1 22'4	72 51 30'3	...	608 609
„ Warli h.s. ...	„	On the highest point of the hill S. of the village and fort of Warli. The station is marked by an isolated pillar of masonry, 3 feet high, surrounded by a platform of rubble. 1865-66.	19 0 48'98	72 51 36'58	$\frac{96}{3}$	584
„ Warli Village Flag-staff	„	South flag on the staff. About the centre of the village, about 2 miles W. of Dádar Railway Station, and 1½ miles N. of Madli Pakhadi. 1865-66.	19 1 11'8	72 51 35'9	...	607
Boral Hill Pagoda ...	Nizam's Territory	Small temple under a Bar tree close to the N. brow of the hill, about a mile N.N.W. of Ghát Boral village, 1½ miles S.E. by S. of Garre Ráyapalle village, and 3½ miles N.N.E. of Rájola village. 1841.	17 54 49'6	77 7 11'4	...	61
Boral h.s. ... <i>Sidoba Pagoda</i>	„	On the temple of Sidoba about a mile N.W. of Ghát Boral village, 1½ miles S.E. by S. of Garre Ráyapalle, 4 miles N.N.E. of Rájola village, and ½ of a mile E. by S. of Boral Hill Pagoda. 1841.	17 54 37'30	77 7 16'35	2159	60
Bori, XXII ...	Poona	<i>Vide</i> page 8—B. ...	18 25 7'76	74 40 15'27	$\frac{2005 \cdot 14}{\dagger}$	26
Borphal Dargah ...	Nizam's Territory	About 1½ miles W. of Ausa town, and 2 miles N. of Borphal village. 1841.	18 14 46'3	76 30 48'3	...	137
Burdapur h.s. ... <i>Bardapur h.s.</i>	„	On high ground, about 1½ miles W. of the village of the same name, 2 miles E. of Nandgaon, and 8 miles S.E. of Ambah largo village. 1822-23.	18 38 6'98	76 30 56'19	...	112
Butcher Island s.	Thána	Also called Dia Deva, on the highest point of the island of that name, in the grave-yard close to the flag-staff. The station is denoted by an isolated pillar of masonry, 3 feet high, surrounded by a platform of rubble: táluks Sásetto (Sáshti). 1865-66.	18 57 39'07	72 56 33'84	$\frac{74}{3}$	429

* To top of rectangular protecting pillar 2.6 feet high, built over circular pillar.

† See description of this station.

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Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Butcher Island Tower ...	Thána	Highest point of roof of the round tower on the island of this name, about 3½ miles E. of Bombay Island: taluka Sátetta. 1829-30.	0 1 " 18 57 33' 0	0 1 " 72 56 41' 2	feet ...	356
Byculla ...	...	See Bombay. ...	...	...	...	...
Carnac Bandar ...	...	See Bombay. ...	...	...	...	...
Chákúr Hill Temple ...	Nizam's Territory	On Kadmulí Peak about 2 miles N.W. of the village of the same name, about a mile E. by S. of Kadmulí village, and the same distance N.E. by E. of Monaul village. 1862-63.	18 31 25' 3	76 53 29' 0	2385	98
Chalkapur Hill Pagoda ...	"	On a conical knoll, about ¼ of a mile S. of the village so called, 4 miles E. by S. of Chincholi village, and 2½ miles N. by E. of Hallikhd village. 1840-41.	17 53 19' 4	77 18 23' 7	2092	57
Chanda Hill Pagoda ...	Ahmednagar	About 2½ miles S.W. of the village of the same name, and 3 miles N.E. of Sinda village: taluka Karjat. 1837-38.	18 38 51' 1	74 57 31' 7	...	277
Chanderi East Peak <i>Chanderi Hill</i> ...	Thána	Highest point towards the western side of the hill about 3 miles S. by W. of Chincholi village, 1½ miles N.E. of Tamsai village, and 3 miles W.S.W. of Bedasgaon village: talukas Karjat and Kalyán. 1829-30.	19 3 49	73 17 13	...	344 345
Chanderi West Peak ...	"	Centre of peak W. of Chanderi, about 2½ miles S. by W. of Chincholi village, 1½ miles N.N.E. of Tamsai village, and 3½ miles W. by S. of Bedasgaon village: taluka Kalyán. 1829-30.	19 4 9	73 16 48	...	346 347
Chandúr h.s. ... <i>Chandar Station</i>	Bhor State	On the peak of the high hill, about a mile N.E. of the village of the same name, 7 miles W.N.W. of Torna Fort, and 2½ miles S. by E. of Pola village: Sátára Agency. The station is denoted by a mark-stone about 3 feet deep. 1828-29.	18 17 45' 11	73 34 16' 83	[3896]	310 311
Chara Hill Dipmal <i>Chora Hill Dipmal</i> ...	Nizam's Territory	About ¼ of a mile E. of Chara village, 1 mile S. of Valvád, and 5 miles N.E. by E. of Agalgaon village. 1837-38.	18 20 49' 3	75 51 33' 9	...	224
Chaunhipparga Tower <i>Chowanpurga Burj</i> ...	"	Highest burj or tower at the S.E. corner of the village, about 1½ miles E. by S. of Sayadpur village, 2½ miles N.E. of Kautala village, and 2½ miles S.W. of Gurdal village. 1840-41.	18 17 1' 7	77 0 36' 0	...	103
Chincholi, XXIII ...	"	<i>Fide page 8—B.</i> ...	18 55 25' 27	75 18 41' 47	$\frac{2928}{10' 6}$	33
Chincholi Garhi ...	"	Centre of Garhi in the village of Chincholi, about 2½ miles S.W. by W. of Sastúr large village. 1840-41.	17 59 50	76 30 16	...	145
Chinchpokli ...	...	See Bombay. ...	...	...	...	...

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Chinchvad Pagoda ... <i>Chinchwar Pag.</i>	Poona	Highest pagoda on the right bank of the Pauna river, about a mile W. by S. of the village of the same name, 2 miles S.W. of Chinchvad Railway Station, and 1 mile E.S.E. of Tãthaura village: taluka Haveli. 1840-41.	18 37 20·4	73 48 32·1	... feet	406
Chindal Bet ...	...	<i>See Cross Island.</i> ...	...	...	...	...
Chini Mãlegaon Temple <i>Chinni Mãlãgaon Temple</i>	Nizam's Territory	On a height in the village so called, about 2 miles S.E. of Tankali village, and 12 miles N.W. by W. of Kaulã town. 1822-23.	18 24 31·6	77 34 42·2	...	*
Chorakalli h.s. ... <i>Chorakali Station</i>	"	On a hill, about 2 miles W. by N. of Chorakalli village, 2½ miles S.E. of Yãrunalla village, and 6 miles N.E. by N. of the large village of Pangri. 1833-34-35.	18 21 38·21	75 56 36·06	...	220 221
Colãba ...	...	<i>See Bombay.</i> ...	...	...	...	...
Colãba Observatory, Bombay, XXXVI	Bombay	<i>Vide page 11—B.</i> ...	18 53 46·51	72 51 14·49	$\frac{63}{\dagger}$	45, 47 48
Cross Island s. ...	Thãna	Also called Chindal Bet. In the centre of the fortified island of that name. The station is denoted by a circular masonry pillar, 8 feet high, 12 feet in diameter at base and 7 feet at top, having a mark of steel wire let into lead. 1865-66.	18 56 49·85	72 53 36·23	$\frac{55}{8}$	413
Dãduri Hill Temple <i>Duduri H. Temple</i>	Ahmednagar	On a hill on the left bank of the Bhãma river, about ¼ a mile E. by N. of the village of the same name, 1½ miles S.E. of Berdi village, 1½ miles N. by E. of Malthan which is the same distance N. of the G.I.P. Railway, and 3 miles W.S.W. of Bhãmbora village: taluka Karjat. 1864-65.	18 24 58·2	74 46 33·4	...	‡
Dãhitna h.s. ... <i>Duhitnu s.</i>	Akalkot State	On a hill, about 2½ miles W.S.W. of the village of the same name, 2½ miles S.S.W. of Chapalgaon, and 4½ miles N.W. of Akalkot town: Sholãpur Agency. 1819-20.	17 34 14·45	76 11 56·93	[1706]	150
Dopka h.s. ...	Nizam's Territory	On a hill, about 2½ miles W. by S. of the village of the same name, 1½ miles N.E. of Dãvalvãdi village, and 11 miles N.E. of Udgir town. 1822-23.	18 29 42·92	77 17 17·57	...	72, 73
Dãpuri Wind-mill ...	Poona	For raising water in the Botanical Garden at Dãpuri, on the left bank of the Pauna river, about ¼ a mile W. by S. of Dãpuri village, 1 furlong N. of Sãngri village, and 1½ miles N.W. by N. of Kirkee Railway Station: taluka Haveli. 1840-41.	18 34 34·6	73 51 48·6	...	375
Dãud Malik, VII ...	Nizam's Territory	<i>Vide page 5—B.</i> ...	17 53 31·91	76 46 37·24	$\frac{2244}{5·0}$	11
Dãud Malik Dipmal <i>Daud Malak Dipmal</i>	"	Southern of the two dipmals on the S. brow of the hill on which is the principal station of the same name, about 8 miles N.E. of Unãrghi large village. 1840-41.	17 53 22·3	76 46 37·7	...	...
Dãud Malik Tree ... <i>Daud Malak Tree</i>	"	Highest tree close by and W. of a shrine (Idgah) of Dãud Malik on a slight eminence, about 2 miles S.S.E. of Korãnga village, 3½ miles E. by S. of Viroda village, and 2½ miles E.N.E. of Yãlluri village. 1840-41.	18 13 27	76 28 19	...	127

* For triangles fixing this point, see Synoptical Volume of the Great Arc Meridional Series, Section 18° to 24°.

‡ For triangle fixing this point, see Synoptical Volume of the Mangalore Meridional Series.

† Not forthcoming.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure <i>feet</i>	No. of Triangle
Deobet, IX	Nizam's Territory	<i>Vide</i> page 6—B.	17 56 21'50	76 26 17'06	$\frac{2197}{11'0}$	10, 12
Deobet Dipmal <i>Deobet dipmal</i>	"	On a flat hill, about 100 yards S.E. of the principal station of the same name. 1840-41.	17 56 19'3	76 26 19'5	...	...
Deobet h.s. <i>Deobetta s.</i>	"	Close to the principal station of the same name. 1819-20.	17 56 20'95	76 26 17'03	...	162
Devgaon Hill Tower <i>Deogaon to.</i>	Ahmednagar	Old round tower called Ral-i-Ras. About $\frac{1}{2}$ of a mile W. of Devgaon, $1\frac{1}{4}$ miles S.E. of Pimpalgaon Uzani, and 2 miles N.E. by E. of Koparvadi: taluka Ahmednagar. 1829-30.	19 8 58'2	74 52 10'3	...	...
Dewalgaon Tree	"	Conspicuous tree on the table-land near the village of that name, about 2 miles S. by W. of Karanji village on the road from Amrapur to Ahmednagar. 1845-46.	19 6 14	75 1 46	...	...
Dháráshev Hill Pagoda <i>Dharasio Hill Pag.</i>	Nizam's Territory	About $2\frac{1}{2}$ miles W. of Dháráshev town, 1 mile N.N.E. of Ambilwál village, and the same distance S.E. of Khánápur village. 1837-38.	18 10 33'8	76 2 51'7	...	213 214
Dháráshev Hill Temple <i>Halta Devi Temple</i>	"	Also known as Halta Devi Temple. Dipmal on the top of the hill, about $2\frac{1}{4}$ miles W. of the large village of Dháráshev $1\frac{1}{4}$ miles S.E. of Khánápur village, $3\frac{1}{4}$ miles N.E. of Jonan village, and the same distance N. of Pimpri village. 1862-63.	18 10 33'8	76 2 52'2	* 2286	212
Dháráshev Mosque <i>Daraseo Idga</i>	"	Centre of dome of the mosque immediately S. of the large village of the same name, about 2 miles N.W. of Shukapur village, 4 miles S.E. of Ghautungiri, and 3 miles S.W. of Sanji village. 1862-63.	18 10 17'1	76 4 54'1	† 2196	210 211
Dharúr, XI	"	<i>Vide</i> page 6—B.	18 3 3'87	76 11 8'32	$\frac{2343}{5'0}$	13
Dharúr Hill Tomb <i>Rukmintola Tomb</i>	"	Also called Rukmintola Tomb, about 3 miles E.S.E. of the principal station of Dharúr, 2 miles S.S.W. of Baniáni village, and $2\frac{1}{4}$ miles W. of Takaviki village. 1862-63.	18 2 14'9	76 13 44'1	...	...
Dhauleshvar, XXVII	Poona	<i>Vide</i> page 9—B.	18 25 41'64	74 12 15'66	$\frac{2939}{\ddagger}$	28
Dhoki Hill <i>Dholki E. Hill</i>	Ahmednagar	About $1\frac{1}{4}$ miles N.W. of the village of the same name, 3 miles E.M.E. of Vasunde village, and $2\frac{1}{4}$ miles N.E. by E. of Tákli Dhokeshwar: taluka Páner. 1832.	19 10 42	74 27 16	...	273 274
Dhoki Hill Pagoda <i>Dholki H. Pagoda</i>	"	About $1\frac{1}{4}$ miles W.N.W. of Dhoki village, $2\frac{1}{4}$ miles E.S.E. of Vasunde village, the road from Utúr to Ahmednagar runs from east to west, about $1\frac{1}{4}$ miles S.: taluka Páner. 1832.	19 10 27'0	74 26 45'6	...	271 272
Dhoki Idgah	Nizam's Territory	On a hill, about a mile E. by N. of the large village of the same name, $1\frac{1}{4}$ miles N.W. of Kaula village, and $2\frac{1}{4}$ miles S.S.W. of Devulhalli village. 1837-38.	18 22 24'7	76 8 25'2	...	207

* To top of dipmal.

† To highest point of mosque.

‡ Not forthcoming.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Dhond Hill Pagoda <i>Dhonda H. Pag.</i>	Poona	White pagoda on the side of the hill, about 3¼ miles S.S.W. of Dhond village, 2¼ miles N.E. of Kurkumb village, and 3¼ miles E.S.E. of Girim village: taluka Bhimthadi. 1838.	18 25 16.8	74 36 49.9	... <i>feet</i>	283
Dhond Pagoda ... <i>Dhonda Pagoda</i>	"	The largest of several temples situated at the N.W. corner of the well-known village of the same name from which the Dhond and Manmad Railway partly takes its name, and about ¼ of a mile S. of the Bhima river: taluka Bhimthadi. 1838.	18 27 58.8	74 37 43.0	...	282
Dhonegaon h.s. ...	Nizam's Territory	On a hill, about ¼ a mile S.E. of the village of the same name, 2¼ miles W. by S. of Bikuni village, and 14 miles S.E. of Udgir town. 1822-23.	18 15 52.97	77 17 58.22	...	52
Dia Deva ...	...	See Butcher Island ...	...	...	...	...
Dighi, XXVIII ...	Poona	<i>Vide</i> page 9—B. ...	18 37 24.00	73 55 34.51	$\frac{2477.96}{1}$	29
Digol Hill Dargah ...	Nizam's Territory	Spire of the dargah about 1¼ miles N.W. by W. of Digol village, the same distance S. by E. of Kubban Sangvi, 1¼ miles E.S.E. of Baulgaon, and 2¼ miles N.E. by N. of Yerola. 1862-63.	18 24 14.9	76 56 47.5	† 2226	97
Dolphin Light ...	...	See Bombay. ...	...	...	...	...
Dongarganj Hill Tower <i>Dongarganj tower</i>	Ahmednagar	Near the Nimhedera Ghát, about a mile W.N.W. of Dongargaon village, 2¼ miles E. by N. of Godaknath Hill, and 3 miles N. by E. of Pimpalgaon Malvi: taluka Ahmednagar. 1829-30.	19 15 3.5	74 47 25.8	...	260
Dongargaon No. 1 h.s. <i>Dongargaon Hill Pagoda</i>	Nizam's Territory	On a pagoda on a flat hill, about ¾ of a mile S.E. of the village so called, and 6 miles W.N.W. of Aurad large village. 1840-41.	18 16 55.76	77 22 28.15	2228	50, 51
Dongargaon No. 2 h.s. <i>Dongargaon h. station</i>	Ahmednagar	On the highest part of a hill, about 1¼ miles W. by N. of Dongargaon village, 2¼ miles N.E. of Dhanora village, 2 miles S.E. of Pipalkhed village, and 3¼ miles N.W. by N. of Kada village: taluka Jamkhed. 1838-39.	18 56 21.53	75 5 3.08	...	244 245
Elephanta h.s. ...	Thána	Also called Ghárápuri, on the highest point of the hill on the E. side of the island of that name. The station is marked by an isolated masonry pillar, 3 feet high, surrounded by a platform of rubble. 1865-66.	18 57 55.99	72 58 44.36	$\frac{559}{3}$	412
Ganesh Khind Hill <i>Ganes Khind H. bush</i>	Poona	Euphorbia bush on the highest point of the ridge, about 2¼ miles W. of Bhamburda village near Poona, and ¼ of a mile S.W. of the Bhamburda Caves: taluka Haveli. 1829-30.	18 31 29	73 51 26	[2365]	392 393
Ganesh Khind Pagoda <i>Ganes Khind Pag.</i>	"	To E. of the Poona-Bombay road, about ¼ a mile N.E. of the Chatter Singi Temple, 1 mile N.E. of the Bhamburda Caves, and 2¼ miles N.W. of Poona City: taluka Haveli. 1840-41.	18 32 25.3	73 52 14.6	...	391

* To mark-stone on top of circular pillar.

† To spire of dargah.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ganeshvádi h.s. ... <i>Gunnaeswurra Tree</i>	Akalkot State	On a hill, about 1½ miles S.E. by S. of Sadlapur village, 2½ miles E.N.E. of Banajghul village, and 2½ miles N. by E. of Chikhli village: Sholápur Agency. 1819-20.	17 33 36.35	76 21 4.52	feet ...	178
Garh Dáud, XIV ...	Nizam's Territory	<i>Fide page 6—B.</i>	18 15 44.82	76 1 43.30	2369 5.0	14
Ghaibi Sahib's Dipmal <i>Gibi Sahib ka Dipmal</i>	Sholápur	On a hill on the Tuljapur-Naldurg road where it goes over a saddle between two hills, about 2½ miles N.E. of Mangrul village, 1½ miles S.E. of Bhatamra village, and 2 miles W. by S. of Tirth village: táluca Sholápur. 1862-63.	17 56 31.6	76 9 19.7	* 2036	201 202
Ghárápuri ...	...	<i>See Elephanta.</i> ... ..	...	...	...	...
Girgaon ...	...	<i>See Bombay.</i> ... ..	...	...	...	...
Godavádi Hill Tree <i>Gorodi Hill Tree</i>	Nizam's Territory	A remarkable thin pipal tree two hundred yards N. of the village of the same name, about 2 miles S.E. of Gorta village, and 1½ miles S.W. of Vadavate village. 1840-41.	17 55 53	77 8 49	...	62
Govargaon Hill Dargah <i>Gawargaon Tree and Darga</i>	"	About 2 miles S.E. by S. of the village of the same name. 1837-38.	18 25 43.9	76 11 45.8	...	206
Gudápur Hill Pagoda <i>Goodapoor H. P.</i>	Daplhápur State	About a mile E. of Konikonúr village, 4½ miles W.S.W. of Sonyal village, and 2½ miles N.W. by N. of Madgyal village: Sátára Agency. 1819-20.	17 9 33.2	75 25 49.0	...	193
Guti Hill Mark (helio.) <i>Ghuti H. S.</i>	Nizam's Territory	About ¼ a mile W. of the village of the same name, 1½ miles N. of Khandála village, and 3 miles S. by W. of Mirkal village. Denoted by a circle and dot. 1862-63.	17 57 44.81	76 58 44.69	2182	111
Guti Hill Pagoda ... <i>Gooty h. pag.</i>	"	On a hill near the village of the same name, about 5 miles E. by S. of Gudsúr village, 9 miles N.E. by N. of Udgir town, and 3 miles E. by S. of Ghunsi village. 1822-23.	18 30 2.0	77 14 39.7	...	74, 75
Halbarga Hill Pagoda <i>Halburga Hill Pagoda</i>	"	About 3 miles S.W. of the village of the same name, 1 mile W. of Tamhalli village, and 1½ miles E.S.E. of Siddasúr village. 1840-41.	17 58 39.6	77 19 52.7	...	59
Háhhalli Tower ... <i>Havinhál Bj.</i>	Kaládgi	Burj or tower at the N.E. corner of Háhhalli village, about 3½ miles W. by N. of Havinal village, and 2 miles S.E. of Siradhon village: táluca Indi. 1819-20.	17 20 51.8	75 39 53.0	...	192
Harangal, VIII ...	Nizam's Territory	<i>Fide page 6—B.</i>	18 23 31.28	76 30 11.08	2192 4.5	8
Harangal Hill <i>Harangul Pile</i>	"	About ¼ of a mile S.W. of the principal station of the same name. Denoted by a pile of stones. 1840-41.	18 23 11	76 29 47	...	...

* To highest point of dipmal.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Hareli h.s. ... <i>Hareli Station</i>	Sátára	On a hill, about 1½ miles S.W. of the village of the same name, 1¼ miles E. by S. of the Komat-ki-ghát, and 3½ miles S. by E. of the large village of Khandála: táluks Wái (Vái) and Koregaon. 1832-33.	18 0 28' 94"	74 4 10' 79"	... feet	290 291
Hari Hill ... <i>Arri Hill</i>	Nizam's Territory	Old wall on hill, about ¼ a mile S. of the village of the same name, 1¼ miles S.W. by S. of Rapka village, 3 miles W. of Siruri village, and 2½ miles E. by S. of Kalambgaon. 1840-41.	18 20 23	76 50 18	...	116
Hari Hill Pagoda ... <i>Arri Hill Pagoda</i>	"	About 1¼ miles E. by S. of the village of the same name, 1¼ miles W. by S. of Siruri village, ½ of a mile N.E. by N. of Bingoli, and 1½ miles S.E. by S. of Rapka village. 1840-41.	18 20 9' 5"	76 51 48' 8"	...	117
Hasagaon Hill Peak No. 1 ... <i>Ashagaon Peak</i>	"	About 2 miles S. of the village of the same name, 2½ miles E. by S. of Kutagaon, 3 miles N.E. by E. of Sarola village, and 1½ miles W. of Dagudvádi village. 1840-41.	18 17 8	76 40 10	...	120 121
Hasagaon Hill Peak No. 2 ... <i>Ashagaon Hill</i>	"	About 2¼ miles S. of the village of the same name, the same distance E.S.E. of Kutagaon, 2¼ miles N.E. by E. of Sarola, and 1¼ miles W. by S. of Dagudvádi village. 1840-41.	18 16 47	76 40 4	...	122
Hasagaon Pile ... <i>Ashagaon Pile</i>	"	Pile of stones on rising ground, about a mile W. of the village of the same name. 1840-41.	18 19 1	76 39 16	...	118 119
Hattibétta h.s. ... <i>Hattibet h.s.</i>	"	On a hill of the same name, 386 feet N.E. of a large Bar tree, 1 furlong N.W. of Dhurmápur, about 1½ miles E. by S. of Kuravandi village, 2 miles S.W. of Devansan, and 2¼ miles W.N.W. of Gurdal village. 1840-41.	18 18 30' 91"	77 0 32' 19"	2281	100
Hattibétta Hill Tree ... <i>Hattibet Tree</i>	"	Large Bar tree on the hill of the same name, 386 feet S.W. of Hattibétta h.s. 1840-41.	18 18 30	77 0 28	...	98, 99
Hinjaura Hill ... <i>Hinjaura Hill Flag</i>	Poona	Small isolated hill about ¼ a mile S.W. of Hinjaura village, 1½ miles W. of Vákud village, and 2 miles N.E. of Mán village: táluks Hareli. 1840-41.	18 35 20	73 46 37	...	403
Hiraj s. ... <i>Hiraj</i>	Sholápur	On high ground, about 1¼ miles N.E. of the village of the same name, and 6 miles W. by N. of Sholápur City: táluks Sholápur. 1819-20.	17 41 20' 94"	75 51 29' 65"	[1591]	196 197
Hissámnagar Tower ... <i>Mathi Burj</i>	Nizam's Territory	Highest burj or tower in the village so called, about 1¼ miles S.E. of Javalga village, 4 miles W. of Vallandi, and 1¼ miles N. of Yellamb village. 1840-41.	18 14 2' 5"	76 57 15' 7"	...	104
Hivra h.s. ... <i>Hewiry H.</i>	Sholápur	On high ground, about a mile S.S.E. of the village so called, the same distance S.S.W. of Chikhli village, and 2 miles N.E. by E. of Kanheri village: táluks Mádha, Patvardhan State. 1819-20.	17 49 35' 94"	75 34 58' 35"	...	...
Honali Hill ... <i>Honali Hill South</i>	Nizam's Territory	Small bush on the southern of two small knolls, about a mile S. by W. of Manhalli village, and 5 miles W.S.W. of Mantalla large village. 1840-41.	17 47 51	76 49 56	...	142

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Ipalgaon Tree No. 1 <i>Ipalgaon Darga Tree</i>	Nizam's Territory	Highest tree over a dargah near the village of the same name, about 5 miles N. by W. of Nitúr large village. 1840-41.	18 10 24	77 23 34	feet ...	55
Ipalgaon Tree No. 2 <i>Ipalgaon Highest Tree</i>	"	Highest tree in the village so called, about 5 miles N. by W. of Nitúr large village. 1840-41.	18 10 9	77 23 19	...	...
Jaiphul Tree	"	Large Bar tree close to a shrine on a plateau, about 1½ miles S. by W. of Jaiphul village, 2 miles E.S.E. of Gugi village, 2½ miles E.N.E. of Mainda village, and the same distance W.N.W. of Sevála village. 1837-38.	18 14 1	76 20 26	...	203 204
Jájnúr Hill Tomb ... <i>Jerri H. Tomb</i>	"	Near the boundary line between the villages of Jari and Jájnúr, about 1 mile S. by W. of the former, 1½ miles N. by E. of the latter, and 2½ miles E. of Lambota village. 1862-63.	18 9 36.4	76 51 41.8	2239	107 108
Jájnúr Hill Tree ... <i>Jaznur Hill Tree</i>	"	About a mile N. by W. of the village of the same name, 2½ miles E.N.E. of Lambota village, and ¼ of a mile S. of Jari village. 1840-41.	18 9 37	76 51 42	...	109 110
Jalibal s.	Sángli State	On high ground, about 1½ miles S.E. of the village of the same name, 2½ miles E.N.E. of Sidankheda, and 1½ miles N. by W. of Nimboni village: Kolhápúr and Southern Marátha Agency. 1819-20.	17 22 53.98	75 29 24.82	[1742]	168
Jánval Hill ... <i>Janwal Hill North</i>	Nizam's Territory	Highest point of the hill, about a mile N.E. of the village of the same name, 2½ miles W. by S. of Vagoli village, and 3 miles N.W. of Wadwál village. 1840-41.	18 33 8	76 48 45	...	94
Jánval Hill Tree ... <i>Janwal Hill Tree South</i>	"	About a mile S.S.W. of the village of the same name, 2 miles E. by N. of Sirni village, and 3 miles W.N.W. of Wadwál village. 1840-41.	18 32 9	76 48 0	...	95, 96
Jevra h.s. ... <i>Jevra Station</i>	Poona	On a hill, about a mile N.W. of the village of the same name, 2 miles S.W. by S. of Aundh village, and 4½ miles N.E. of the Khandála Railway Station: táluks Máral. The station is denoted by a mark-stone sunk about 2 feet below the surface of the ground, covered over with a mound of stones. It is not on the highest part of the hill, that point being invisible from Kárlí Base-line E. End. 1829-30.	18 47 37.32	73 28 14.64	...	322 323
Jinjaria h.s. ...	"	On a flat-topped, isolated hill, a few yards S. of a sacred stone, about 1½ miles N. W. of the village of Kanhúr, and above the small village of Golapvádi: táluks Sirúr. This station was originally fixed by the Topographical Survey, and is denoted by a mark-stone on a masonry pillar covered over with a cairn of stones. 1881-82.	18 51 31.83	74 10 10.75	$\frac{2606}{\bullet}$	296 297
Jinkhor Hill Peak ... <i>Jinkhor Peak</i>	Thána	Highest point of the inaccessible peak, about ¼ of a mile N. W. of Irealvádi village, 1½ miles W.S.W. of Varosa village, 2½ miles N.N.W. of Chauk village, and 3 miles N.N.E. of Lodevli village: táluks Karjat. 1829-30.	18 56 3	73 16 26	...	341 342

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kadaknāthvādi Hill Temple ... <i>Kandoba H. Temple Dipmal</i>	Nizam's Territory	Dipmal of the temple known as Khandoba Temple about a mile S.W. of Kadaknāth hamlet, 2½ miles N.E. by N. of Dhamangaon, and 3 miles E.N.E. of Chumb village. 1862-63.	18 24 45·6	75 50 28·9	feet * 2399	225 226
Kalambgaon Hill Tree ... <i>Kalambgaon hill tree</i>	"	Highest tree over a temple on a small hill, about a mile E. by N. of the village of the same name, 1½ miles W. of Hari village, 1½ miles S.E. of Ganeshvādi village, and 2 miles S.S.W. of Tergaon. 1840-41.	18 20 48	76 49 2	...	114 115
Kalambvādi North Peak ... <i>Kalam Peak North</i>	"	About ¼ a mile E. of the village so called, 1 mile N.W. of Katugaon, and the same distance S.W. of Dhamangaon. 1837-38.	18 22 32	75 48 20	...	227
Kalambvādi South Peak ... <i>Kalam Peak South</i>	"	About 200 feet S.W. of Kalambvādi North Peak. 1837-38.	18 22 30	75 48 16	...	228
Kalani Church ...	Thāna	Cross of the R. C. church in the village of the same name, N. of a small tank, about 2 furlongs E. of Kolakulyān village, and 1½ miles N. by W. of Kuria Railway Station. 1865-66.	19 4 39·6	72 54 38·1	...	625 626
Kallur h.s. ... <i>Kulloor h.s.</i>	Nizam's Territory	On a hill, about 2½ miles S.W. by S. of the village of the same name, and 6 miles N.W. of Udgir town. 1822-23.	18 27 27·72	77 6 14·40	...	86, 87
Kambargaon Hill Tree ...	Ahmednagar	Large tamarind tree about 1½ miles E.N.E. of Pimpalgaon Kaura, 1½ miles S. of Bhojar village, and 3½ miles W. by S. of Tās village: tālukas Pārner and Ahmednagar. 1845-46.	19 1 14	74 38 4	...	275
Kandalgaon h.s. ... <i>Kundulgaon s.</i>	Sholāpur	On a hill, about 1½ miles S. by W. of the village of the same name, 2½ miles E.N.E. of Vinchnur village, and 2½ miles W. by N. of Yellāgaon: tāluka Sholāpur. 1819-20.	17 31 27·60	75 47 31·12	[1626]	156
Kanheri, XVIII ...	Nizam's Territory	<i>Fide page 7—B.</i>	18 29 30·75	75 45 43·87	2610 4·9	19
Kanheri Tower ... <i>Kanheri Burj</i>	"	Highest burj or tower in the village so called, about 2 miles S. by W. of Sarola, 2 miles S.E. by N. of Jaynagar village, and 1½ miles N.W. of Vaguli village. 1840-41.	18 13 57·8	76 36 54·3	...	130
Kanhūr Hill Mark ... <i>Kanhor Mark</i>	Poona	On the conical hill, about 2½ miles N.E. of the village so called, 1 mile N. by E. of Philtkivādi village, and 2½ miles S. by W. of Kauta village: tāluka Sirūr. 1829-30.	18 51 17·35	74 12 37·48	...	295
Kaplapur h.s. ... <i>Kaplapur Station</i>	Nizam's Territory	On a hill, close to and E. of the village of the same name, about 1½ miles S. of Bah Jaunlaga village, 2 miles W.S.W. of Korabkallaghi, and 2 miles E.S.E. of Māvinhalli. 1840-41.	17 57 36·14	77 12 56·22	2072	58
Kapria h.s. ... <i>Kapria Station</i>	Thāna	On the highest part of the southern peak, about a mile E. of Vinegaon, the same distance S.E. of Vaundal village, 1½ miles N. of Kalota Mokashi, and 3 miles S.W. of Karjat Railway Station: tāluka Karjat. The station is denoted by a mark-stone sunk into the ground and covered over with a pile of stones. 1828-29.	18 52 47·64	73 19 40·65	...	330 331

* To top of dipmal.

BOMBAY LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Karaji s. ... <i>Kubbair Kuruzugi</i>	Nizam's Territory	In the village so called, and about 3 miles S.W. by S. of Māshal village. 1819-20.	0 1 " 17 16 54 32	0 1 " 76 15 20 80	feet ...	183 184
Karanja, XXXIV ...	Kolāba (Kulābu)	<i>Fide page 10—B.</i> ...	18 51 24 99	72 58 49 06	$\frac{997}{4}$	40, 49 44
Karasaon, VI ...	Nizam's Territory	<i>Fide page 5—B.</i> ...	18 13 5 12	76 36 15 46	$\frac{2290}{4 9}$	7
Karasaon Hill Pagoda	"	This pagoda is situated alongside of the principal station of the same name. 1840-41.	18 13 4 9	76 36 15 4	...	131
Karikada Pagoda ... <i>Kari Pag.</i>	Ahmednagar	In the village of the same name, about 3 miles S.W. by S. of Devi Ningaon, 1½ miles N.W. of Shiri Buzurg village on the high road from Ahmednagar to Jāmkhed, and 3 miles E. by S. of Sābarkhel village: tāluka Jāmkhed. 1845-46.	18 53 38 5	75 7 13 5	...	247
Kārli Base-line E. End s. <i>Shelatna Station</i>	Poona	The eastern extremity of the base measured by Captain Shortrede in 1828-29. It is close to and W. of Shilatna village, about a mile S.E. of the Kārli Caves, and 4 miles W. by N. of Khadkēla Railway Station: tāluka Māval. The station is marked by a conical stone, about 2 feet diameter at bottom and 8 inches at top and 2 feet high, the upper surface being level with the ground. The mark is a drilled hole $\frac{1}{4}$ an inch deep, the upper half being $\frac{1}{2}$ of an inch in diameter and the lower $\frac{1}{2}$ of an inch. Two circles, one of 2 inches, the other of 6 inches diameter, are cut round the hole, leaving an inch all round between the outer circle and the edge of the stone. The station is protected by a pile of stones. 1828-29.	18 46 17 92	73 32 5 86	...	325 326
Kārli Base-line W. End s. <i>Dongargaon Station</i>	"	The western extremity of the base measured by Captain Shortrede in 1828-29. It is between the village of Dongargaon and the G.I.P. Railway Line, and 2½ miles E. of Lonāva Railway Station: tāluka Māval. The station is about 30 yards N.W. of a diḡmal, and is marked by a hole of about 1½ inches diameter cut into a piece of flat rock, having a projecting collar about $\frac{1}{2}$ of an inch high and 7 inches in diameter. The hole is filled with lime and is protected by a pile of stones. 1828-29.	18 44 45 74	73 28 44 55	...	824
Karmāla Hill Temple	Sholāpur	Largest spire of the highest of seven temples on the W. end of the flat, about a mile E. of Karmāla town: tāluka Karmāla. 1862-63.	18 24 14 5	75 15 4 2	...	234 235
Karnāla Hill Fort	Thāna	Centre of the Euphorbia bush on the top of the Karnāla Peak called Funnel Hill, about 2 miles N.N.W. of the town of Apta on the Patalganga river, 1½ miles E. by N. of Kalla village, and 2½ miles W. of Gulsanda village: tāluka Panvel. 1829.	18 52 50 8	73 9 35 6	[1538]	339 340
Karongavādi Hill Pagoda <i>Peak H. P.</i>	Ahmednagar	On a peak of the hill, about $\frac{1}{2}$ of a mile W. by S. of the village of the same name, and 2 miles E. of Betrādi village. The road from Shrigonda to Jāmkhed runs about $\frac{1}{2}$ of a mile to S: tāluka Karjat. 1819-20.	18 38 32 1	74 58 3 8	...	...

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Karul Hill Pagoda <i>Karool H. Pag.</i>	Nizam's Territory	About 1½ miles S.E. of Karul village, 2½ miles E. by N. of Shiri Buzurg village, and 1½ miles N. by W. of Mandra village. 1829-30.	18 53 1' 2"	75 10 41' 2"	feet ...	248
Kásársai Hill	Poona	Bush on the hill, about a mile W.N.W. of the village of the same name, 1½ miles S.E. of Chándkhed village, and 2 miles S.W. of Dárumbra village: táluks Haveli and Mával. 1832-33.	18 37 48	73 42 20	...	...
Kasti Pagoda <i>Kashti Pagoda</i>	Nizam's Territory	Tree over a temple at the S.W. corner of the village of the same name, about 2 miles N.W. of Nagúr village, 3½ miles S.E. of Kanagaon, and 4 miles S.W. of Batangli village. 1840-41.	18 2 11' 6"	76 24 8' 5"	...	148
Kem, XVII	Sholápur	<i>Fide page 7—B.</i>	18 10 48' 90	75 20 51' 10	[*] 1951' 21 4' 8	20, 22
Kem Hill Pagoda <i>Kaimb H. P.</i>	"	On a conical hill, about a mile N. of the Railway station of the same name, 2 miles S.E. of Malori village, and ¼ of a mile W. of the road from Kem to Ghoti village: táluks Karmála. 1819-20. Refixed in 1837-38.	18 11 10' 9"	75 18 50' 7"	1944	231 232
Kevla Bridge <i>Kewla Bridge</i>	Poona	About a mile N.E. of the village of the same name on the Bombay-Poona road, and 6 miles S.E. by S. of Talegaon: táluks Haveli. 1840-41.	18 39 47	73 46 17	...	409
Kevla Well <i>Kewla Well</i>	"	Large well near the village on the left bank of the Pauna river, about 2 miles S.S.W. of Shelárvádi Railway Station, 2 miles N.W. by W. of Raret village, and ¾ of a mile N.W. by N. of Jámba village: táluks Haveli. 1840-41.	18 39 47	73 46 16	...	410
Khadki Hill Temple <i>Karki Hill Pag.</i>	Sholápur	Small pinnacle on the southern face of the wall of Dával Malik Temple on the boundary of the Sholápur District with Naldurg District of the Nizam's Dominions, 1½ miles S.E. by E. of Khadki village, and 3½ miles W. of Tandulvádi village. 1840-41. Refixed in 1862-63.	17 45 53' 1"	76 4 30' 6"	...	199 200
Khandáli s. <i>Khundali s.</i>	"	On high ground, close N. of the Poona-Sholápur road, about 2½ miles N.E. by N. of Khandáli village, 2½ miles S.W. by S. of Váphla village, and ¼ a mile S.E. of the place where the village road from Khandáli to Váphla crosses the road from Poona to Sholápur: táluks Mádha. 1819-20.	17 52 36' 16"	75 31 18' 84"	[1774]	160
Khandeshvar Hill Pagoda <i>Kandeshwar Pagoda</i>	Poona	About 4 miles S.E. of the well-known hill of Singi, and 6½ miles W. by N. of Karus village and market: táluks Khed. 1829-30.	18 54 35' 5"	73 45 14' 6"	[4086]	...
Khánpisura, XXI	Ahmednagar	<i>Fide page 7—B.</i>	18 45 30' 65	74 49 16' 99	[†] 2751	26
Khorti Hill Mark (holio.) <i>Khorti H.S.</i>	Sholápur	About 2½ miles N.E. by E. of the village of the same name, 2½ miles S.W. of Malunji village, and 2½ miles W.N.W. of Marrar village: táluks Karmála. 1863.	18 24 57' 42"	75 5 42' 63"	2101	236 237
Kiranhalli Hill Pagoda <i>Kiranuhulli h. p.</i>	Akalkot State	About ¼ of a mile N. by E. of the village so called, 2 miles S.E. of Gholasgaon, and 2½ miles N.W. by W. of Bhuri Kántha village: Sholápur Agency. 1819-20.	17 39 43' 1"	76 24 2' 8"	...	179

* To mark-stone on top of circular pillar.

† See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kirkee Church ... <i>Karkki Church Tower</i>	Poona	Tower of the R. C. church about $\frac{1}{2}$ of a mile S.E. of Kirkee Railway Station, and 1 mile S.S.W. of the Grand Magazine: taluka Haveli. 1840-41.	18 33 21' 7"	73 53 36' 3"	... feet	380
Kirkee Fives Court ... <i>Karkki Fives Court</i>	"	Centre of the Fives Court in Cantonment, about $\frac{1}{2}$ a mile S.E. of Kirkee Railway Station, and $\frac{1}{2}$ of a mile N.W. of the Roman Catholic church: taluka Haveli. 1840-41.	18 33 30' 0"	73 53 21' 9"	...	379
Kirkee House ... <i>Karkki Highest House</i>	"	Highest house in the Cantonment, immediately N. of the Grand Magazine: taluka Haveli. 1840-41.	18 34 6	73 53 53	...	377
Kirkee Idgah ... <i>Karkki Idga</i>	"	About $\frac{3}{4}$ of a mile N.E. of Kirkee Railway Station, 1 mile E. of Bopori village, and $\frac{1}{2}$ miles W. by S. of Kalas village: taluka Haveli. 1840-41.	18 34 10' 4"	73 53 26' 7"	...	376
Kirkee Mess House (helio.) ...	"	About $\frac{1}{2}$ of a mile S.E. of the Roman Catholic church, $\frac{1}{2}$ miles S. by W. of the Grand Magazine, and 1 mile S.E. of Kirkee Railway Station: taluka Haveli. 1862-63.	18 33 10' 14"	73 53 42' 69"	...	381
Kirkee Refuse Kiln (helio.) ...	"	About $\frac{1}{2}$ of a mile S. of the Grand Magazine, and $\frac{1}{2}$ a mile S.E. of Kirkee village: taluka Haveli. 1862-63.	18 33 50' 01"	73 53 54' 27"	...	378
Kondhápuri Pagoda <i>Kondapur Pag.</i>	"	On rising ground, about $\frac{1}{2}$ of a mile N.E. of the village of the same name on the high road from Poona to Ahmednagar, $\frac{1}{2}$ miles S.W. by S. of Khandál village, and $\frac{2}{3}$ miles N.W. by N. of Nimgaon Mahálungi village: taluka Sirúr. 1837-38.	18 43 37' 5"	74 14 38' 3"	...	294
Koparvádi Hill Temple <i>Koparwari h. pag.</i>	Ahmednagar	White domed temple on hill close to and N. of the village of that name, about $\frac{4}{5}$ miles N.E. of Ahmednagar City, $\frac{1}{2}$ miles N. by W. of Koparvádi, and $\frac{1}{2}$ miles S.E. of Pakhardi village: taluka Ahmednagar. 1832-33.	19 8 54' 0"	74 49 45' 5"	...	261 262
Korthan Hill Dipmal <i>Korthan Dipmal</i>	"	Also known as Ana Dipmal. In the village of Khandoba, about 2 miles S.W. of Pimpalgaon Rotha village: taluka Párner. 1837-38.	19 6 27' 4"	74 19 15' 6"	...	298
Kotagial Fort s. <i>Kotagial Fort</i>	Nizam's Territory	Close to and W. of the village of the same name, about $\frac{1}{2}$ miles S.S.E. of Kolgaon, and 13 miles S.E. by S. of Udgir town. 1822-23.	18 14 42' 62"	77 16 6' 69"	...	53
Kotúl Hill Pagoda <i>Kothul H. P.</i>	Ahmednagar	Top of white pagoda about $\frac{1}{2}$ miles E. by N. of the village of Kotúl, and 4 miles E.S.E. of Kolgaon village and market: taluka Shrigonda. 1837-38.	18 46 37' 6"	74 45 57' 3"	...	...
Kuldharan Hill ...	"	File of stones on a conical hill near Kuldharan village, about 2 miles E. by N. of Kolgaon, and 9 miles E. by N. of Shrigonda town: taluka Shrigonda. 1837-38.	18 37 12	74 52 29	...	278 279
Kundrál, II ...	Nizam's Territory	<i>vide page 4—B.</i> ...	18 37 26' 34"	77 23 20' 14"	1685 5' 2"	4
Kuranur h.s. <i>Koorunoor Tree</i>	Ahalkot State	At the S.W. end of the flat hill, about $\frac{2}{3}$ miles E. by S. of the village of the same name, 2 miles W.N.W. of Badol village, and $\frac{3}{4}$ miles S. by W. of Kini village: Sholápur Agency. 1819-20.	17 37 37' 92"	76 17 47' 65"	[1730]	171 172

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Kurkumb Dīpmal ...	Poona	Near the Kurkumb Ghát on the main road from Pátas to Ravangan, about 6 miles E.S.E. of Pátas large village, and the same distance W.N.W. of Mallad village: táluha Bhimthadi. 1832-33.	18 23 36'3	74 35 7'6	feet ...	284
Kurla Chimney ...	Thána	Top of chimney of the Spinning and Weaving Co's Works, on the E. margin of the town, about 2 miles S.S.E. of Kolakalyán village, and the same distance W. of Chembur village. 1865-66.	19 3 29'7	72 54 59'8	...	623 624
Kurla Clock Tower	"	Clock tower of the Spinning and Weaving Co's Works, on the western margin of the town, about 2 miles S.S.E. of Kolakalyán village, and the same distance W. of Chembur village. 1865-66.	19 3 29'1	72 54 56'1	...	...
Kurla h.s. ...	"	On the southernmost of three hillocks, about $\frac{1}{2}$ a mile S. of Kurla village, and close to the Kurla Spinning and Weaving Co's premises. Kurla Railway Station is about 500 yards from the foot of the hill: táluha Síssette. The station is marked by an isolated masonry pillar, 3 feet high, surrounded by a platform of rubble. 1865-66.	19 3 23'20	72 55 2'57	$\frac{149}{3}$	426
Kurul h.s. Koorool s.	Sholápur	On high ground, about 2 $\frac{1}{2}$ miles S. by W. of the village of the same name, 7 $\frac{1}{2}$ miles N.E. of Ghodeshrar village on the Bhina river: táluhas Mádha and Sholápur. 1819-20.	17 38 31'23	75 41 38'34	[1657]	157 169
Lachan s. Luchuna s.	Sángli State	About 1 $\frac{1}{2}$ miles S. E. by E. of the village of the same name, 6 miles S.W. of Agarkhod village on the Bhina river, and 8 miles W.S.W. of Mánúar village and Dharmshála: Kolhápur Agency. 1819-20.	17 15 56'50	76 1 29'92	[1557]	165
Lamjan Hill Tree ...	Nizam's Territory	Eastern of two trees on a small knoll, about 2 $\frac{1}{2}$ miles N. of the village so called, 11 miles W. of Nilanga large village, and 2 miles N. by E. of Bikor Chicholi village. 1840-41.	18 9 51	76 37 25	...	139
Látur Idgah ...	"	Centre of face wall of the Idgah S. of the large village of the same name, between the village and town, about 2 miles S.E. of Uravi village, the same distance S.W. of Kásargaon, 3 miles W. of Sarola, and 2 miles N. by E. of Kanheri village. 1862-63.	18 24 10'4	76 37 14'8	* 2100	113
Laula Hill Pagoda ... Lowla Hill Pagoda	Poona	About 3 furlongs S.S.W. of the village of the same name, 1 $\frac{1}{2}$ miles N. E. by N. of Peringut village, and 2 miles E.S.E. of Bhára village: táluha Haveli. 1840-41.	18 31 19'4	73 44 40'4	...	398
Laul s. Laool S.	Sholápur	About 2 miles S. by W. of the village of the same name, 2 $\frac{1}{2}$ miles W. by N. of Ashita village, 3 miles E. by S. of Ujuni village, and $\frac{1}{2}$ of a mile W. of the road from Bási Road Railway Station to Shetphal district bungalow: táluha Mádha. 1819-20.	18 0 34'56	75 25 29'76	[1876]	†
Lohára Hill ...	Nizam's Territory	Highest point of the hill, about 1 $\frac{1}{2}$ miles N. of Lohára village, 2 $\frac{1}{2}$ miles W. of Haibatpur village, and 1 $\frac{1}{2}$ miles S.E. of Kunta village. 1840-41.	18 24 18	77 3 45	...	83

* To top of face wall.

† For triangle fixing this point, see Synoptical Volume of the Mangalore Meridional Series.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Lohogaon Hill Pagoda ...	Poona	Top of spire of the pagoda about 1½ miles N. by W. of the village of the same name on the high road from Kirkee to Ahmednagar, 3 miles S. by E. of Charholi Khurd village, and 2½ miles N.E. of Dhanori village: taluka Haveli. 1829-30.	18 37 8.1	73 57 45.4	feet [2311]	...
Loni Hill Tree ...	Nizam's Territory	On a rising ground, about 2½ miles N.N.W. of the village of the same name, 1½ miles E. of Ungargah, 2½ miles N. by E. of Tondaur, and 2½ miles S.W. by S. of Kallur village. 1840-41.	18 27 12	77 6 18	...	84, 85
Mahadeoba, XII ...	"	<i>Vide page 6—B.</i> ... Note:—As Captain Garling's station of Katgong has disappeared, all his observations have been referred to this station.	17 48 20.71	76 9 58.85	1968 5.0	16
Mahalunga Pagoda <i>Mahlunga white pag.</i>	Poona	White pagoda about ¼ of a mile E.N.E. of Mahalunga village, 1 mile W. of Balevadi village, and 1 mile S.S.E. of Vaskad village: taluka Haveli. 1840-41.	18 34 40.4	73 48 32.5	...	373
Mahalunga s. <i>Mahlunga Station</i>	"	On high ground, about a mile S.E. of Mahalunga village, the same distance N.E. of Sus village, and 1½ miles W.N.W. of Banera village: taluka Haveli. The rock being bare and hard, the circle and dot were cut on it and protected by a heap of stones. 1840-41.	18 33 47.30	73 48 25.04	...	366
Maheshgaon Hill Pagoda <i>Mhaisgaon Hill Pagoda</i>	Sholapur	On the side of the hill, about 1½ miles S.W. of the village so called, 1 mile S. of Chinchgaon, and 2 miles N. of Tadvala village: taluka Madha. 1833-34.	18 6 36.8	75 31 0.6	[1794]	230
Makni Pagoda ... <i>Mathula Pagoda</i>	Nizam's Territory	Highest temple at the S.W. corner of the village so called, about 1½ miles S.W. of Sarni village, 2½ miles S.E. of Loata village, and 3½ miles E. by N. of Khed village. 1840-41.	18 1 30.7	76 28 45.1	...	147
Makni Tree ... <i>Makhni Trees</i>	"	Highest tree at the foot of a hill, about 1½ miles S. of the village so called, and 4 miles E. by S. of Khed village. 1840-41.	18 0 35	76 29 1	...	...
Malabar ...	...	<i>See Bombay.</i> ...	...	...	...	...
Malangad Hill No. 1 <i>Malangarh Hill</i>	Thana	Highest point of the hill known as Baramalang Hill, now almost inaccessible, about 2 miles E.S.E. of Bandanvadi village, 1½ miles N. by E. of Mohadar village, and 3½ miles S. by W. of Banoli village: taluka Kalyan. 1829-30.	19 6 32	73 13 12	...	350 351
Malangad Hill No. 2 <i>Malangarh Peak</i>	"	Conical peak of the hill known as Baramalang Hill quite inaccessible, about 200 feet S.W. of the preceding point: taluka Kalyan. 1829-30.	19 6 31	73 13 7	...	352 353
Malia Hill No. 1 ... <i>Bhoti S. hill</i>	Nizam's Territory	Southern of two round knolls, close to Malia Hill No. 2. 1840-41.	18 30 17	77 3 51	...	90
Malia Hill No. 2 ... <i>Bhoti N. hill</i>	"	Northern of two round knolls, about 1½ miles S.W. of Kinni village, 2 miles E. of Selgaon, 1 mile N. by E. of Malia Hill Temple, and 6 miles E. by S. of Buti village. 1840-41.	18 30 21	77 3 50	...	91

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Malia Hill Temple ...	Nizam's Territory	About 1½ miles W.N.W. of Anupvadi village, 2 miles W. by S. of Ambarga village, 1½ miles N.E. of Döngres large village, 2 miles E. of Chaulachivadi village, and 9 miles N.W. of Udgir town. 1862-63.	18 29 32·1	77 3 34·9	feet * 2244	88, 89
Malmala ...	...	See Bombay. ...	...	...	...	...
Malvandi Point ... <i>Shaik Gowri Pir</i>	Sholápur	Also known as Shekh Ghori Pir. About ¼ a mile S. by W. of the village so called, 1½ miles E.N.E. of Turuk Pimpri village, and 2 miles N. by W. of Hatkar village: taluka Bársi. 1862-63.	18 3 1	75 41 27	...	...
Mamdapur Tomb ...	Nizam's Territory	White tomb close S.W. of the village of the same name, about ¼ a mile N.E. of Sayadpur village, 1 mile N.W. of Chaunhipparga village, and 1½ miles S.S.E. of Karavandi village. 1840-41.	18 17 48·2	76 59 53·1	...	102
Mamdapur Tower ... <i>Mamdapur Burj</i>	"	Highest burj or tower in the village so called, about ¼ a mile N.E. of Sayadpur, 1 mile N.W. of Chaunhipparga, and 1½ miles S.S.E. of Karavandi village. 1840-41.	18 17 59·5	77 0 0·1	...	101
Mándvi, XXXI ...	Bhor State	<i>Fide</i> page 9—B. ...	18 37 51·11	73 34 48·89	$\frac{4121}{2·4}$	39
Manganál, XL† ...	Nizam's Territory	<i>Fide</i> page 4—B. ...	18 13 41·38	77 25 5·45	$\frac{2211}{4}$	1
Manganál Hill Tree <i>Manganal Tree East</i>	"	About 1½ miles W.N.W. of the village of the same name, 1 mile S.S.E. of Khandokleri village, and 3 miles S.W. of Aurád large village. 1840-41.	18 13 49	77 25 17	...	...
Mangrul Tower ... <i>Mimgurool</i>	Akalkot State	Burj or tower about the centre of the village of the same name, 2½ miles S.W. of Karajgi village, and 4 miles S.E. of Suler Javalga: Sholápur Agency. 1819-20.	17 24 48·5	76 3 22·3	...	...
Manikgad Hill Fort <i>Manikgarh</i>	Thána	Pole near pagoda in Manikgad Fort, about a mile N. by E. of the village of the same name, 2 miles S.E. of Sauna village, and 1½ miles S.S.W. of Talauli village: taluka Panvel. 1829-30.	18 49 30·2	73 14 7·0	[1876]	338
Maradi Tomb ... <i>Lohara Tomb</i>	Nizam's Territory	White tomb at the N.W. corner of the village so called on the road to Lohara, about 1 mile W. of Baidakal village, 3 miles E.S.E. of Thorámba village, and 4½ miles S.S.E. of Karaskheda village. 1837-38.	18 0 24·9	76 20 3·0	2159	149
Mardi s. <i>Marudi s.</i>	Sholápur	On high ground, about 2½ miles W. by S. of the village of the same name, 2 miles E. of Akola, and 3 miles S.S.E. of Nanaj: the road from Bársi to Sholápur runs N. and S. about a mile W. of the station: taluka Sholápur. 1819-20.	17 47 58·99	75 54 29·57	[1722]	155
Márunji Chauri ...	Poona	At the N.W. corner of the village of the same name, about 2 miles S.E. of Nira village, the same distance N.W. of Hinjauri village, and 4 miles W. by S. of Chinchvad village: taluka Haveli. 1840-41.	18 36 38	73 45 23	...	405
Márunji Hill Peak ... <i>Marunji Peak</i>	"	Conical peak about 1½ miles S.W. of the village of the same name, 2 miles N. by W. of Mán village, and the same distance S.E. of Kasársai village: taluka Haveli. 1829-30.	18 36 10	73 44 32	[2795]	404

* To spire of temple.

† Of the Great Arc Meridional Series, Section 18° to 24°.

BOMBAY LONGITUDINAL SERIES.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Márunji h.s. ... <i>Marunji s.</i>	Poona	On a low spur projecting from a high range, about a mile S. of Márunji village, 1½ miles W. by N. of Hinjauri village, and 1½ miles N. by E. of Mán village: táluca Haveli. There is no platform but three large stones for the theodolite stand and one in the centre for the station mark are set in firmly based upon the rock. The mark is on a piece of brass in the central stone. 1840-41.	18 35 53·77	73 45 25·58	feet ...	872
Mira Dongar, XXXIII	Kolába	<i>Vide page 10—B.</i> ...	18 41 1·68	73 12 16·06	$\frac{1863}{5}$	42
Morgiri Fort s. ... <i>Morgiri Station</i>	Poona	At the centre of the level ground on the peak in the fort, about ½ of a mile S.E. of Jabhulna village, 1½ miles N.N.E. of Devgad village, and 2 miles N.W. of Morva village: táluca Mával. The station is denoted by a mark-stone 1 foot deep in the ground, and covered over with a pile of stones. 1828-29.	18 39 51·74	73 27 42·70	3707	818
Mudhól Pagoda ... <i>Mudhal White Pag.</i>	Nizam's Territory	White pagoda in the village of the same name, about 7 miles W.S.W. of the large village of Aurád. 1840-41.	18 13 18·4	77 21 28·5	...	...
Mugaon s. ...	"	On high ground, about a mile W. by S. of the village so called, 2½ miles N. of Pángalgaon, and 3 miles N.E. by E. of Bráhmangaon. 1836-37.	18 51 9·67	75 18 21·87	...	241
Mungíál h.s. ...	"	On a hill, about 2 miles N.E. of the village of the same name, 2½ miles E. by S. of Sáwargaon, 2½ miles W.S.W. of Junorono village, and 2½ miles N.N.W. of Kundral. 1822-23.	18 39 30·71	77 20 54·82	...	*
Murad Hill Mark ... <i>Marud h. s.</i>	"	About 2 miles E. of the village of the same name, 1 mile N.W. of Kurkut village, and 3½ miles S.S.E. of Natagaon. 1837-38.	18 24 33·43	76 18 41·53	...	205
Nágaral Hill Dargah ... <i>Nagral Hill Darga Tree</i>	"	Highest tree over a dargah on a flat hill, about ¼ a mile E.S.E. of the village of the same name, ¼ of a mile S.W. of Konali village, 2 miles S.E. of Arsanhal village, and 1½ miles E. by N. of Kamaréddipur village. 1840-41.	18 18 16·1	77 5 24·7	...	105
Nágpáni Hill Mark	Poona	About a mile N.W. of Kurvanda village, and 3½ miles W. by S. of Lonávla Railway Station: táluca Mával. 1829-30.	18 44 27·20	73 24 3·22	...	335
Nalanda h.s. ... <i>Nalowda Hill</i>	Thána	On the centre of the peak about a mile N. of the village of the same name, 1½ miles W. of Kalota Moksahi village, 1½ miles E.S.E. of Dharni, and 6 miles S.W. by W. of Karjat Railway Station: táluca Karjat. The station is denoted by a mark-stone covered over with a heap of stones. 1828-29.	18 51 37·41	73 18 4·15	1343	336 337
Naldurg Cavalier ... <i>Nuldurg</i>	Nizam's Territory	Watch tower at the S.E. corner of the fort on the Bori N. 1819-20.	17 49 7·2	76 19 59·7	...	173
Naldurg Idgah ... <i>Nuldurg Eedgah</i>	"	About 1½ miles E. of Naldurg, on the Naldurg-Andúra road. 1819-20.	17 48 53·8	76 18 38·4	[1919]	174
Nándurg Tree ... <i>Nandruk Tree</i>	"	Highest tree in Nándurg village, about 3½ miles N. by W. of Bástur village, and 4 miles W. by S. of Ganjankheda village. 1840-41.	18 3 26	76 30 28	...	...

* For triangle fixing this station, see Synoptical Volume of the Great Arc Meridional Series, Section 18° to 24°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station Height of Structure	No. of Triangle
Náráyngad Hill Pagoda <i>Naráyngarh Pagoda</i>	Poona	In the hill fort, about 4 miles E. of the large village of Náráyngaoon on the Mína river, where the road from Poona to Násik crosses the river: táluks Junnar. 1829-30.	19 6 57'0	74 4 15'7	... feet	301
Netjai Hill <i>Netjai S.W. Hill</i>	Ahmednagar	A conspicuous hill close to and S.W. of a similar hill on which is Netjai h.s.: táluks Shergaon. 1845-46.	19 6 47	75 9 21	...	252
Netjai h.s.	"	On a ruined temple about 2½ miles N.W. of Mánek-dándi village, 2½ miles E.N.E. of Sárvargaon, and 6 miles S.E. by S. of Tisgaon large village: táluks Shergaon. 1845-46.	19 6 54'09	75 9 26'25	...	251
Nighoj Hill Pagoda	Poona	Top of spire of the temple about a mile N. by E. of the village so called, 3½ miles E. by N. of Khát Umbra, and 3 miles W. of Masidan hamlet: táluks Khed. 1829-30.	18 44 36'4	73 51 56'5	...	...
Nilagaon h.s. <i>Niligaon H. T.</i>	Nizam's Territory	On a hill temple about 2½ miles N. by E. of the village so called, 3 miles E. by S. of Kiangaoon, and 1½ miles W. of Shahpur. 1819-20.	17 44 9'75	76 14 51'04	[1909]	176 177
Nimbadera h.s. <i>Nimbadera</i>	Ahmednagar	On Godaknáth Hill, about 2½ miles E. by N. of Dehara village, 4½ miles N.E. by N. of Vilud Station of the Dhond-Manmád Railway, and 3 miles W. of Dongargaon: táluks Ahmednagar. 1845-46.	19 14 42'27	74 45 22'94	...	257 258 259
Nimbál h.s. <i>Nimbál</i>	Kaládgi	On a hill, about 2½ miles S.W. of the village of the same name, and 3½ miles S.E. of Horti village on the Bijápur-Sholápur road: táluks Indi. 1819-20.	17 4 42'09	75 51 40'92	...	189
Nitali, X	Nizam's Territory	<i>Vide page 5—B.</i>	18 17 7'16	76 18 50'50	2289 4'9	9
Oyster Rock	...	<i>See Bombay.</i>	...	...	...	...
Pála h.s. <i>Pála Station</i>	Poona	On the highest part of the peak, about 1½ miles N. of the village of the same name, 6 miles N. by W. of Khadkála Railway station: táluks Mával. The station is marked by a hole ¾ of an inch in diameter and half an inch deep cut into the shelving side of the large stone about 2 feet below the surface, and covered over with a heap of stones. 1828-29.	18 50 40'35	73 34 26'20	[3459]	316 317
Palvan h.s. <i>Palvan Station</i>	Sátára	On a flat-topped hill, about a mile N.N.E. of the village of Palvan, 9½ miles S. of the town of Phaltan, and 3½ miles S.W. of Girvi village: táluks Mán. 1837-38.	17 50 44'60	74 28 '6'50	[3481]	† 287
Pángaon, XV	Sholápur	<i>Vide page 6—B.</i>	18 6 37'83	75 44 13'12	1880 5'0	18
Pángaon Hill Tree	"	About 1½ miles W. by S. of the village of the same name, 2 miles E. by N. of Korphal village, and 1½ miles N.N.E. of the principal station of the same name: táluks Bársi. 1837.	18 7 57	75 44 56	...	219

* For another triangle to this station, see Synoptical Volume of the Khánpisura Meridional Series, Volume of the Mangalore Meridional Series.

† For another triangle to this station, see Synoptical

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Pangoli h.s. ... <i>Pangoli Station</i>	Poona	On the highest part of the hill, about 1½ miles N.W. of the village of the same name, the same distance N.E. by E. of Kuna village, 2½ miles N.E. by N. of Khandála Railway Station, and 2½ miles S.S.E. of Undevádi village: taluka Mával. The station is marked by a square stone having a hole in the middle such as is used in native houses for supporting posts. 1828-29.	18 47 8.17	73 26 33.88	feet ...	332 333
Parninda s. ... <i>Purraindu</i>	Nizam's Territory	North of the tank inside the town of the same name. 1819-20.	18 16 11.23	75 29 44.38	...	...
Parel ...	...	<i>See Bombay.</i> ...	...	...	...	...
Párner, XXVI ...	Ahmednagar	<i>Vide page 8—B.</i> ...	19 2 34.75	74 26 51.54	3239 3.2	35
Parvati Pagoda No. 1 <i>Parvati Hill Pagoda North</i>	Poona	Top of the gilded spire of the northernmost of several pagodas on a small hill, about 2 furlongs W. of the village of the same name, and 3½ miles W. of the Vánáudi Barracks in the Poona Cantonment: taluka Haveli. 1829-30.	18 29 48.3	73 53 19.4	...	388 389
Parvati Pagoda No. 2 <i>Parvati Hill Pagoda South</i>	"	Top of spire of the southern one of several pagodas on a small hill, about 2 furlongs W. of the village of the same name, and 3½ miles W. of the Vánáudi Barracks in the Cantonment of Poona: taluka Haveli. 1829-30.	18 29 44.8	73 53 16.1	...	390
Pátas Hill Pagoda	"	About 2½ miles E. of the large village and market of the same name, and 7 miles S.W. by W. of Dhond Junction Railway Station: taluka Bhimthadi. 1838.	18 25 57.1	74 32 25.7	...	285 286
Patri Hill Tree ...	Nizam's Territory	Tree on a ridge, about 4½ miles W. by S. of Bársi town, 3½ miles S. by W. of Kundalgaon, and 1 mile N.E. of Gopalle village. 1837-38.	18 16 53	75 41 39	...	220
Pedgaon Pagoda ... <i>Pergaon Pagoda</i>	Ahmednagar	Highest pagoda in the village so called, on the left bank of the Bhima river, about 2 miles N.W. by W. of Jalápur, 4 miles E. by N. of Vadgaon, and the same distance N.E. of Devalgaon: taluka Shrigonda. 1837-38.	18 30 39.4	74 44 56.7	...	280
Penur Hill Pagoda <i>Peynoor H. P.</i>	Sholápur	On a small flat hill, about a mile N.N.W. of Penur village, immediately N. of which the Pandharpur-Mohol road passes between the pagoda and the village: taluka Pandharpur. 1819-20.	17 47 2.7	75 32 41.9	...	...
Phursangi Pagoda ...	Poona	Highest temple about the centre of the village so called, 3½ miles W. by S. of Loni Railway Station, and 2½ miles N. by W. of Vadhi village: taluka Haveli. 1840-41.	18 28 24.2	74 1 9.6	...	304
Pimpalgaon Hill Pagoda	Ahmednagar	Small temple about 2 miles W. of Pimpalgaon Landyn, 1 mile S.S.E. of Salabat Khán's Tomb, and ½ of a mile E. of a tank at the base of the western slope of the hill: taluka Ahmednagar. 1829-30.	19 4 57.2	74 53 27.1	...	253 254

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Pimpla Nilakh Pagoda <i>Pimpla white Pagoda</i>	Poona	In the village so called, about 1½ miles N.W. by W. of Aundh village, 1 mile S.E. of Bālerādi village, and ½ of a mile N.N.E. of Banera village: tāluka Haveli. 1840-41.	18 34 14·1	73 50 0·7	... feet	401 402
Pimpla Nilakh s. <i>Pimpla Station</i>	"	About ¼ of a mile E. of the village of the same name on the Mula river, and 5 miles N.W. of Poona City: tāluka Haveli. The rock being rather soft the station mark was made on a piece of brass run into it. 1840-41	18 34 12·98	73 50 13·38	...	365
Pokhrapur s. <i>Pokhrupoor s.</i>	Sholāpur	On high ground, about 2½ miles S.S.W. of the village so called, 4½ miles E. by S. of Penur village, and 5 miles S.W. of the town of Mohol: tāluka Mādha. 1819-20.	17 45 43·17	75 37 13·93	[1690]	158
Poona Base-line E. End s. <i>Base E. End</i>	Poona	The eastern extremity of the proposed base laid out by Lieut. Jacob in 1840-41. About 1½ miles E.N.E. of Pimpla Nilakh village, ¾ of a mile N. by W. of Aundh village on the main road from Poona to the Shelārādi Caves, and 1 mile W. by N. of Sāngri village: tāluka Haveli. The station is marked on brass in the centre of a triangular pillar capped by a single stone and surrounded by a brick platform 10 feet square and 3 feet high. 1840-41.	18 34 34·15	73 50 56·93	[1862]	361 362
Poona Base-line No. 1 s. <i>Base No. 1</i>	"	On the base-line, about 2¼ miles from the W. end, 1 mile N.E. of Hinjauri village, 1½ miles N.W. by N. of Vākad village, and 2½ miles E. by S. of Mārūnji village: tāluka Haveli. It is denoted by a circular brick pillar level with the surface, with three stones for the theodolite stand and a central one for the station mark, the pillar is insulated by an annulus of brick-work. The mark is on a piece of brass run into the stone. 1840-41.	18 36 9·53	73 47 32·12	...	369
Poona Base-line No. 2 s. <i>Base No. 2</i>	"	On the base-line, about 1¼ miles N. by W. of Pimpla Nilakh village, ¼ of a mile N.E. by N. of Bālerādi village, and 1½ miles E. of Vākad village: tāluka Haveli. It is marked in a similar manner to No. 3 s. on this base-line. 1840-41.	18 35 7·87	73 49 44·55	...	367 368
Poona Base-line No. 3 s. <i>Base No. 3</i>	"	On the base-line, about 1 mile N.E. by N. of Pimpla Nilakh village, the same distance N.N.W. of Aundh village on the main road from Poona to the Shelārādi Caves, and 1½ miles S.W. by W. of Pimpla Gurau. The Bombay road passes within a few feet of the station: tāluka Haveli. The station is marked on brass on a pillar, raised nearly 2 feet above the surface and surrounded by a platform of stones and mud 10 feet square. The pillar is founded on hard rock which was excavated a few inches for the purpose and insulated by an annulus. 1840-41.	18 34 49·23	73 50 24·57	...	364
Poona Base-line W. End s. <i>Base W. End</i>	"	The western extremity of the proposed base laid out by Lieut. Jacob in 1840-41. On a gentle slope, about 200 yards E. of its highest part, ¼ a mile N.N.E. of Mārūnji village, 2 miles S.E. of Nira village, and 2½ miles W.S.W. of Tāthaura village on the main road from Poona to the Shelārādi Caves: tāluka Haveli. The station is marked on brass in the centre of a platform consisting of a triangular stone embedded in masonry and surrounded by an annulus of bricks. 1840-41.	18 37 1·86	73 45 39·63	...	359 360
Poona Church	"	Steeple of St. Mary's Church in the Cantonment of Poona, about 1 furlong E. of a small puka tank, and ½ of a mile E. of Poona City: tāluka Haveli. 1834-35. Refixed in 1840-41.	18 30 45·1	73 55 33·2	* 2024	385 386

* To steeple.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Poona Observatory s. ...	Poona	In the Sapper and Miners' old Lines, 42 feet E. of the road which connects the new polo ground with Lothian Road. It is 40½ feet almost due N. of the N.W. corner of the Staff Hospital, 72½ feet from the S.W. corner of the old Meteorological Observatory, and 176 feet from the S.E. corner of the Garrison Class Room: taluka Haveli. Denoted by a platform 12 feet square and 2 feet high, enclosing a circular, isolated pillar, 3 feet in diameter, on the top of which a rectangular protecting pillar 3·49 feet high has been constructed. The circular pillar is level with the top of the platform and insulated by an annulus of 1½ inches width. 1862-63.	18 31 18·91	73 55 27·16	feet 1854·25	383
Poona Old Observatory ...	"	Near the S.E. corner of the compound occupied by Lieut. Jacob at Poona. It is marked by a brick pillar and was formerly used as an observatory. A new observatory has been built of which the transit pillar bears 102° 10' from this point, distance 223 feet. 1837-38. It is now, 1876-77, in the Telegraph Office, nearly ¼ mile S. by W. of the Arsenal and the same distance N.W. of St. Mary's Church: taluka Haveli.	18 30 42·2	73 55 21·5	...	384
Prabal, XXXII ...	Thána	<i>Fide</i> page 10—B. ...	18 57 34·86	73 16 10·81	$\frac{2318}{0}$	41
Prongs Light-house ...	...	<i>See</i> Bombay. ...	...	...	...	...
Punaula Bungalow <i>Punawla Bangalo</i>	Poona	Travellers' bungalow on the right bank of the Pauna river, about ¼ of a mile S. of Ravet village, and 1 mile N.W. of Táthaura village. The road from Poona to Bombay is close N. of the bungalow: taluka Haveli. 1832-33.	18 38 19	73 47 10	...	407
Purandhar Fort s. <i>Purandark Hill Pagoda</i>	"	On the pagoda on the peak in the fort, about ¼ of a mile S. of the hospital gate, and 1 mile S.W. of the church gate, 2 miles W.S.W. of Vajrágad Fort: taluka Purandhar. The station is marked by a circle and dot on the centre of the pagoda. 1828-29.	18 16 34·42	74 0 45·53	4560	288 289
Rnitala h.s. ... <i>Raithala Hill Pagoda</i>	Ahmednagar	On the old temple about 1½ miles E. by S. of the village so called, and 4 miles E.S.E. of Supa village and rest house on the Poona-Ahmednagar road: taluka Párner. 1829-30.	18 56 17·88	74 38 11·11	...	263 264
Rájmáchi Hill Fort ...	Poona	About 3 miles W. by N. of Aundha village, and 6 miles N.N.E. of Khandála Railway Station: taluka Máral. 1829-30.	18 49 35·8	73 26 29·7	[2708]	334
Rájuri Hill Mark (helio.) <i>Rajuri H. S.</i>	Nizam's Territory	On the top of the hill, about 2 furlongs E. of the main road from the town of the same name to the village of Sirúr, 2½ miles S.S.E. of Rájuri village, 1½ miles W. of Jaulga village, and 1½ miles E. by N. of Talegaon. 1862-63.	18 40 13·49	76 59 38·14	1857	92
Rámagaon Hill Tree <i>Ramegaon Hill Tree</i>	"	About 3 miles N.W. of the village so called, between Naurakinni and Shadoal villages, 1 mile N. of the former, and the same distance W. of the latter. 1840-41.	18 11 35	76 40 53	...	138

* To upper surface of circular pillar.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Rasin Pagoda	Ahmednagar	At the S.E. corner of the large village of the same name, about 3 miles E. by S. of Yasori village, and 3½ miles N.E. by N. of Karpari village: taluka Karjat. 1832-33.	18 26 6'9	74 57 46'9	... <i>feet</i>	239 240
Roragiri Hill Mosque	"	About 2½ miles W. by S. of Dádágaon, 2½ miles N.W. by N. of Dongargaon, and 1½ miles E. of Hirva village: talukas Jámkhed and Pátoda. 1832-33.	18 57 59'2	75 5 14'2	...	255 256
Salábat Khán's Tomb ... ..	...	See Ahmednagar h.s. ... ..	...	...	...	...
Sálotgi h.s. <i>Salowuttugi S.</i>	Kaládgi	On rising ground, about 2 miles N. by W. of the village of the same name, 3½ miles S.S.E. of Inalgi village, and 4 miles W.N.W. of Sátalgaon: taluka Indi. 1819-20.	17 9 36'43	76 3 27'80	...	*
Súngvi Hill Dargah <i>Sangwi Hill Tree</i>	Nizam's Territory	Highest tree by a dargah on a slight eminence called Bét Súngvi, about 2½ miles S.S.E. of the village so called on the road to Tuljapur. 1840-41.	17 56 31'6	76 36 24'4	...	141
Sarola Tower <i>Sarola Burj</i>	"	Square tower in the village so called, about ½ of a mile E. of Yerundi village, 2 miles N.E. by N. of Kanheri village, and 3 miles S. by E. of Kutagaon. 1840-41.	18 15 34'2	76 37 50'8	...	128
Sastúr Tomb <i>Shastur Tomb</i>	"	Large tomb at the S.E. corner of Sastúr large village on the road to Hyderabad, about 2 miles N. by W. of Nágarulla village, and 5 miles E. by N. of Karasgaon. 1840-41.	18 0 47'0	76 32 19'7	...	144
Sátalgaon h.s. <i>Satulgaon S.</i>	Kaládgi	On a hill, about 1½ miles S.E. by S. of the village of the same name, 2 miles W. by S. of Hádalsang village, and 3½ miles E. by S. of Jagjivani village: taluka Indi. 1819-20.	17 10 11'10	75 45 52'47	...	167
Sauringi Hill Tree <i>Chourun h. Tree</i>	Poona	About 6 miles N. by E. of Khed, the same distance E.N.E. of Kurus village, and 2 miles W. of Peth: taluka Khed. 1829.	18 55 31	73 56 13	[2970]	302
Sautára, XX	Nizam's Territory	<i>Vide page 7—B.</i>	18 46 23'41	75 25 27'13	$\frac{2604}{4'5}$	24, 32
Sáwargaon, XIII	"	<i>Vide page 6—B.</i>	17 55 46'65	75 59 18'33	$\frac{1916}{4'0}$	15, 17
Sáwarkhed Hill Temple <i>Sewarkheir H. Pag.</i>	"	About ½ of a mile S.E. by S. of Sábarkhel village, 1½ miles E.N.E. of Sirapur village, and 2½ miles W. of Kara village. 1845-46.	18 53 42'8	75 4 56'4	...	242 243
Sedatek Hill Temple	Ahmednagar	Close to and S.W. of Deval hamlet of that village on the E. bank of the Bhíma river, about ½ of a mile S. of the principal village from which it takes its name: taluka Karjat. 1864-65.	18 26 36'4	74 46 5'3	...	281

* For triangle fixing this station, see Synoptical Volume of the Great Arc Meridional Series, Section 8° to 18°.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure <i>feet</i>	No. of Triangle
Shelárvádi h.s. ... <i>Shelarwari Station</i>	Poona	On a small mound on the highest part of the hill, about 2 furlongs N. of the caves of the same name, 2½ miles W.N.W. of Shelárvádi Railway Station, and the same distance S.E. by S. of the town of Talegaon: <i>táluka Mával</i> . The Bombay road passes close to the base of the hill. The station is denoted by a mark-stone covered over by a heap of stones. 1828-29.	18 41 19·95	73 44 56·69	...	318 319
Sheri Fara Bágh ...	...	<i>See Ahmednagar.</i>	...	...	...	...
Sholápur Fort (helio.)	Sholápur	On the highest part of the S.E. bastion of the fort: <i>táluka Sholápur</i> . Denoted by a circle and dot engraved on a stone 8 inches square set in masonry. 1862-63.	17 40 19·42	75 56 38·31	1583* 21	198
Sholápur Fort s. ... <i>Soolapoor</i>	"	On the S.E. corner of the Sholápur Fort W. of the tank at the S.W. corner of the town: <i>táluka Sholápur</i> . 1819-20.	17 40 21·41	75 56 37·34	...	194 195
Shrigonda s. ... <i>Chambhargoandu</i>	Ahmednagar	In the centre of the town of Shrigonda: <i>táluka Shrigonda</i> . 1819-20.	18 36 48·29	74 44 27·69	...	...
Shur Tower ... <i>Bhada Burj</i>	Nizam's Territory	Highest burj or tower in the village of Shur, about 6 miles N.W. by N. of Ausa town, 1½ miles E. by N. of Uti village, and 2 miles S.W. of Chincholi village. 1840-41.	18 19 27·8	76 29 37·5	...	123
Silgaon Tree ... <i>Shelgaon</i>	"	Highest tree about 3 miles S. by W. of the village so called, 1 mile E. by S. of Chorakalli village, and 2½ miles N.W. by N. of Yedsi village. 1840-41.	18 21 11	75 59 10	...	...
Sindkhed Hill ... <i>Sindkher Hill Tree</i>	"	Bush on hill, about 2 miles W.S.W. of Ambulga village, 1 mile W. of Jaujnur village, and 3½ miles E. by N. of Lambota village. 1840-41.	18 9 26	76 52 39	...	106
Singi, XXX ...	Poona	<i>vide page 9—B.</i> ...	18 56 45·89	73 42 10·30	$\frac{4243}{0}$	31, 38
Singoli Pile ... <i>Shingoli Pile</i>	Sholápur	Pile of stones close to the N.W. corner of Ráj hamlet, about 2 miles E.S.E. of Singoli village, 1½ miles S. by E. of Upla village, 2½ miles S.N.W. of Suuj village, and 3½ miles W.S.W. of Vagholi village: <i>táluka Bársi</i> . 1837-38.	18 13 40	76 6 14	...	208 209
Sinhgad h.s. ... <i>Singarh Fort</i>	Poona	On the highest part of the fort on a well-known hill, about 15 miles S.W. of Poona, and 5 miles S. of the Khadakrásala or Lake Fife: <i>táluka Haveli</i> . 1828-29.	18 21 53·29	73 47 46·18	4320	306 307
Sirangi h.s. ... <i>Shewungi H. P.</i>	Jath State	On a pagoda about a mile S.S.E. of the village of the same name, 3 miles N.W. by N. of Ludi village, and 4½ miles E. of Salgad village: <i>Sátára Agency</i> . 1819-20.	17 17 21·93	75 36 50·76	[1665]	190 191
Sondavádi Hill Peak ... <i>Sonde Pk.</i>	Poona	About ½ of a mile N.E. of the village so called, and 2 miles E.S.E. of the southern portion of the Sanitarium of Mátherán: <i>táluka Mával</i> . 1829-30.	18 57 6	73 20 30	[2086]	343
Suler Javalga s. ... <i>Juculgi Tree</i>	Ahalkot State	About 2½ miles E. by S. of the village of the same name, 2½ miles W.N.W. of Karajgi village, and 2½ miles N. by W. of Mangrul village: <i>Sholápur Agency</i> . 1819-20.	17 27 8·30	76 2 52·79	[1566]	187 188

* To dot in centre of circle.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Supa Hill Idgah ... <i>Supa Idga</i>	Ahmednagar	On a small hill, about $\frac{1}{2}$ a mile W. of the village of the same name, on the Poona-Ahmednagar road, and 3 miles E.S.E. of Hanga village: taluka Pärner. 1837-38.	0 1 " 18 57 25.8	0 1 " 74 34 25.7	feet ...	276
Sus Hill No. 1 ... <i>Sus Peak</i>	Poona	Northern of two high points on a ridge, about $\frac{1}{4}$ miles S. of Sus village, $\frac{2}{4}$ miles W. of Páshan village, and $\frac{1}{4}$ miles N.W. by N. of Baudhan village: taluka Haveli. 1840-41.	18 32 6	73 47 53	...	304
Sus Hill No. 2 ... <i>Sus West Hill</i>	"	High hill about $\frac{1}{2}$ a mile S.W. by W. of Sus h.s., $\frac{1}{4}$ miles E. of Nánda village, the same distance W.N.W. of Sus village, and $\frac{1}{4}$ miles S.W. of Mahalunga village: taluka Haveli. 1840-41.	18 33 34	73 46 38	...	395
Sus h.s. ...	"	On the lower of two hills, about a mile N.W. of the village of the same name, 2 miles E. by N. of Nánda village on the Mula river, and $\frac{1}{4}$ miles S.W. of Mahalunga village: taluka Haveli. There is no platform but three large stones for the theodolite stand and one in the centre for the station mark are set in firmly based upon the rock. 1840-41.	18 33 45.17	73 47 2.04	...	370 371
Sus Pagoda ...	"	Highest pagoda in the village of Sus, about $\frac{1}{4}$ miles S. of Mahalunga village, $\frac{2}{4}$ miles W. by S. of Banera village, and $\frac{2}{4}$ miles E. by S. of Nánda village: taluka Haveli. 1810-41.	18 33 10.3	73 47 44.2	...	397
Sus Rock ...	"	Projecting rock on a ridge, about 1 mile S.W. of the village of Sus, 2 miles S.E. of Nánda village, and $\frac{2}{4}$ miles N.E. by E. of Laula village: taluka Haveli. 1840-41.	18 32 34.0	73 46 54.1	...	396
Tárdeo ...	...	See Bombay. ...	...	...	...	...
Tikona Hill Fort ... <i>Tikona Fort</i>	Bhor State	Highest building in Tikona Fort, about 2 miles W. of Mándvi Hill, 2 miles S.S.E. of Vád village, and 1 mile N. by W. of Kásig village: Sátára Agency. 1829-30.	18 37 52.1	73 33 14.8	[3480]	...
Toramba Pagoda ...	Nizam's Territory	Largest temple in the village so called, about 3 miles S. of Tausi village, $\frac{1}{4}$ miles S.W. of Salagaon, and 3 miles N. by W. of Koral village. 1840-41.	17 56 17.6	76 29 42.8	...	146
Torna Pagoda ...	"	Highest temple at the N.W. corner of the village of the same name, about $\frac{3}{4}$ miles E.S.E. of Kodigal village, and 3 miles S.W. by S. of Delkuni. 1840-41.	18 13 52.4	77 18 21.6	...	56
Trombay, XXXV ...	Thána	<i>Fide page 11—B.</i> ...	19 1 46.05	72 57 30.80	$\frac{1002.45}{3.5}$	46
Trombay Masjid ... <i>Pau Pir</i>	"	Top of spire of the masjid known as Pau Pir Masjid at the S. end of the mainland, about $\frac{3}{4}$ miles E. of Bombay Island, $\frac{2}{4}$ miles N. by W. of the Island and Caves of Elephanta: taluka Sáissette. 1829-30.	18 59 56.3	72 57 15.1	...	354 355
Trombay Palm Tree ...	"	Conspicuous palm tree near the hill fort of Trombay: taluka Sáissette. 1865-66.	19 2 7	72 59 3	...	627

* To top of circular pillar.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure <i>feet</i>	No. of Triangle
Tuljapur Hill Temple ...	Nizam's Territory	Khandoba Temple on the southern spur of a hill, about 2 miles W. of Tuljapur town, 1½ miles E.N.E. of Gosai hamlet, and 2 miles S.E. of Dhikuri village. 1862-63.	18 0 37·6	76 5 33·3	1936	216
Tuljapur Idgah ...	"	On a spur of a hill, about a mile S.W. of the large village of the same name, Khandoba Temple is 1½ miles W. by N., and Gosai hamlet is 2½ miles W. by S. 1840-41.	18 0 32·1	76 6 20·2	...	...
Tung Fort ... <i>Tung Fort Pagoda</i>	Bhor State	Temple on the summit of the fort of Tung on a hill, about 1½ miles S. of Kola village, 2 miles W. of Thākursai village, and the same distance N.W. by N. of Kādo village: Sātara Agency. 1829-30.	18 39 32·0	73 30 19·2	...	312
Udagi h.s. ... <i>Oodugi</i>	Akalkot State	On a small hill W. by N. of the village of the same name, and about 4 miles E.S.E. of Kadabgaon Railway Station: Sholapur Agency. 1819-20.	17 26 8·71	76 14 47·82	[1704]	185 186
Udalpur h.s. ... <i>Udalpur Station</i>	Nizam's Territory	On a hill, about ¼ of a mile S.E. of Udalpur village, and 3½ miles S. by W. of Sastūr large village. 1840-41.	17 58 9·17	76 30 59·45	...	143
Udgir, I ...	"	<i>vide page 4—B.</i> ...	18 26 51·65	77 9 26·94	2188 5·5	1
Udgir Bungalow (belio.) ...	"	On top of the roof of the Travellers' bungalow about 1½ furlongs S.W. of the S.W. corner of the town with main road between, and ¼ of a mile E. of a small tank. 1862-63.	18 23 28·65	77 9 21·12	2141	79
Udgir Hill Masjid ... <i>Udghir Masjid</i>	"	About 1½ miles S.W. of the S.W. corner of the town of the same name, 1½ miles N.E. of Shelki village, 2 miles W. by N. of Madalapur village, and 2½ miles E.S.E. of Tiratgal. 1840-41.	18 23 18·4	77 8 34·2	...	82
Udgir Hill Tomb No. 1 ... <i>Udghir East Tomb</i>	"	Large tomb about 1 mile E. of the fort of Udgir, 1½ miles N.E. of the town of the same name, and 2½ miles S.W. of Avalkōnda village. 1822-23.	18 24 41	77 10 33	...	76
Udgir Hill Tomb No. 2 ... <i>Udghir Manikdowla's Tomb</i>	"	Known as Manikdowla's Tomb between two small tanks, about 1½ miles S.E. by S. of Udgir Principal Station, and 2½ miles N. by E. of the town of Udgir. 1822-23.	18 26 0·3	77 9 56·2	...	77
Udgir Hill Tomb No. 3 ... <i>Udghir West Tomb</i>	"	About 1½ miles N. of the town of Udgir, and 2 miles S.E. of Hattanakvādi village. 1840-41.	18 25 22·6	77 9 16·0	...	78
Udgir Idgah ... <i>Udghir Idga</i>	"	About ¼ of a mile S.W. of the S.W. corner of the town of Udgir. 1840-41.	18 23 28·5	77 9 15·2	2151	80, 81
Umbra h.s. ... <i>Umbra Hill</i>	Poona	On the highest part of a mound on the large hill, about 2½ miles N.W. by N. of Umbra Naulakh village and market, 3½ miles W. by N. of Karanjiviro village, 10 miles N.E. by E. of Khadkūla Railway Station: tāluka Khed. The station is denoted by a markstone about 2 feet deep and covered over with a mound of stones. 1828-29-30. Revisited in 1834 and 1842.	18 49 37·82	73 42 56·01	[3663]	320 321

* To highest point.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Uran h.s. ... <i>Keraula h.s.</i>	Thána	On the highest point of that hill at the N.W. extremity of Uran Island, and close to the shrine of a Muham-madan saint, close S.W. of Mora village, and about 2 miles W. of the town of Uran. The station is marked by an isolated masonry pillar surrounded by a platform of rubble. 1865-66.	18 54 2'62"	72 57 58'76"	702	414
Urawra Hill Peak ... <i>Urawra Peak</i>	"	Centre of the largest rocky peak surrounded by a number of smaller rocks, about 1½ miles S.W. by S. of the principal village of Thákur, and 1½ miles N.N.E. of Karmoli; táluks Panvel and Kalyán. 1839-40.	19 5 55	73 15 16	...	348 349
Vadgaon Hill Pagoda <i>Wadugaon Pagoda</i>	Patvardhan State	About 2½ miles W. by N. of the village of the same name, 2 miles N.E. of Nanaj village on the road from Bársi to Sholápur, and 4 miles N.N.W. of Mardi village; Sholápur Agency. 1819-20.	17 51 14'3	75 54 50'9	...	...
Vadgaon h.s. ... <i>Wadugaon s.</i>	Nizam's Territory	On a hill, about 3 miles N.W. of the village so called, 3½ miles S. by W. of Lavára village, and 5 miles W. of Døvbet. 1819-20.	17 56 33'83	76 21 50'81	[2165]	161
Vairág Pagoda No. 1	Sholápur	Highest temple near the E. bund of a tank, about a fur-long N. of the town of the same name, 1½ miles S.E. of Mángaon, the road from Bársi to Sholápur passes ¼ a mile W. of the temple; táluks Bársi. 1837-38.	18 3 43'9	75 50 44'8	...	218
Vairág Pagoda No. 2 <i>Wyrag P.</i>	"	Immediately N. of Vairág town, about 4 miles W. of Ratanjun village, 3 miles N. of Sasura village, and 1½ miles S.E. of Mángaon; táluks Bársi. 1819-20.	18 3 31'4	75 50 34'8	...	...
Valkarádi h.s. ... <i>Wankawari Station</i>	Poona	On the site of an old pagoda on the highest part of a small hill immediately above and S. of the village so called, about 2½ miles S.W. of Váfgaon, and 7 miles N.W. of Kendúr village; táluks Khed. The station is marked by a round hole cut into the rock, about 2 inches deep and 2 inches in diameter. 1825-29-30.	18 51 12'61	74 0 36'91	[2822]	303
Valsung h.s. ... <i>Wolsung s.</i>	Sholápur	On rising ground, about a mile W. of the village of the same name on the Sholápur-Akalkot road, 2½ miles N.E. of Sinhadgaon, and 6 miles E. by N. of Hotgi Railway Station; táluks Sholápur. 1819-20.	17 34 49'38	76 6 42'14	[1667]	154
Vanaudi Bungalow <i>Wanawari Bangalo</i>	Poona	Front door of the second house from the N. end of the Horse Artillery Lines at Poona; táluks Haveli. 1841.	18 30 0	73 56 21	...	387
Vandev Hill Pagoda <i>Wandew Hill Pagoda</i>	Ahmednagar	Ruined pagoda about 1½ miles S.W. of Vadghula village, and 1½ miles N.N.W. of Khánpisura Principal Station; táluks Shrigonda. 1837-38.	18 46 28'6	74 48 33'5	2761	...
Varoda h.s. ... <i>Waroda Station</i>	Poona	On a hill, about 2 miles E.S.E. of Vádkañ village, 2½ miles S.W. by W. of Pimpalgaon Joga, and 2 miles N.W. of Alme village; táluks Junnar. 1829-30.	19 17 0'80	73 54 31'48	...	299 300
Viroda Tree <i>Waroda Darga Tree</i>	Nizam's Territory	Centre of the clump of trees over a dargah on rising ground, about a mile E.N.E. of Viroda village, 2½ miles N. by W. of Yélluri village, and 2½ miles W. by S. of Koranga village. 1837-38.	18 14 1	76 25 34	...	126

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station — Height of Structure	No. of Triangle
Wadwál, V	Nizam's Territory	<i>Vide</i> page 4—B.	18 32 2' 28"	76 49 19' 04"	<i>feet</i> 2403 3' 9"	3, 6
Wáfgaon, XXIX	Poona	<i>Vide</i> page 9—B.	18 55 59' 20"	74 3 13' 78"	2858 3	30, 37
Wálkeshwar ... ..	...	<i>See</i> Bombay. ... ..	...	...	...	...
Wanjarvádi, III	Nizam's Territory	<i>Vide</i> page 4—B.	18 40 25' 26"	77 11 41' 02"	1841 5' 3"	5
Wápla, XVI	Sholápur	<i>Vide</i> page 6—B.	17 55 58' 56"	75 32 56' 45"	1740 5' 8"	21
Wardal Hill Tomb <i>Wardal Tomb</i>	Nizam's Territory	Largest of seven small tombs on the hill, about 2½ miles E. by S. of Vadála village, and the same distance N.W. by W. of Vadgaon. 1837-38.	17 52 10' 4"	75 54 35' 0"	[1757]	217
Warvati Hill Peak <i>Warvati Peak</i>	"	About a mile S.S.E. of the village so called, 7 miles N.N.W. of Tuljapur, and 3½ miles N. by E. of Absingi village. 1838.	18 6 8' 3"	76 5 26' 3"	...	215
Yaravda Hill <i>Yelavda Hill</i>	Poona	Mound on the hill close to Yaravda, commonly called Picket Hill on the right bank of the Mutha Mula river, about ½ a mile S.E. of the Deccan (Dakshin) College, and 2 furlongs N.W. of the Fitzgerald Bridge: taluka Haveli. 1832.	18 32 42"	73 55 24"	[1951]	382
Yérandi Tower <i>Erandi Burj</i>	Nizam's Territory	Highest burj or tower in the village so called, about 2 miles S.E. by E. of Shalu village, the same distance S. by W. of Kutgaon, and ½ of a mile W. of Sarola village. 1840-41.	18 15 44' 1"	76 37 7' 9"	...	129
Yéria Dipmal No. 1 <i>Vermala Dipmal North</i>	"	Northern of two dipmals on a hill, about 1½ miles S.S.E. of Iaramulla village fort, 2½ miles N.E. by E. of Pimpalvádi village, and 3 miles W. by N. of Chorákalli village. 1837-38.	18 22 11' 1"	75 55 29' 7"	...	222
Yéria Dipmal No. 2 <i>Vermala Dipmal South</i>	"	Southern of two dipmals on a hill, about 1½ miles S.S.E. of Iaramulla village fort, 3 miles W. by N. of Chorákalli village, and 2½ miles N.E. by E. of Pimpalvádi village. 1837-38.	18 22 0' 9"	75 55 27' 6"	...	223

March, 1892.

J. ECCLES,
In charge of Computing Office.

77° 0'

77° 30'

Dáud Malik, VII	Deobet h.s.	Nitali, X	Karasgaon Hill Pagoda
Deobet, IX	Kasti Pagoda	Pála h.s.	Mándvi, XXXI
Deobet h.s.	Dáud Malik, VII	Prabal, XXXII	Manikgad Hill Fort
Dighi, XXVIII	Parvati Pagoda No. 2	Sátalgaon h.s.	Jalihal s.
Garh Dáud, XIV	Kalambvádi North Peak	Singi, XXX	Malangad Hill No. 2
" "	South Peak	Singhad h.s.	Mándvi, XXXI
" "	Yéria Dipmal No. 1	Udgir, I	Malia Hill No. 1
Harangal, VIII	Ausa h.s.	"	Nágara Hill Dargah
" "	Hari Hill	"	Udgir Hill Tomb No. 2
" "	Hari Hill Pagoda	"	" " No. 3
Hattibétta h.s.	Karasgaon Hill Pagoda	"	" Idgah
" "	Chauhhiparga Tower	Wadwál, V	Chákúr Hill Temple
" "	Hattibétta Hill Tree	" "	Malia Hill No. 1

77° 0'

77° 30'

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